HD **Bhp Billiton PLC Investor Briefing Sydney - Final**

WC 16,219 words

PD 23 November 2014

SN CQ FD Disclosure

SC FNDW

LA English

LP

Presentation

ANDREW MACKENZIE, CEO, BHP BILLITON PLC: Well, good morning, to everybody here in Sydney; and hello, to those on the webcast.

TD

But first let me point you to the disclaimer, and remind you of its importance to today's presentation.

Now, you're going to be familiar with quite a lot of the material from our presentation in London, but we do want to reiterate the key points and provide you with the opportunity to ask questions on those topics.

But as I did in London, I'll start by providing an overview of our performance in the 2014 financial year to show you what we achieved. I'll then share more detail and how we expect further simplification via our proposed demerger to unlock even more value for our shareholders. And, I'll provide a brief update on the new **Company**.

Following this I'll reiterate our definitive targets, both production and costs, for each of our major businesses, so that you can continue to track us; we must be accountable to you, our owners.

I'll then conclude with our capital management framework and explain how it will enable us to consistently deliver superior performance and more cash to our shareholders. Mike Henry, our President of HSE, Marketing and Technology, will then share our unchanged views on commodity markets.

A few weeks ago in London we drilled into two of our major businesses, **iron ore** and petroleum. Today Dean Dalla Valle will present on **coal**. And Peter Beaven, our new Chief Financial Officer, will provide an update on **copper**, given that, until very recently, he was our President of **copper**.

You will have also seen today our announcement that, from January 1, Dean and Mike will swap roles. This is consistent with our strategic approach to leadership development.

The **Company**'s in great shape. We have a clear strategy. We will deliver on our commitments by doing what we say we will do.

Keeping our people and **operations** safe matters more to me and the team than anything else, because we view safety performance as a critical indicator of a business in control. In the 2014 financial year, we delivered our best ever safety performance.

Sustainability, our first charter value, is also a key consideration for all of our investment decisions.

In the 2014 financial year, we exceeded production guidance for a number of our core commodities. For the 2015 financial year, we're well positioned to achieve record production again.

We remain focused on generating value through productivity. We delivered nearly $3 **billion** in productivity-led gains in the 2014 financial year. And, today, have committed to a new minimum target of $4 **billion** of annualized efficiencies from our core portfolio by the end of the 2017 financial year.

Finally, the combination of our high-quality assets, optimal diversification, and a disciplined approach to capital management, including our unbroken progressive dividend and strong balance sheet, enable us to generate superior shareholder returns. This is our distinctive investor proposition.

If you look at our score card for the 2014 financial year, you'll see that we achieved strong results. And there's more to come. Over the last two years, our simplification process, including well-timed asset sales, created more than $6.5 **billion** of proceeds.

Our outstanding operating performance delivered annual production records at 12 of our **operations** across four commodities.

And, we embedded an additional $2.9 **billion** of productivity-led gains, more than $1 **billion** above our guidance, with about $1 **billion** coming from volumes, and nearly $2 **billion** from cost efficiencies.

For the 2014 financial year we reduced our capital and exploration expenditure by almost one-third, to $15.2 **billion**. So that in a period of falling commodity prices, this resulted in an $8 **billion** increase in free cash flow.

The strong cash generating capacity of our business underpins our commitment to a progressive base dividend, the minimum expectation that our shareholders should have. We increased our dividend by another 4% in the 2014 financial year, to $1.21 per share, for a payout ratio of 48%. All of this delivers valuable growth and yield to our shareholders.

So why do we focus on simplifying our portfolio? Well, we believe by simplifying our organization we can sharpen our focus and improve productivity. Large companies often become more complex as they push for growth. Additional layers of management and new processes are required to manage such organizations.

In time, the cost of complexity outweighs economies of scale and erodes the benefits of retaining too many options for growth. I've worked in many complex organizations throughout my career and I've seen how important it is to avoid this.

At BHP Billiton we've already addressed this challenge over many years to make sure we maximize the value of our assets. As the **Company** has grown, we've increased our focus on our largest and most profitable assets. And we've put in place standard systems and processes to make sure decisions are made as close to the business as possible.

We've also **sold** several assets in a disciplined manner to maximize value for shareholders and simplify our organization. In the last two years, we have **sold**, as I said, $6.5 **billion** worth of assets, all at attractive valuations.

For example, the $1.9 **billion sale** of our interest in Richards Bay Minerals, timed at the top of the titanium dioxide market; the $430 **million sale** of our folio in Yeelirrie project, a development project not typically included in analyst valuations.

The $1.6 **billion sale** of Browse, another development project that was not normally included in analyst valuations, and in which we are only invested $300 **million**. Then the $650 **million sale** of Pinto Valley, an asset that didn't fit with our long-life, low-cost, strategy, but was **sold** at an attractive premium to the average analyst valuation at the time.

We are clear about which assets best fit our strategy. There is no rush to sell. Our financial position is strong. And we will not agree to terms that do not meet our value or returns criteria.

For example, as you know we sought to divest our nickel asset in Western Australia, and announced, earlier this month, that we were unable to find a buyer willing to offer terms acceptable to us. So we will retain the asset for now, and run it for maximum value.

Equally, we recently announced our intention to test the market's interest in our Fayetteville shale assets. But consistent with our commitment to shareholders, we will only complete a **sale** if a buyer is willing to pay full value that reflects both the quality of our acreage and the positive outlook for US gas prices.

Again, achieving value for shareholders is our priority, and determines all the decisions we make about the portfolio.

In this ongoing process of portfolio simplification, the proposed demerger is the logical next step. We believe it will deliver more value than the alternatives, like maintaining today's portfolio, or selling our non-core assets through trade sales. By concentrating our focus on our largest and most profitable assets, this will deliver a step-change improvement in BHP Billiton's performance.

Our existing organization has worked well. It's enabled us to develop and operate a complex diversified portfolio of substantial scale and geographical spread.

It's been supported by our standard systems and processes, which have all made sure that decisions are made at the operation asset, or even business, level, wherever it is best to maximize value. But it was designed for a more complex asset portfolio and operating environment.

The demerger creates the opportunity for us to redesign the business. Put simply, we can organize a **company** that operates just 12 large core assets quite differently to one with 30 operated assets of varying size across a broader range of commodities.

In the 2014 financial year, our core assets generated 96% of underlying EBIT. So we can cut complexity and its associated costs without losing any of the benefits of scale and diversity.

Let's take costs not directly linked with the production process first, which we'll call functional costs.

A simpler portfolio will enable us to reduce the range and volume of the functional work we need to manage. As well as to aggregate this level at a higher level.

It will also allow us to further delayer and streamline our organizational structure; and handle a greater proportion of our high volume routine work, through shared service centers located in lower-cost locations.

We spend more than $3 **billion** on this functional support a year, so it will only take a modest reduction to create substantial additional value.

A simpler portfolio will also cause us to focus even more on improving operational performance. In recent years, we've cut complexity by increasing standardization across the **Group**. So assets have more-common equipment, systems, and ways of working. This has established a solid platform from which we can continue to share and improve operational performance faster.

Following the demerger, our portfolio, as you've heard, will include fewer assets, a lot fewer assets, but these will have a much greater proportion of common characteristics. Everyone will be large, very large, up-stream-focused with a long life that supports, what we call, an advanced-manufacturing approach to **operations**.

This will allow us to increase the depth of our benchmarking, standardize the way we complete more common tasks, and eliminate duplication of effort, to an even greater extent. This opportunity is significant. Small, but carefully targeted, changes to critical work spread right across the **Company** quickly can create very large benefits.

Achieving our own current best practice in truck utilization, for example, across our entire fleet, even if we assume that this just allowed us to **park** up the trucks and add nothing to production, would add $300 **million** per year to operating cash flow. Every 1% added to the throughput on our system bottlenecks would add another $230 **million** per year.

Changes such as these won't be easy and they won't be achieved immediately. But this is an illustration of the size of the prize on offer.

We strongly believe that we can get there more rapidly when senior management has a greater focus on our core safety and operational opportunities, and best practice only has to be created and shared quickly between just 12 core assets.

We believe a simpler portfolio would, therefore, enable our teams to improve our productivity further, faster, and with greater certainty.

Now that our demerger plans are public, we've been able to begin to define the areas of improvement in more detail, because clearly we need to consult very widely.

We've become, in the recent months, increasingly confident that our focus on improvements right across our core assets, which the demerger facilitates, can generate further productivity gains beyond those already announced.

So I'**m** pleased to tell you that we are now targeting annualized productivity gains in the core portfolio of at least $4 **billion** by the end of the 2017 financial year. This, as you're aware, is a $500 **million** increase on previous guidance of $3.5 **billion**. This target is on top of the $6.6 **billion** of productivity-led gains embedded during the last two years.

Critically, we believe our improvements will last and be a point of differentiation. The demerger and enhanced operational efficiency are not the only tools though that we have to create value for shareholders. We're also focused on capital productivity, and our priority has to been to identify now we can reduce the cost of bringing on new production, so we can lower our investment without slowing production growth.

While I'll cover this in more detail towards the end of the presentation, I am pleased to confirm that in the 2015 financial year, we will reduce projected capital expenditure from $14.8 **billion** to $14.2 **billion**. And in the 2016 financial year, we expect to invest $13 **billion**.

Simplification through our proposed demerger is, without a doubt, the right strategy for the **Company**. As you all know, the new **Company** we are creating will be a global metals and **mining company**, with high-quality assets, but not of the scale of those that remain in our core businesses.

It will, however, pursue its own bespoke strategy that matches its quite different type of asset, to unlock an analogous set of productivity gains to those I described for the core.

Its selected portfolio includes 11 operated assets, primarily in Australia and Southern Africa. In the 2014 financial year, generated almost $1.8 **billion** of EBITDA. The portfolio remains cash flow positive, despite recent market volatility. This underscores the relative strength of their assets in their industries.

An improvement in **ore** recovery and an increase in plant availability resulted in record quarterly production at Hotazel; and overall, manganese **ore** production increased by 10% in the September 2014 quarter, to a record 2.3 **million** tonnes. As smelter reliability improved manganese alloy production increased by 25% last quarter.

Further, at Illawarra **Coal**, a series of productivity initiatives drove the mine to achieve record run-of-mine volumes, and production increased by 64% in the September 2014 quarter, to 2.3 **million** tonnes.

As I said, with its own bespoke strategy, systems and processes specifically tailored for a business of its scale and geographies, the new **Company** will now be very well placed to see its assets realize their full potential, and of course deliver a lot more productivity as well.

The new **Company** will be lean and flat, and we've chose a regional operating model. We'll have an experienced team, led by Graham Kerr as CEO and Chaired by David Crawford, who retired from the BHP Billiton **Board** just last week.

The new **Company** set up is proceeding to plan, with Ricus Grimbeek now appointed as Chief Operating Office for Australia and Mike Fraser as Chief Operating Office for Africa. Both bring a wealth of experience in the metals and **mining** industries, and have extensive operational credentials, having spent time as asset presidents for BHP Billiton during their careers.

The appointments of Mike and Ricus to these leadership roles in the new **Company** demonstrate the strength of our strategic approach to management development.

In addition to Mike's departure from BHP Billiton's **Group** Management Committee, as I said, I've also announced today other changes to our GMC, as we continue to develop our people and our **Company** for future success. These appointments illustrate the strength of the team that we're creating.

As expected, there's been a lot of interest in the new **Company**, and I'**m** pleased to confirm that the proposed demerger remains on track for completion in the first half of the 2015 calendar year. Most of you know that the new **Company** will be an Australian incorporated entity, and we'll apply for an ASX primary listing, a JSE secondary listing, and a standard listing in London.

We've already received a number of significant regulatory approvals, including Australia's Foreign Investment Review **Board** and from the Australian tax office. We're progressing well on those that remain outstanding.

In March, we're expecting to release all shareholder documentation, with full details of the proposed demerger, and this will include a BHP Billiton shareholder circular and an information memorandum for the demerged **Company**.

It's around this time that we plan to host tours of the new **Company**'s major **operations** and showcase the quality of these assets. We also plan to hold an Extraordinary General Meeting in May 2015, for both BHP Billiton Limited and plc shareholders to vote on the demerger.

Based on our current timetable, the new **Company** is expected to trade in the first half of the 2015 calendar year.

Back to the business.

We continue to improve our safety performance in the 2014 financial year. We improved it to our lowest-ever total recordable injury frequency rate of 4.2 for every **million** hours worked. Importantly, we also suffered no fatalities.

While we're encouraged by this result, recent events, again, demonstrated that we can never rest on past performance.

We were all deeply saddened by the fatal injury of one of our colleagues at our Worsley refinery in Western Australia in September. Extensive investigations are underway, to understand how this incident occurred and ensure we learn all the lessons quickly across BHP Billiton in both companies, because the safety of our people will always come first.

Given the scale of our **operations** and resources, we will continue to be an important member and contribute to our communities for decades. We do set ourselves very high environmental standards and believe that there must be a significant acceleration in the development and deployment of low-emissions technologies, and we will champion this change.

Since the 2007 financial year, we've invested nearly $0.5 **billion** to support emissions reduction and **energy** efficient projects. We'll continue to make more of these investments and to take opportunities to partner with governments, industry and researchers to invest in the technologies that could **lead** to a reduction in greenhouse gas emissions from the use of fossil fuels.

We have improved, of course, our own performance there and reduced our greenhouse gas emissions by 1.7 **million** tonnes in the 2014 financial year. And despite producing significantly more volumes since then, our greenhouse gas emissions are now below our 2006 financial year baseline.

We've also achieved a 22% reduction in potential occupational exposures compared to our 2012 baseline.

We also seek to be a valued partner in host communities and recognize that their support is central to our success. We work with these host communities all around the world to understand their issues and identify the opportunities: from helping Brazilian coffee farmers improve their productivity sustainable; to signing an opportunities agreement with three First Nations in Saskatchewan; to humanitarian assistance for typhoons in the Philippines, bush fires in Australia, and Ebola in West Africa.

Alongside the over $240 **million** invested in the **Company** last year in community and conservation programs with lasting benefit, our own people also make a real difference to the communities where they live and work; they volunteer their time and donate money which we match, doubling their contribution. In the 2014 financial year, this amounted to $12.1 **million**.

For the year, we also paid $9.9 **billion** in **Company** taxes, royalties and certain indirect taxes.

In the 2014 financial year, we delivered record volumes with a 9% increase in **Group** production through investment and productivity. And our core portfolio was the foundation of this success, with growth in **copper** equivalent terms, of 15%.

During the period, we also successfully completed six major projects, with two of those delivered under budget and ahead of schedule.

Looking ahead, the ramp up of these projects, combined with our productivity agenda, will deliver another year of record production. Our previously-stated guidance for each of our core commodities remains intact.

And, over the two years to the end of the 2014 financial year, we're also on track to deliver growth of 23% from our core portfolio.

Alongside this productivity-led growth sits almost $2 **billion** of real cost savings embedded last year and we remain confident that there is much more to come.

At Western Australian **iron ore**, we reduced unit costs to under $26 per tonne in the second half of the 2014 financial year. But we've only just scratched the surface and we see a clear pathway to FOB cash costs of less than $20 per tonne in the medium term.

There's no reason why we shouldn't be the lowest all-in cost supplier to **China**.

Dean will walk you through our core business later, but I would like to just take a moment to highlight the outstanding progress that Dean and his team have made.

In the 2014 financial year, our Queensland **coal** operation reduced operating costs by 24% to $99 per tonne. This has re-established this business as a leader in its industry.

We are, of course, no longer investing for growth in our **coal** business. All volume increases from now on will come from productivity. We expect this focus to yield another 10% reduction in unit costs at Queensland **coal** this year.

In our onshore US business, we continue to forecast that in the 2015 financial year unit costs will decline by approximately 10%. The business will be free cash flow positive in the 2016 financial year and, by the end of the decade, will approach $3 **billion** per annum.

Just to highlight this point, this is an annualized $5 **billion** increase over the period, representing growth of more than $800 **million** in each and every year between now and then.

[Fast-lane] **copper**, like elsewhere in the business, we have an unrelenting focus on productivity and costs. Escondida unit costs have fallen by 22% in the last two years and in the 2015 financial year, we forecast a further decline of more than 5%.

Let me now describe how we convert our continued improvement in operational performance into superior growth in shareholder returns.

Our longstanding capital management framework defines four priorities for cash flow: one, a commitment to maintain a strong balance sheet and solid A credit rating throughout the cycle.

Two, a commitment to at least maintain or grow our progressive base dividend in every reporting period.

Three, a commitment to invest selectively in high-return diversified opportunities, again through the cycle.

And four, a commitment to return excess capital to shareholders in the most-efficient way.

We see a solid A balance sheet as a precondition to consistently maximize shareholder value and returns. We test forward projections for cash flow to make sure that in a low-case scenario, we can be sure of maintaining an A or A2 credit rating.

Should this test indicate that we have excess capital, once we've paid a progressive base dividend and selectively invested in our high-return projects, we will consider buybacks or special dividends.

But given the underlying volatility, we will only return excess cash once it's accumulated on our balance sheet, so that any program has a high degree of certainty of being completed.

This is a consistent and enduring capital management framework.

By maintain our solid A, we achieve three objectives at all points in the cycle: a lower cost of funding; access to markets; and sufficient liquidity. History has proven that this is not true for other companies in our industry that flirt with higher levels of debt.

We also enjoy access to diverse sources of funding and a well-balanced maturity profile that currently averages 10 years. All of this combined equates to an efficient capital structure for BHP Billiton.

It's while sitting within the envelope of solid A that we've been able to maintain a progressive-based dividend, and we're the only **Company** in our peer **group** to have achieved this over the last decade and our base dividend has grown at a compound annual rate of 17%; again, superior to the peer **group**.

Our dividend is a **firm** commitment. We will not rebase or lower the dividend should the shareholders approve the demerger and this implies, all other things being equal, a higher payout ratio than the 48%, I talked about earlier.

Our opportunity-rich portfolio and a solid A balance sheet allows us to invest selectively through the cycle for value. The capacity to complete major projects and invest in new high-return opportunities, even in periods of extreme volatility, is an important differentiator in an industry characterized by boom and bust cycles, and this requires resilience and discipline.

Our capital allocation framework makes sure we consider all alternatives for capital, as we seek to optimize for net present value; IRR; return on capital employed; and margin. This rigorous process creates active competition against all possible uses of cash.

All businesses and their projects compete for capital against one another and the ever-present option of buying our shares.

So to our plans. As I mentioned earlier, we are focused on capital productivity and, as we've reduced spending, we've increased the competition for capital. Our teams have been pushed to lower the capital intensity of our planned growth.

We reduced capital and exploration expenditure in the 2014 financial year by 32% to $15.2 **billion**. Our expenditure will decline again in the 2015 financial year to $14.2 **billion**, that's $600 **million** below our prior

guidance. And, in the 2016 financial year, capital expenditure will again decline to $13 billion in nominal terms.

This includes roughly $2 billion for maintenance capital; $1 billion for exploration; less than $500 million at Jansen; less than $4 billion for onshore US; and around $1.5 billion to maintain steady production in our existing conventional petroleum business. The remainder is available for our mineral projects and execution, and our diversified portfolio of development options.

We have been able to achieve this as a result of capital productivity. So importantly, this reduced expenditure will not impact growth. As we continue to lower our spend, internal competition for capital and the quality of our projects will continue to rise.

This process will drive capital productivity to a new level, and further differentiate our investor proposition. Given the capital intensity of our industry, the importance of this process should not be underestimated.

We continue to project an average rate of return in excess of 20% for our portfolio of high-quality development options. So as we further improve capital productivity, we can choose either, to maintain our rate of investment and create more value, or to invest less.

So, our track record over the last decade is impressive. Our progressive dividend remained unbroken and increased at a compound annual growth rate of 17%.

We returned a total of $64 billion to shareholders, including $23 billion in the form of buybacks at less than $25 per share.

And this generated a total shareholder return of 394%, against an AX200 total shareholder return of 221%.

It's clear that our strategy and strong balance sheet have worked well for our shareholders, and we intend to extend our distinctive track record even in the face of low prices.

BHP Billiton is in great shape. We have many of the best ore bodies in the world; we operate sustainably; look after our people in our communities; and we are successful increasing volumes and lowering costs.

We are confident that our productivity drive will be accelerated by the demerger, and expect cash flow will be brought forward and enhanced to increase value and secure yield for you, our shareholders.

So to summarize, the key numbers: 23%, the projected two-year growth rate of our core portfolio; $4 billion, our new minimum target for productivity; $2.6 billion, our minimum cost out target; and 20%, the return that we can exceed by investing in our best projects.

These are hard targets, and they cause us to inspire the right behaviors and drive the right culture for delivery throughout the organization. And, they also allow you to confidently track our performance, and hold us to account.

So that's all I had to say, but Mike's now going to present our views on the commodity markets. And then we'll have some questions and answers, and then a break before the second half, over to you Mike.

MIKE HENRY, PRESIDENT, HSEC, MARKETING & TECHNOLOGY, BHP BILLITON PLC: Thank you, Andrew; and once again, welcome, everyone.

So it's a pleasure to be here today to talk about the external factors relevant to our business.

Now, in London, I also spoke about our approach to continuous improvement. But in the interests of time this morning, I'm not going to speak to that same topic; you're going to see more than enough by way of similar themes and the same framework coming through in the presentations that both Dean and Peter will give a little bit later on.

So just before I get started, let me point you to our usual disclaimer slide.

Now in my presentation, I'm going to focus on three things. I'll talk about global economic development and growth; what this means for our commodities; and then finally, why we are uniquely placed to resource the future, and in doing so create long-term value for our shareholders.

Now our diverse portfolio of commodities and our centralized marketing models support our ability to conduct deep analysis into how the world is likely to evolve.

It's important to note though that while we use that ability to develop a well-researched and thought through mid-case outlook, we also recognize that the world is inherently uncertain.

Therefore, we test our portfolio and our investment decisions not just against that mid-case outlook, but against different potential outcomes. We develop a range of scenarios that take into account key uncertainties; macroeconomic factors; technology evolution; political developments; and governance trends.

As an example, we recognize the uncertainty in the way that countries address climate change. We consider a scenario in which a growing global acceptance of the science, in which climate change-related events drive stronger responses; drive increased **energy** efficiency; and accelerate the deployment of low emissions technology, resulting in a more-diverse global **energy** supply base with greater inclusion of nuclear and renewables.

Even in that severely carbon-constrained world, our modeling indicates that our uniquely diversified portfolio remains resilient, with potential upside for **uranium**; our high quality **iron ore** and metallurgical **coal**; potash; and, likely, **copper**.

Now, our central view is consistent with what we've discussed previously. It assumes a degree of volatility in the global economy in the near term, and strong global growth over the longer term, as the developing economies further integrate on investment, and trade.

We see the US maintaining its relative position in global growth, **China** continues to successfully pursue the reforms required to support their ongoing shift towards increased reliance on consumer demand, and India pursues a stronger reform agenda, resulting in improved growth and increasing prominence.

Now, this scenario yields very healthy global growth in the long term of -- in the order of 4%, solid commodity demand, but also ready access to resources. So we see low-cost supply keeping up with demand.

Now, against that backdrop, the outlook for our products and our portfolio remains strong, notwithstanding the short-term volatility that we're seeing in commodity markets.

As the industrialization and urbanization of the developing world continues, not only will ongoing investment in infrastructure be required to support that process, but the accompanying productivity gains will translate into higher incomes, which will drive even greater relative growth in consumer demand.

This will drive resilient demand for things like **copper**, **energy**, and food, even as demand for steel and steel-making raw materials begins to slow.

Now although this evolution is not a given and some countries will likely not make the full transition, our view is that in key jurisdictions there is sufficient signs of progress taking place in educational, legal, labor and market reforms to give us a measure of confidence in our outlook.

For example, in **China**, there are clear steps being taken to rebalance the economy towards consumption, a critical shift for sustainable growth in employment.

The authorities have been adopting a really encouraging degree of resolve in pursuing the same, in the recent -- in the face of the recent slowing in the **property** market, the efforts to stimulate growth have been measured, and, certainly, more measured than they've been historically.

We've also seen resilience in consumer spending, despite a slowdown in the broader economy.

Now the UN forecasts that the urbanized population of middle income economies will include another 1.7 **billion** people by 2050, supporting a larger variety of markets and goods, as low productivity work in rural areas shifts to more productive and better paying jobs in the manufacturing and services sectors.

Now the impact of this growth in the middle class can be illustrated by what's been seen historically in other economies. We've called out one example in the slide here; the bottom right-hand chart shows the increase in penetration of light vehicles as incomes rise.

Global light duty vehicle penetration is forecast to increase by 30% per capita to 2030, led by developing countries like **China**. Now, the additional vehicles in **China** alone will require another 20 **million** tonnes of steel, 350,000 tonnes of **copper**, and so on, and so forth, not to mention the **energy** required to power them.

It's not just vehicles, as air conditioner penetration in India grows from 10% to 40% to 2030; we expect to see a six-fold increase in household **energy** consumption for this use.

Over the longer term, agricultural demand will also increase strongly, and this could play a growing role in our portfolio by way of potash, as I'll speak to later in the presentation.

Now, we have confidence that this transition towards a consumer and services sector-oriented economy will continue, and that our portfolio is well suited to meet the commodity demand that will accompany it. But I'll now turn to a few of the individual commodities, and I'm going to start with iron ore, and let me start with where we've been.

As everyone in this room knows, over the past decade, or decade and a half we have seen a sharp acceleration in growth in demand for iron ore. Supply initially struggled to keep pace with that growth in demand, and we saw a resultant run up in prices. But iron ore is fundamentally not a scarce resource.

So not surprisingly, the high prices incentivized fresh capital into the industry. As a result, a supply of relatively low cost, high-quality iron ore has been able to catch up with demand, and then some. As that's happened, we've seen a displacement of high-cost supply off the top end of the cost curve, and a drop in prices. This is something that we've experienced or seen, certainly, in the past few months. So, in other words, markets have worked the way markets can be expected to work.

So what do we see ahead of us? Well, Chinese steel demand growth is slowing, as the economy transitions from investment to consumption. We've spoken previously about our forecast for steel production to peak at between 1 billion and 1.1 billion tonnes in the early to mid-2020s.

An increasing proportion of that steel will be for replacement steel, as much of the infrastructure and equipment that's been added to the economy over the past decade begins to reach the end of its useful life. As the steel in it gets released, more of the steel production will be met by way of scrap rather than by way of pig iron, which is what requires iron ore.

It's this combination of slowing steel growth and more of that steel being met by scrap that can be expected to lead to a decline in the demand for seaborne iron ore from the peak that it will reach in the early to mid-2020s.

This is consistent with the outlook that we've spoken about for the past few years, and that outlook has been integral to our commitment to maximize returns from our already-installed infrastructure and resources.

Now, our margins, over the long run, will be supported by the structural advantage that we enjoy in terms of our proximity to tidewater; our low strip ratio; and our position relative to North Asia, where most of the steel demand will continue to be.

Our metallurgical coal operations have been focused on recapturing our competitive position. Dean and the team there have achieved much by way of embedding cost and volume efficiencies, as Dean will speak to later.

At the same time, other suppliers have also rapidly improved their productivity to reduce unit cost, and there's been an overall compression in the cost curve, and we're seeing displacement of some high-cost production from that market.

However, as margins have compressed, high-cost supply has initially been stickier in this market than it's been in iron ore. We have seen marginal producers announce capacity curtailments of over 20 million tonnes per annum this calendar year, some of which are yet to fully take effect.

Now, it's likely that it's going to take some time for more high-cost production to work its way out of this market, as some of the less-sustainable steps taken to reduce cost begin to unwind, or as those under greater financial pressure elect to step back.

Now, over the longer term, we expect demand to be supported by steel growth in developing economies outside of China.

For example, the Indian growth story is really starting to gain traction, with the election of a new government there that's committed to improving infrastructure and to supporting the private sector in achieving sustained growth.

An investment in steel capacity in India is gaining momentum, with an additional 17 million tonnes of annual steel capacity committed, and to be commissioned by 2016 alone.

Unlike in iron ore, India does not have indigenous resources of high-quality hard coking coal and, therefore, they're going to need to meet their needs via imports.

We are well positioned to supply this growth in metallurgical coal demand. Our Queensland coal assets are characterized by the quality of their premium hard coking coals, and a resource base that can support

production for decades. These assets have access to well-established infrastructure and are in close proximity to both traditional and growth markets.

The outstanding work that Dean and the team have done there to become more productive now returns us to the low end of the cost curve, as Andrew mentioned, securing our competitive advantage in this commodity.

Now, turning to **copper**. The **copper** story remains very strong. Demand for **copper** is expected to increase from 27 **million** to 40 **million** tonnes by 2030. This will be driven by electrical and building construction, which together comprise around half of overall **copper** demand; as well as production of consumer goods, including household appliances and automobiles.

And whilst **China** will remain the single most important driver of demand, we do expect to see consistent growth in other regions.

Now, on the supply side, while scrap will grow by 30% to 2030, significant fresh primary supply of **copper** will still be required to meet demand growth.

Compounding the increased requirement for supply to meet outright growth and demand is the grade decline, which is going to impact the current supply base. That's expected to take about 5 **million** tonnes off of the current installed capacity to 2030.

The cost base in South America, which is the largest exporter of **copper**, will be further impacted by the increased need for desalinated water, and increased **ore** hardness, which will **lead** to higher power consumption.

This combination of the need for greenfield capacity and a structurally-challenged cost base bode well for **copper** prices longer term.

So on to **energy**. The outlook for **energy** is also robust. As the world's economies and population continue to grow, more people will gain access to electricity and living standards will rise, increasing **energy** demand.

We expect primary **energy** demand to grow by around 40% to 2030. **Energy** demand growth will be strongest in Asia, which is forecast to comprise 46% of global primary **energy** demand in 2030. **China** and India alone will make up almost half of the growth between now and then.

Demand for all of the fossil fuels is expected to continue to grow over that period. And this is directionally consistent with the views of other globally-recognized forecasting bodies.

Even in the more conservative new policy scenario of the International **Energy** Agency, demand for thermal **coal** falls as a percent of the **energy** mix, but continues to grow strongly in absolute terms. Absolute demand for natural gas in that scenario grows by 40%, and demand for **oil** grows by 12%.

Now, that figure for **oil** might sound like a low number, but we need to keep in mind that the decline curves in **oil** are such that a lot of new production will need to be brought to market just to stand still. So the apparent demand, or the need for new capacity, will be much higher.

Continued global development depends on access to reliable and affordable **energy**, and connecting new users and improving quality of electricity supply will support strong global **energy** demand.

Now, the chart on the right here gives you a different lens on how we expect **energy** supply and demand to evolve. It illustrates our mid-case outlook but, more importantly, it helps to illustrate one of the factors that gives rise to higher than usual uncertainty when trying to call exactly how countries will meet their **energy** demand, and what the exact mix will look like.

Energy mix will be determined not only by the usual underlying direct economics, but also by how countries shape their response to climate change and by their security of supply considerations. These factors are going to be particularly important in Asia, given the region's continued development and its strongly increasing reliance on imported **energy**, as can be seen in the chart.

Just to be clear, we accept this uncertainty. Just like we test our aggregate portfolio against a range of different scenarios, we do the same with our **energy** portfolio. Our unique diversity of **energy** commodities both de-risks our portfolio and provides us with attractive growth options under multiple different scenarios.

Finally, on to agricultural demand and fertilizer or potash. As I mentioned earlier, population growth and greater economic prosperity in the developing world will increase the demand for agriculture.

Plants need potassium to grow. As crops are harvested, potassium is removed from the land, and it ultimately needs to be replenished. Potash is the primary means for doing so.

At a global level, major grain demand is expected to increase by 20% to 30% by 2030. This will require the development of additional productive land, or increasing the productivity and yields from existing farmland. We believe arable land availability will become an increasing challenge going forward, as suitable arable land is already constrained and environmental sustainability must be taken into account.

Therefore, increasing yield or intensity of crop production is also going to be required. And potash demand will not only benefit from the base increase in agricultural activity, it will also be critical to deliver this required increase in crop yields.

Now, in the long term, we are confident in the demand for potash, which we expect to grow by between 2% and 3% per annum to 2030. With major crop-producing regions, such as **China**, India, Southeast Asia, Brazil and the US making up around three-quarters of that growth in demand.

Global potash demand saw a 7% rebound in 2013, and is expected to grow by around 9% this year, to 58 **million** tonnes.

Now, on the supply side, the market is in oversupply, and we can expect it to remain so for the foreseeable future. As announced, brownfield expansions and the first phase of three greenfields projects are completed.

However, the current suite of brownfield expansions really represent the last of the low-hanging fruit for incumbent producers. Many of these mines have reached the limits of their shaft or ventilation capacity, and we forecast that new capacity is going to be required by the end of this decade.

Greenfield projects, like Jansen, will be very well placed to compete, given that even where future brownfield expansions are technically feasible, they will be more akin to greenfield projects requiring new shafts and associated infrastructure.

So with our broad exposure to **iron ore**, metallurgical **coal**, **copper**, the full range of **energy** commodities and potentially potash, and with a long-life resource endowment in those commodities, we are well placed to respond to changes in demand across a range of scenarios.

Our core portfolio provides us with decades, and in some instances over a century, of inventory across these multiple commodities, allowing us to choose when and where to expand our **operations** to maximize value.

Our concentrated, largely OECD footprint lends itself well to low cost, low-risk expansions, as demand grows and to driving world-class productivity in our **operations** with resultant higher relative margins. This is an unrivalled position.

So in conclusion, while we remain positive and confident about our outlook, our testing against multiple divergent scenarios makes us equally confident that our strategy and portfolio are resilient to the uncertainty inherent in trying to call the future.

In a continuously-evolving external environment, we remain well positioned to continue resourcing the future and to delivering long-term value for shareholders.

DEAN DALLA VALLE, PRESIDENT, **COAL**, BHP BILLITON PLC: Well, good morning, and welcome to the second part of our briefing today. My name is Dean Dalla Valle and I'**m** the **coal** business President.

It's great to be here today to provide an overview of the work that we have been doing to deliver against our strategy, as I outlined to many of you in May last year.

Broadly, our strategy involves continuing to improve our safety performance; engaging employees; driving productivity at the bottom [link] of our **operations** to global benchmarks; and reducing our absolute costs.

As a result of that, I'**m** pleased to report that we have delivered $2.4 **billion** of embedded costs in volume efficiencies since 2012. And, all of our **operations** are cash positive today.

As with the earlier presentations, I draw your attention to our disclaimer. And equally important is the statement of our resources, which is used throughout this presentation and noted for your reference.

As Mike explained earlier, we remain confident about the outlook for both metallurgical and **energy coal**. However, as you all know, the current market conditions are challenging. It has been essential that we focus on the things that we control to re-establish our cost-competitive position.

With the compression of the cost curve and reducing margins, our volume and cost-saving initiatives have been essential to ensure all our **operations** are cash positive.

Today, I will highlight the key focus areas for the **coal** business, achievements to date and some of the initiatives underway to deliver even more.

Continuous improvement in a health, safety, environmental and community performance is critical to the success of our business. While we are aggressively pursuing productivity improvement, our work is predicated on continuing to improve HSEC performance.

Our priorities are to continue improving safety by rapidly improving our ability to manage material risk. For example, one of our priority material risks is the interaction between light and heavy vehicles at our mines. No doubt many of you close to the industry have seen some of the tragic events of late where **operations** get this wrong. Multiple fatalities can happen very quickly.

We have implemented detailed plans, which are lowering the risk across all of our sites. These are **site**-based; they're routinely measured and tested all the way up to Andrew.

Equally important is the work that we are doing within our communities. The picture you see here captures one of our community projects at our Mount Arthur mine in New South Wales; it was actually a finalist in our global HSEC awards just last week, which Andrew presided over.

This is the Warrae Wanni Pathways to School Program. This partnership, with a local public school in the Hunter Valley, supports pre-school age children to attend an early-learning program to help them transition successfully to school. It is particularly focused on local aboriginal and disadvantaged children.

This is just one of the many health and safety environment community projects that we have developed. Our teams are so proud to do this. No doubt, we've seen **mining** and **coal mining** in particular, come under lots of pressure and scrutiny.

The ability for people to work in these businesses and actually do these projects bring great benefits for the people inside the operation, but also around the **operations**, to have lasting impact is just a wonderful thing for people to be able to do, and it really fits well with the charter of our organization.

Coal is a key pillar of BHP Billiton. It's accounted for 17% of our production over the last five years. We have made the material contribution to the **Group** through both EBIT and cash flow. However, as shown on the bottom chart, the last two years have been particularly challenging.

Given market circumstances, we have been running incredibly hard to re-establish our cost-competitive advantage and we are making great progress, as you will see.

The success of the **coal** business is underpinned by a high-quality resource base that can support decades of production. Note, the legend size the bubble, which represents 1 **billion** tonnes resource down the bottom left-hand side.

Specifically, three-quarters of the production forecast in our Queensland **coal operations** is premium quality, hard coking **coal**. Along with well-established infrastructure and proximity to traditional and growth markets, this gives us a competitive advantage against emerging **coal** basins.

Following the proposed de-merger, the BHP Billiton**coal** business will be predominantly focused on the major resource basins in New South Wales and Central Queensland, as shown as the large orange bubbles on the east coast of Australia. Again, note the size of those bubbles compared to a 1 **billion** tonne resource on the legend.

For those of you who attended the Queensland **coal** tour in May 2013, you will recall that we set out a very simple, clear strategy to maximize productivity through the utilization of installed capacity and to sustainably lower our cost base.

I'**m** pleased to be able to report today that this has resulted in a reduction in met **coal** unit costs by 37% and **energy coal** costs by 21% over the last two years. We have done this by identifying bottlenecks and value drivers at each operation across the value chain. We are focusing on benchmarking productivity; renegotiating supply agreements; eliminating waste; and engaging our people to improve productivity.

This is how we achieved cost and volume efficiencies of $2.4 **billion** since fiscal year 2012, representing over one-third of the **Company**'s savings, with the majority coming from sustainable cost efficiencies. And we are not done yet, as we'll show you today.

In conjunction with Mike's team, we're also leveraging our marketing expertise to maximize margins. Our marketing team is a major contributor to **coal**'s productivity agenda. Transparent pricing and promoting the technical properties of our high-quality **coal** ensures full recognition of their value and use.

If we look at the chart, it shows the prices for premium, low-volatile **coal** we realize compared with the index. The orange dots represent our sales and the grey dots the sales of our peers.

On average, we outperform our competitors and receive above-index pricing. We also optimize the end-to-end supply chain, leading to lower rail and port costs, higher throughput and reduce demurrage.

Driving labor productivity is one of the major elements in our strategy. As you can see, labor is around 50% of our costs base.

Two data points I would like to emphasize in this slide; we have lowered our labor costs by 23% last year and achieved a 29% increase in material moved per employee.

Our high-performance culture has been key to achieving these reductions. We're engaging with employees at all levels to ensure that every person, every day starts with a sense of purpose and a target, is involved in the process of identifying improvement and elimination of waste, and receives regular feedback on how they and their teams are performing. No different to how you would coach an elite sporting team. And that's what our teams are; they're people who are competing on a global basis every day.

Achieving diversity in our workforce has also been key to enhancing our labor productivity. This includes diversity by location, by source, and by gender. We are very proud of the 25% female workforce at Daunia and the Caval Ridge mines, achieving the aspiration that we set out for ourselves.

All the improvements are facilitated by our systems and processes, which enable internal benchmarking across our **operations**. This creates a very healthy competition.

So let me get a little bit more specific and detailed about our work. The two charts here show that we have achieved material increase in both our truck fleet and wash-plant utilization, which are our bottlenecks, and this is over the last 12 months.

However, our aspirations are high. We are aiming to meet, or exceed, global benchmark performance for our key equipment over the coming years.

Specifically for trucks, we are targeting global benchmark performance of 6,000 hours per annum, excluding queue time; that is not recognizing the time that the truck is waiting round for a shovel to load it.

In our wash plants, we are targeting benchmark performance of 8,000 hours per annum. I'**m** sure I don't need to remind the highly productive people in the audience here today that there are only 8,760 hours in one year. So 8,000 hours is truly a high benchmark.

With our common systems and processes in a simplified business, rapid replication of best practice will also be a significant source of advantage for **coal**. So let's dive a little deeper into productivity. We have lots of great examples of productivity improvement across our business, but I'll talk about three today.

Let me start at the Peak Downs' mine in the Bowen Basin. The team there has delivered an outstanding performance with an 8% improvement in production to 9.8 **million** tonnes last year, a record for that mine, and that's been running for quite a while. And, annual operating costs have been reduced by 18% in the same year.

Today, the **coal** preparation plant, which is the **site** bottleneck, is currently operating at over 7,500 hours' production per year. So it's approaching our 8,000 hour target.

So how do we achieve this? It was done by detailed, bottom-up, analysis of the critical path, identifying areas of lost opportunities for improvement, engagement of the workforce, and use of measurement and visualization of the process. So everybody was engaged and involved.

The second case study is about optimizing the mine plan at the Poitrel mine, also in the Bowen Basin. So what you are seeing here, in the picture, is how we've redesigned our **mining** process to optimize the amount of **coal** we extract from the Poitrel seam.

So on the picture, you can see the direction of the **mining** from top to bottom. You can see we started strip 11 in this process. We got up to strip 14.

The chart shows the improvements we've made as **mining** has progressed. The red area shows where sub-optimal blasting practices have previously impacted up to two meters of mineable **coal**.

The green area is where we have implemented more accurate blasting, resulting in no more than 20 centimeters of **coal** being impacted. This is a great improvement, which equates to less washing, less waste, and significant cost savings. This is achieved by improved mine planning, more accurate geological models, and, of course, being well communicated and engaged, so that everyone knew the plan, and everyone acted on the plan every day.

The final example I'd like to share is the significant improvements in productivity at Mount Arthur in New South Wales. A cross-functional team with representatives from production, mine planning, and dispatch, underpinned by benchmarking clinical path analysis, identified opportunities to improve utilization, and increase productivity.

This included improvements in truck dispatching; faster driver changes by having drive-through bays; improved mine planning; and focus on payload. Through these measures, we will be able to reduce loading fleets from 12 trucks to 10 trucks, and reduce the trucking fleet from 88 trucks to 64 trucks over the next year.

All these case studies highlight the sustainable productivity improvements our **coal** business is implementing and embedding where it can in all the other **operations** rapidly.

So hopefully these three examples, plus the previous one, give you a sense of the great work that's going on right throughout the business. And each of the mines, if you visited, would have two or three examples of equal gravity that they'd be extremely proud of.

So after a long period of significant cost inflation driven by a headed market for labor, consumables and accommodation, we have had to work tirelessly to rebase our costs.

We have banked almost $400 **million** in supply savings over two years, and are targeting a similar result this year. So this means a combined savings of about $750 **million**, since fiscal year 2012, will be achieved.

So how do we do this? Obviously, it's a mix of traditional reviews, and looking at some more innovative ways about doing it.

Rapid tendering is a good example of more innovative ways. This involves electronic auctioning process where we have proven results. We have seen a 50% lowering in input price for some of our consumables. And it's something we're now starting to institutionalize across all of our businesses. And it's one of the new approaches. There are many, but it's a good example of what we're actually doing today, and is realizing results.

And being in the great town of Sydney, we all know how the Sydney Harbor Bridge is painted. Our supply process is the same. You start at one end; you paint it. When you've finished that, you basically start again. So we just continually do this, and continue to delayer our costs.

So, so far I've told you about productivity; people; equipment; supply; marketing costs. So what's next? Despite having already embedded significant productivity-led gains and cost efficiencies over the last two years, there is more to come.

At Queensland **Coal**, we are targeting a further 10% reduction this fiscal year, bringing costs below $90 per tonne. Remember in May last year, when some of you were in Queensland, there was questions and challenges: could we get below $100 per tonne? Some were bullish, some were bearish. But we're now at $90 per tonne we're forecasting to beat.

In New South Wales **Energy Coal**, we are forecasting a further 15% reduction in unit costs over the next two fiscal years, bringing costs below $45 per tonne. You'll note the footnote there that this is after an exchange rate of AUD1 per $0.91. So we know we've moved on. So there's actually further upside. But we've held it at AUD1 per $0.91 so it's consistent with our other presentations.

Again, our plans will be achieved through targeting global benchmarks on our productivity, crystallizing further cost reductions, and leveraging our common systems and processes right across all of our businesses.

For fiscal year 2015 we expect to achieve record metallurgical **coal** production of 47 **million** tonnes. Our increase in volume is from maximizing the utilization of existing capacity, including our newly-completed Caval Ridge and Daunia mines operating at full capacity.

Our **energy coal** volumes are expected to remain steady. While we're seeing strong operational performance at Mount Arthur, there will be lower volumes at Navajo **Coal** due to reduced power-plant demand. And Cerrejon is producing at guidance, with upside with the right conditions.

As you can see, we have successfully delivered projects in our pipeline. Most recently Caval Ridge was delivered three months ahead of schedule, and $160 million below budget.

The port expansion associated with Cerrejon P40 delivered first coal on schedule. However, as previously communicated, we will remain constrained at 35 million tonnes in the medium term.

Hay Point expansion is nearing completion to its 55 million tonne capacity.

So with our growth pipeline behind us, going forward our capital expenditure will largely be in minor and sustaining capital, as Andrew has articulated many times, in publicly and to me privately many times.

Our productivity and cost work will also directly impact the efficiency of our capital spend going forward. So productivity, obviously, we'll -- largely operationally focus, we'll have massive spin-offs on to our capital spend as well. And you're seeing some of that flow through major capital and minor capital projects.

So I've given you an overview of how we're delivering against our strategy. As Andrew outlined this morning, there is also significant opportunity for simplification in BHP Billiton as a result of the demerger.

With fewer assets we'll be able to focus on our core capabilities and we can leverage our common systems and processes to deliver continuous improvement and accelerate productivity gains.

The demerger will result in a reduction of core operations for coal from 19 to 12. As a result we are focusing on understanding how we can further simplify our business and the way we operate.

We intend on extracting synergies from the commonality of our fleet and the concentration of operations, including centralization of maintenance, analysis and improvement. We'll also review functional activities to further streamline for the simplified portfolio.

So you can see from these results that our strategy is delivering. We are driving ongoing improvement in HSEC performance, while we are aggressively pursuing productivity.

We have a large high-quality resource base and our early decisions to close high-cost capacity, and our extensive productivity and efficiency work have re-established our competitive advantage.

Volume growth will come from successful ramp up of our completed projects, but mainly from our focused approach to productivity. Even in this tough environment all our assets are cash positive, which leverages us for margin growth and positions us well for the future.

We're not stopping here. We can further simplify post demerger and pursue even more efficiency across the coal portfolio. So that's the exciting part of the story.

With that, I'll hand over to another exciting story and Peter Beaven will talk about copper. Thank you.

PETER BEAVEN, CFO, BHP BILLITON PLC: Thank you, sir. Thanks, Dean. My name is Peter Beaven, as many of you know, prior to my appointment as CFO, I was the President of Copper and it's really in that context that I'm here to present to you today.

But before we begin we have the usual disclaimers, all three pages of them.

What I'm going to do is I'm going to start with an overview of the copper industry and outline some of the structural challenges that we all face. Mike mentioned a few of them; I'll try and bring out a few more details in that regard. Those challenges, of course, at the same time make the long-term market fundamentals for copper very attractive.

Importantly, I'll detail some of the solutions that we're implementing to overcome those challenges and how we plan to create significant shareholder value from, really, essentially two things: maintaining our low-cost operation, driving what we have today as hard as we can. And then secondly, growing our business, firstly, from debottlenecking; low capital intensity; super higher returns; greater projects; and then, finally, larger -- more material growth projects.

Our productivity efforts alone are delivering substantial unit cost savings; there's more to come as you heard from Dean.

Beyond the enormous effort that's required simply to stand still in this industry, we also have a differentiated growth story. Near term, several exceptionally lower capital-intensive growth options that will generate returns significantly exceeding 20%; and longer term, we really have a world class resource base that will provide us with a compelling suite of growth projects.

As Andrew mentioned earlier, operating in a safe and sustainable manner is what matters most to us. We've got a strong safety track record in **copper**. Our TRIF is consistently below 3; that's a very good number in the **mining** world.

Escondida, the world's largest **copper** mine, has a number of very large complex projects underway, a huge amount of contractors, therefore, on the **site** along with our own operation employees. It's TRIF, at the moment, is 1.7. So I think this is indicative of a business that's in control.

The sector performance is underpinned by a material risk management process that focuses on establishing critical controls; those controls being owned by the line, the people on the ground and on a daily basis, in the field, verifying their effectiveness using a simple and effective tablet-based system.

Sustainability is also a key consideration in all of our decisions. As many of you will know, two of the biggest challenges that face the **mining** industry, in fact Chile in total, are really power and water. Our communities in Chile and, in fact, all across our **operations**, like all communities in the world, are demanding and expecting different solutions to the problems that we've faced in the past.

So our stance is to react positively, get on the front foot. We fundamentally believe that we need to be aligned with our communities. We need to be in line with our community, because we need a license to operate; and we need that license to operate to run on a multiple decades' basis. I don't believe that as society changes then we should sit and hang back and wait and be pulled in the direction of that society.

So our new desalinization plant at Escondida will substantially reduce non-renewable water usage. It will enhance, obviously, the sustainable use of those [Aquafix] that we currently draw the majority of our water.

We need more power to operate an expanded Escondida and smelts and, in fact, to pump that water up to Escondida. So we have Korean partners, they're building a 500 megawatt gas-fired plant in Mejillones, close to Antofagasta. That will help us to move from 100% reliance in **coal** to a 50/50 split between **coal** and gas.

In so doing, we can reduce our emissions, our carbon emissions by 1.5 **million** tonnes per annum, which is obviously very, very significant.

In the last five years, we contributed over $200 **million** to social programs in our communities. In Australia, Olympic Dam is supporting programs to improve employment prospects, enterprise development and local indigenous communities.

In Chile, we established the CREO and Antofagasta organization. CREO means to believe, so to believe in Antofagasta. So what we did is we put together with civic society, with regional government, with federal government, and with the other private companies in the region an organization that will create a comprehensive long-term plan to make Antofagasta one of the most livable cities in Chile by 2035. And for those of you who have been to Antofagasta you know that's quite a challenge.

This year I was very proud, I was very proud, that we were given by ICARE, which is a think tank, which essentially is set up by the business community of Chile. ICARE gave us the **company** of the year, many of these things.

But in 50 years this organization has been an existing -- an existence and giving out this award. This is only the second time a foreign **company** has ever been given it. They gave it us because of obviously how we run our business, and how we have developed and have contributed to the development of Chile. That's really significant when you get your peers in another country to recognize what -- how we do things as well as what we do.

So given the scale of our **operations** and our resources, we'll continue to be an important contributor to our communities for decades to come.

So this foundation of safe sustainable **operations** has underpinned exceptional operating and financial performance. Very quickly let me just remind you some of these numbers.

Last five years **copper** contributed 21% of BHP Billiton's production. Underlying EBIT margin, 42%; we invested $13 **billion** in our business and that achieved a net operating return -- a return on net operating assets of 34%, money well spent. So **copper** truly is one of BHP's key pillars.

Let me just step back and look more closely what are the success factors that we need to achieve in this business, in **copper** in particular; maybe, actually, just in any commodity. So, do you have the best **ore** bodies? Are you low cost? Do you operate in stable countries? Do you have attractive -- a suite of attractive high-return growth prospects?

I think if you tick one or two of those boxes you've got a [shout for it]. But honestly, we can say that we tick all four of those boxes.

We have a simple portfolio, world class **ore** bodies, concentrated in stable countries. All of our -- with the exception of Peru, in fact, all of our countries are OECD, interesting.

They underpin our low cost position. They contain many of the industries' best development options, I'll tell you more about those in a second. With our productivity agenda, they continue to improve every day.

Our four assets in Australia, Chile and Peru contributed 1.2 **million** tonnes of attributable **copper** production in FY14. That makes us the fourth largest **copper** producer in the world currently.

I think these assets also form the largest **copper** resource base in the industry and, in many cases, with potential mine lives in excess of 100 years.

We have a competitive cost position: Antamina, Escondida firmly placed in the first quartile; Spence in the second. Olympic Dam, well, it continues to move down the cost curve with significantly more productivity gains to come and, again, I'll speak about that in a moment.

Steep tail in the industry cost curve is interesting. It does support attractive margins for our low-cost assets, but we've seen other commodities with a steep tail. So what I think is important is that we actually believe this one is sustainable.

Mike's already outlined the existing **copper** supply base will be unable to meet increased primary demand. So grade decline in the big porphyries, that account for much of the world's **copper** production, and continued demand growth will require additional mined tonnes to balance the market. Those additional tonnes to balance the market have to come from higher-cost resources.

The industry faces considerable headwinds in addition to this in meeting the market demand for these additional tonnes, because the grade decline means that we'll have to move more tonnes simply to stay the same, and productivity in moving those tonnes is very variable.

What we see in Chile and in Peru, it's about the same numbers, is the productivity per person, in terms of tonnes moved per person per year, is about 50% of that -- of comparable **operations** in United States and Canada. These are Wood Mack's numbers. Actually, we did our own study; pretty much the same.

This lack of productivity is exacerbated these days by the labor cost inflation.

Other input costs, important input costs also rising. Cost base in South America will be affected by the increasing need for desalinated water; higher power consumption required to pump this water to mines located at high altitudes. Power cost per megawatt hour in Chile are already significantly higher than other major **copper**-producing countries, such as Peru and the United States and, in fact, here in Australia.

Permitting, it's getting harder all the time. We have to give more commitment; takes longer.

So within this context, we believe that we are performing very well. We believe we will continue to do so and we have a portfolio of assets of unrivaled quality.

We have a differentiated approach to productivity that's producing great results and capital-efficient growth options to go with that. So we believe we're very well positioned to outperform.

Let's have a look at some of these aspects in more detail. First things we've got to do: make sure you get the most out of the assets you currently have; the capital that you and our shareholders have given us.

So the first aim: get the most out of every piece of installed capacity, that is, most production, so ensure maximum throughput at the bottleneck. Like you heard from Dean, we're on exactly the same journey, leveraging common systems, processes central to our operating model to underpin continuous performance improvements.

We're focused on the amount of time our infrastructure and equipment is available; how much of the time it's utilized; the rate; the variability. These are very basic things, but they require day-in/day-out focus.

Maximizing bottleneck utilization has the potential add more value than anything else we do. Essentially, it doesn't come with a huge investment of capital and it produces a tonne that carries a margin with it.

Our focus on the basics over the past three years has allowed us to increase bottleneck throughput to record or near-record level at all the assets in FY14.

Record material mined at Olympic Dam. The shaft -- the lifting capacity is essential the bottleneck there; 22% (sic - see slide 73, "9%") increase in mill throughput at Escondida, the sags -- the mills are the bottleneck.

At stacking -- at Spence, processing and stacking, that's the bottleneck, we've seen a 13% increase in that in FY14 to the second-highest ever, just a smidgen off the record. At Antamina, actually the primary crusher is the bottleneck interestingly enough and that is absolutely going at record rates.

At Escondida, we systematically moved -- takes time, Andrew said it. These changes, they may seem small, but they take time. We systematically moved the modeling from crushing, conveying to the concentrators and now, we've hit the next bottleneck, which is water.

But we also have to look beyond the bottleneck, obviously. There's a whole lot of operation and efficiency gains that we really need to look after. So here we benchmarked the performance of our equipment internally/externally; the transparency of the results enables the pursuit of best-in-class performance; and our productivity programs have identified several initiatives to further improve performance across the business.

Example, Escondida: optimized meal break, shift changeover practices combined with increased training and development resulted in an 11% increase in truck utilization over the last 15 months.

Escondida, we run more than 150 trucks. We move about 1.3 **million** tonnes of dirt a day. So you can image, those changes, 11% increase in utilization, it has a big impact on your bottom line.

Our focus on productivity will support our ability to achieve FY15 **copper** production guidance of 1.8 **million** tonnes. That is notwithstanding the recent two-day strike and the significant water and power availability issues/challenges that have constrained production so far this year.

Sometimes you get lots of numbers on productivity and these are big **billions** here and **billions** there, but, hey, does it actually hit the bottom line? So here, what are we going to say? The productivity initiatives that we're talking about, they're directly translating into lower unit costs.

In order to offset grade decline, we're not only moving more tonnes, but we're doing so at a lower cost. Of the three years to the end of FY15, we anticipate a 25% reduction in unit costs across the total **copper** business. This is despite an expected 13% increase in material moved over the same timeframe.

We're achieving the substantial reduction through supply savings, strategic insourcing with contract activity, improved labor productivity, reducing consumable expenditure, simplifying our functional support structure; same as what you've heard from all of my colleagues.

Escondida alone, we expect FY15 unit costs to decline by 30% compared to FY12.

So, as I mentioned earlier, industry is characterized by a big **copper** porphyries. They have variable grades; that's how God created them and where he put them was where, right now, we have water and power constraints, so Escondida's no exception.

Following several years of strong grades from FY12, we're again faced with significant near-term decline in grades with the resultant reduction in volumes. However, we have been preparing for this for some time. So we expect FY16 to represent the lower point in production for the remainder of the decade, and I'll tell you how we're going to get over this grade decline.

First of all, our productivity initiative will offset some of the impact of lower grades. As evidenced in the top-right chart on this slide, shows the FY16 production well above FY12 in spite of that low grade. And in the bottom right-hand chart, shows that we expect to hold FY16 unit costs approximately 20% below FY12.

But we still need to do more. So following the commissioning of OGD1 in 2015, we now have created for ourselves the option to extend the life of the Los Colorados concentrator, the original concentrator at Escondida. And if you recall, OGP1, the premise of OGP1, the new concentrator we're building, was that we would build OGP1 and then we would demolish Los Colorados and get to the **ore** that sat underneath it.

So we've created the option to extend the life of the Los Colorados, enabling us to run three concentrators with a resultant 70% uplift in throughput compared to the 220,000 tonne per day we achieved in FY14. The improved mine design will still enable us to access high-grade **ore** as we had originally envisaged from those pushbacks directly adjacent to Los Colorados and the truck shop that sits next to it, and we'll reach that in the early 2020s.

That will return our mill head grade to 1% from the early 2020s. Again, I want to stress, in line with our original projections.

Escondida water supply project, EWS, is a critical component of our three-concentrator strategy. We need water to run that additional concentrator. So we balance our increasing water requirements with our commitment to ensure a sustainable use of [Aquafix].

Against that backdrop, following the commission of EWS, in calendar year 2017, with three concentrators installed, Escondida can maintain production for a decade without the need for any major capital investment.

Let me give you a few more details on the Los Colorados Extension; we think we have the opportunity to extend the life out to financial year 2030 and this option has been created by mine plan optimization; a super job by our mine planners in Escondida. But -- so the changes, we're executing a series of smaller pushbacks with steeper pit gradients. In so doing -- so we're going to cut that pit wall right up against the existing infrastructure. But we can do that safely and we can access therefore the high grade **ore** that is adjacent to the concentrator without needing to demolish it.

We can process **ore** from the high-grade zone adjacent to Los Colorados in the early 2020s in -- consistent with the original mine plan. And we can potentially achieve combined mill throughput capacity 375,000 tonnes per day. It's just a huge operation.

LCE will require only modest, low-risk investment, essentially just to construct a new crusher. The current crushing and conveying system will continue to feed Laguna Seca and, of course, it will be diverted to feed OGP1. So we will have to build a new crusher.

Water supply will be largely met through desalinization, as well as from existing resources. And a result, we're planning full ramp-up of Los Colorados or re-ramp-up, if you like, to coincide with EWS commissioning. **Ore** from LCE will be the highest grade material that is currently feeding sulfide leach.

It does make sense; so we're diverting it from sulfide leach. It makes sense. Why? Because if you put that **ore** to sulfide leach, you get 35% recovery -- around about 35%. Of course, if you put it into a concentrator you're going to get more than 80%.

Sulfide leach will continue post-LCE, albeit obviously at a marginally lower grade, because essentially we're just bringing the average grade down of the material we feel to sulfide leach. In addition, it will probably have some lower tonnes in a few years, some of the years in the future, because we'll be using trucks to continue to feed the concentrators at full capacity.

We still have to optimize our material handling approach between the concentrators and sulfide leach, and we continue to study that, but that's our current view at the moment.

Three-concentrator strategy; incredibly low capital intensity option providing exceptional returns. Essentially, you get a new concentrator for the price of a crusher; aren't too many projects like that in the world of **copper**.

Also postpones the requirement to invest in a new concentrator. If we ever wanted to build OGP2, we can keep pushing that out and it also happens to save $100 **million** in previously-planned demolition costs of Los Colorados.

And will avoid the need to replace the truck shop, because the truck shop was also going to go, because it sits next to. In an operation the size of Escondida, when you're running 150 trucks, truck shops are not cheap.

Again, following the commissioning of EWS, three concentrators installed; we'll be able to maintain production for a decade without the need for any major capital investment. Currently in concept study, expected to move to pre-feas first half of CY15. Subject to internal approval, commissioning can be achieved by FY18, simultaneously with the availability of order from EWS; so the timing works.

Just a few more words on water and power. Water supply is the bottleneck at Escondida. FY16 is the most impacted year. We are addressing this in the short term. We are constructing a new water pipeline to replace the existing one that carries water from the 500 liter second de-sal plant in Colosso, and that will allow us to run that at full capacity. It's not quite running at full capacity at the moment.

Then, as we say, EWS, 2,500 liters per second de-**sale** facility on schedule for commissioning in calendar year 2017. Once we get EWS we'll -- basically, with LCE in our operation will be getting over 80% of our water from non-fresh water sources.

There is going to be higher costs associated with that. Because it's de-sal water obviously it's more expensive than taking it from the [sellers], but that is going to be much more than mitigated by the

increased throughput that it enables. Essentially, it's not a -- this is just to maintain the sustainability of that site.

We have to get more power and we've got to get that at a competitive cost. We have caused the development of a 570 megawatt gas fired plant; I did mention that. The Korean consortium, (inaudible) are Samsung. It's under a long-term contract with us.

We put actually the gas in and we take the power out, and it will help us to achieve full security of supply for power for Escondida's existing operations and its committed projects and, in fact, it also has expansion options which will be good for LCE for Spence or anything else that we've got going in the region. So we're very happy with that. That project's underway at the moment, is on time and on budget.

Let me -- the next bottlenecking story. We're currently executing a low capital-intensity program of projects; they're designed to increase the copper production at Olympic Dam by approximately 50,000 tonnes. So we're hitting 230,000/235,000 tonnes per year rate.

We're doing this two ways; one we need to get better grade. We've suffered a 20% rate decline over the last 10 years, because we've been sitting in the northern part of the ore body and as you get to the edges of it, Dean knows better than I, then the grade starts to fall away. We need to get back into the southern area where those originally high grades are. So that's where we're going to develop.

Second thing we're just going to spend probably about a couple of hundred million dollars on incremental de-bottlenecking investment on the surface, essentially around the smelter in particular; a little bit on the concentrator. But that would then match the 235,000 tonnes that sits as capacity in the refinery, and that's currently underway.

Again, a very, very high grade, high quality and low-cost expansion opportunity.

Spence. The bottleneck is the tankhouse 200,000 tonnes per year. We have a recovery optimization project. This has been underway -- we have been studying leaching in our research facilities for a decade or so. Finally, this is a culmination -- we have lots of good work commonality but here's a culmination [that's] really good, I think, which is that we have now got the potential to offset the grade decline that Spence follows.

Like everything else, we will be able to increase recoveries by 14% from FY16. We will achieve that by the acceleration of heap leach kinetics; increased utilization of the leach pads; those things together.

We should be able to reach the tankhouse capacity of 200,000 per tonnes per annum for two years post-commissioning. Thereafter grade decline will get us again and we expect grades to average just about 0.7% during the remaining life of the reserve. The reserve, if you recall, is the supergene only that sits on the top part of that resource.

This SRO project is expected to deliver exceptional returns again with very low capital expenditure required; currently in pre-feasibility.

So, in addition to these low-cost, fast payback de-bottlenecking projects, we do have a couple of other really interesting major projects. The first one is on Spence; let me talk to you about that.

We're studying the development of the 2.3 billion tonne hypogene resource at Spence. If we get this into production, it will increase the mine life by more than 50 years.

It will access the hypogene ore that sits below the current supergene that we exploit. So like all -- like many porphyries has a supergene that sits on an enriched portion and then a very large hypogene that sits below. Tends to be harder; tends to be lower grade.

What we then -- because we access it below, we eliminate the need for pre-stripping and new mining equipment. We'll have to build a 95,000 tonne per day concentrator and the related infrastructure. It will rely, as always, in Chile on de-sal water, but leaching will continue in parallel using the existing infrastructure.

When the supergene reserve is depleted, as expected in the mid-2020s, the SRO project will enable the ongoing leaching of hypogene ore.

So hypogene has traditionally been very difficult to leach in a heap context, but again with this technology that we've developed, we're really confident that in fact we will be able to leach this and we'll be able to achieve recoveries of up to 60%, which is going to be really, really helpful and -- to ensure that we have economies of scale on that side.

It's got good molyb and those by-product credits are expected to support at least a second quartile C1 cost performance. And obviously, we have ongoing optimization to further drive down the cost.

The approach was substantially reduced at the capital intensity -- sorry. With attractive **copper** and molyb growths, and an expected average **copper** recovery in the concentrator of close to 90% over the life of the resource, we think the project is well positioned to compete for capital.

Currently in pre-feasibility, we -- I was asked the question -- we were asked the question just a moment ago about why is it still in pre-feasibility; just a moment on that.

We have taken our time to study this thing, but we think it was really value-added, because we managed to reduce the capital-intensity versus the original project that we had in mind. We think that that small delay is really, really worth it to shareholders.

So in this regard we see further lowering -- potential lowering of the upfront capital required, via the outsourcing of required infrastructure, such as the de-sal plant. The project has the potential to deliver first production FY20.

Olympic Dam. The world's fifth-largest **copper** deposit. We're evaluating a low-risk, modular, capital-efficient underground expansion. Expanded underground design, supported by our current stope-**mining** method; no changes there. Significantly smaller footprint, obviously, than the previous open-cut design.

What we intend is that it would increase all hoisted capability to 21 **million** tonnes per annum. Currently, as I said, we're drilling about 10.5 **million** tonnes per annum; so roughly a doubling.

But on the surface a change. We'll go with a heap leach, operating in parallel with the current concentrated cathode process; there's no reason to change what we've got at the moment. But this approach will substantially reduce the combination of this approach, staying underground; and the heap leach will substantially reduce the capital intensity of the mine expansion project and surface infrastructure.

Again, technology remains a key enabler of this lower capital-intensity growth path. And happy to say, lots of testing, over many years, of that heap leach test program delivering very promising results.

Project has potential to enable OD to produce over 450,000 tonne per annum of **copper**; with associated **uranium**, **gold**, silver by-products by the middle of next decade.

On a **copper**-equivalent basis that's 750,000 tonnes of **copper** per annum. That is -- if you put this mine into Chile, where we had limited, that would certainly make it second or -- yes, probably the second-biggest **copper** mine in the world.

Cost will be low, given the economies of scale and the low-cost nature of heap leaching. This will cement our planned first-quartile C1 cost position.

But importantly, the project doesn't inhibit the ability, in the future, to go -- if it's so -- if the economics change and so on, and circumstances change, we can still go with the open pit; it won't obviate the optionality in that regard.

Project's expected to progress to pre-feasibility in calendar year 2015.

So beyond these attractive major growth projects, the unique quality of our resource provides deep optionality across all of our assets.

Escondida, we have the ability to put another concentrator. There is high grade at depth. We can build an underground mine, sweeten the **ore** as we, in the long term, start to get into a more of a chalcopyrite, and you get into the reserve grade. That could support high-margin production for over a century. It's huge.

Cerro Colorado, haven't said much about Cerro, but we can leverage the successful leaching technology deployed at Spence. We don't see any problem with that. In fact, there is more **ore** there.

It also has a hypogene. So we can, in fact, pursue multi-decade, low capital-intensity life-extension projects; or even replicate an SGO-type concept.

Antamina, we are working with our partners. First thing we've got to do, extend the life of the reserve. It's currently constrained by the tailings dam. That project's underway, we need to build another tailings dam, and then we have got excess sag capacity.

I mentioned a moment ago that the crusher is the bottleneck. In fact, we've got good sag capability there. We need to make sure that we just close that gap, and enable that mine to increase its throughput.

There's also high grade at the depth. And again, in the future Antamina, undoubtedly, I think it's going to have an underground mine alongside that open pit.

Resolution, let's not forget Resolution, we do have a 45%. It is one of the largest and highest-grade undeveloped **copper** assets in the world.

Clearly, the permitting is challenging, but it -- that is eventually going to come -- become one of the largest **copper** producers in North America, and one -- in fact, one of the biggest **copper** producers in the world.

So notwithstanding our world-class resource base, we do continue to target Tier 1 discoveries in the Americas, via a focused exploration program. But we only pursue opportunities that have the potential to compete with our organic development options. As you've just seen, that really is a very high bar indeed.

So in summary, we're maximizing the potential of our world-class **copper** portfolio, to create sustainable long-term value for our owners. We're focused on very few large, long-life, low-cost assets in stable producing regions. We have a structured approach to productivity that allows us to proactively address the ongoing challenge of grade decline.

We've got unique and sustainable solutions to the industry-wide constraints of power and water availability. And, our resource position can support a suite of compelling longer-term growth options that will deliver a substantial increase in production, while at the same time further lowering unit costs.

So all in all, we think we're very well positioned to benefit from the very attractive **copper** market fundamentals.

And with that, I will hand back to Andrew, who will facilitate some further Q&A.

ANDREW MACKENZIE: Thanks, Peter. Just one point before I throw it open the Q&A. I was speaking to a couple of people during the break and, to be unequivocal about things, the $4 **billion** of productivity savings we're talking about are only from the core portfolio. That's going forward, if you like, from FY14.

So the additional productivity savings that we can get from the NewCo portfolio while it still sits in that are not counted; and certainly we don't count anything that will be delivered. We think they will be substantial, and you'll hear more from them through the separate listing, and them having their own bespoke strategy.

So that would come in addition, anything from FY14 onwards to what we've already spoken about.

CO bltplc : BHP Billiton PLC | bkhlp : BHP Billiton Ltd

IN i211 : Metal Ore Mining | ibasicm : Basic Materials/Resources | imet : Mining/Quarrying

NS ntra : Transcripts | ncat : Content Types | nfact : Factiva Filters | nfce : C&E Exclusion Filter | nfcpex : C&E Executive News Filter | niwe : IWE Filter

RE usa : United States | austr : Australia | peru : Peru | sydney : Sydney | apacz : Asia Pacific | ausnz : Australia/Oceania | devgcoz : Emerging Market Countries | dvpcoz : Developing Economies | lamz : Latin America | namz : North America | nswals : New South Wales | samz : South America

PUB CQ-Roll Call, Inc.

AN Document FNDW000020141126eabn000gp

