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CORPORATE PARTICIPANTS

. Andrew Mackenzie - BHP Billiton plc, CEO

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- . Mike Henry BHP Billiton plc, President, HSEC, Marketing & Technology
- . Dean Dalla Valle BHP Billiton plc, President, Coal
- . Peter Beaven BHP Billiton plc,CFO

OVERVIEW

Co. provided an investor update.

PRESENTATION SUMMARY -

Maximizing Value & Shareholder Returns (A.M.)

- 1. Note:
- 1. From Jan. 1, Dean Dalla Valle and Mike Henry will swap roles.
- 2. Key Themes:
- 1. Views safety performance as critical indicator of a business in control.
- 1. In FY14, delivered best ever safety performance.
- 2. Sustainability, key consideration for all investment decisions.
- 3. In FY14, exceeded production guidance for number of core commodities.
- 1. For FY15, well positioned to achieve record production.
- 4. Focused on generating value through productivity.
- 1. Productivity-led gains in FY14, nearly \$3b.
- 5. On 11/24/14, committed to new minimum target of \$4b of annualized efficiencies from core portfolio by FY17-end.
- 3. FY14 Scorecard:
- 1. Over last two years, simplification process, including well-timed asset sales, created more than \$6.5b of proceeds.
- 2. Operating performance delivered annual production records at 12 operations across four commodities.
- 3. Embedded additional \$2.9b of productivity-led gains, more than \$1b above guidance, with about \$1b coming from volumes and nearly \$2b from cost efficiencies.
- 4. For FY14, reduced capital and exploration expenditure by almost a third to \$15.2b.

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- 1. In a period of falling commodity prices, this resulted in \$8b increase in free cash flow.
- 5. Strong cash generating capacity of business underpins commitment to progressive base dividend, minimum expectation shareholders should have.
- 1. Increased dividend 4% in FY14 to \$1.21 per share.
- 1. Pay-out ratio 48%.
- 4. Simplification:
- 1. Believes by simplifying organization, Co. can sharpen focus and improve productivity.
- 2. Large companies often become more complex as they push for growth.
- 1. Additional layers of management and new processes are required to manage such organizations.
- 3. Cost of complexity outweighs economies of scale and erodes benefits of retaining too many growth options.
- 4. As Co. is growing, increased focus on largest and most profitable assets.
- 1. Put in place standard systems and processes to make sure decisions are made as close to business as possible.
- 5. Sold several assets in disciplined manner to:
- 1. Maximize value for shareholders.
- 2. Simplify organization.
- 6. In last two years, **sold** \$6.5b worth of assets, all at attractive valuations.
- 1. \$1.9b sale of Co.'s interest in Richards Bay Minerals, timed at the talk of titanium to outside market.
- 2. \$430m sale of wholly-owned Yeelirrie project, a development project not typically included in analyst valuations.
- 3. \$1.6b sale of Browse, another development project that was not normally included in analyst valuations and in which Co. had only invested \$300m.
- 4. \$650m sale of Pinto Valley, asset that didn't fit with long-life, low-cost strategy, but was sold at attractive premium to avg. analyst valuation at the time.
- 7. Clear about which assets best fit strategy.
- 1. No rush to sale.
- 2. Strong financial position.
- 3. Will not agree to terms that do not meet value or returns criteria.
- 8. Sought to divest nickel asset in Western Australia.
- 1. Announced earlier this month that Co. was unable to find a buyer willing to offer terms acceptable to Co.
- 2. Will retain asset for now and run it for maximum value.
- 9. Recently announced intention to test market's interest in Fayetteville shale assets.
- 1. Will only complete a **sale** if a buyer is willing to pay full value that reflects quality of acreage and positive outlook for US gas prices.
- 10. Proposed demerger, logical next step.
- 1. Believes it will deliver more value than alternatives like maintaining current portfolio or selling non-core assets through trade sales.
- 2. By concentrating focus on largest and most profitable assets, this will deliver step change improvement in Co.'s performance.

- 11. Existing organization:
- 1. Worked well.
- 2. Enabled developing and operating complex diversified portfolio of substantial scale and geographical spread.
- 3. Supported by standard systems and processes, which have all made sure that decisions are made at operation asset or even business level, wherever it is best to maximize value.
- 4. Designed for more complex asset portfolio and operating environment.
- 12. Demerger creates opportunity to redesign business.
- 1. Can organize co. that operates 12 large core assets quite differently to one with 30 operated assets of varying size across broader range of commodities.
- 13. In FY14, core assets generated 96% of underlying EBIT.
- 1. Can cut complexity and associated cost without losing any benefits of scale and diversity.
- 14. Simpler portfolio:
- 1. Will enable Co. to reduce range and volume of functional work it needs to manage and aggregate this level at higher level.
- 2. Will allow Co. to de-layer and streamline organizational structure and handle greater proportion of high-volume routine work through shared service centers located in lower-cost locations.
- 3. Spends more than \$3b on functional support a year.
- 1. Will take modest reduction to create substantial additional value.
- 4. Will cause Co. to focus on improving operational performance.
- 1. Cut complexity by increasing standardization across **Group**.
- 2. Sold assets that have more common equipment systems and ways of working.
- 3. This has established solid platform from which Co. can continue to share and improve operational performance faster.
- 15. Following demerger, portfolio will include lot fewer assets.
- 1. These will have much greater proportion of common characteristics.
- 2. Everyone will be large upstream focused, with long life that supports advanced manufacturing approach to **operations**.
- 3. This will allow Co. to:
- 1. Increase depth of benchmarking.
- 2. Standardize way Co. completes more common tasks.
- 3. Eliminate duplication of effort to greater extent.
- 4. Significant opportunity.
- 1. Small, but carefully targeted changes to critical work spread right across Co. quickly can create large benefits.
- 5. Other Simplification Efforts:
- 1. Achieving own current best practice in truck utilization across entire fleet even if Co. assumes that this just allowed it to park up the trucks [and add] nothing to production, would add \$300m per year to operating cash flow.
- 2. Every 1% added to throughput on system bottlenecks would add another \$230m per year.
- 3. Changes like these won't be easy.

- 1. They won't be achieved immediately.
- 4. Believes Co. can get there more rapidly when senior management has greater focus on core safety and operational opportunities.
- 1. Best practice only has to be created and shared quickly between 12 core assets.
- 5. Believes simpler portfolio would enable teams to improve productivity further, faster and with greater certainty.
- 6. Now that demerger plans are public, able to begin to define areas of improvement in more detail.
- 7. Has become, in recent months, increasingly confident that focus on improvements across core assets, which demerger facilitates, can generate further productivity gains beyond those already announced.
- 8. Targeting annualized productivity gains in core portfolio of at least \$4b by FY17-end.
- 1. \$500m increase on previous guidance of \$3.5b.
- 2. Target is on top of \$6.6b productivity-led gains embedded during last two years.
- 9. Believes improvements will last and be a point of differentiation.
- 10. Focused on capital productivity.
- 1. Priority has been to identify how Co. can reduce cost of bringing on new production so it can lower investment without slowing production growth.
- 11. Confirms that in [FY17], will reduce projected CapEx from \$14.8b to \$14.2b.
- 1. In FY16, expects investing \$13b.
- 6. New co.:
- 1. Will be global metals and mining co. with high quality assets, but not at scale of those that remain in Co.'s core businesses.
- 2. Will pursue bespoke strategy that matches its different type of asset to unlock analogous set of productivity gains.
- 3. Selected portfolio includes 11 operated assets, primarily in Australia and Southern Africa.
- 1. In FY14, generated almost \$1.8b of EBITDA.
- 2. Portfolio remains cash flow positive despite recent market volatility; underscores relative strength of their assets and their industries.
- 4. Improved **ore** recovery and increased plant availability resulted in record quarterly production at Hotazel.
- 5. Manganese ore production increased 10% in Sept. 2014 qtr. to record 2.3m tonnes.
- 1. As smelter reliability improved, manganese alloy production increased 25% last qtr.
- 6. Illawarra Coal:
- 1. Series of productivity initiatives drove mine to achieve record run of mine volumes.
- 2. Production increased 64% in Sept. 2014 gtr. to 2.3m tonnes.
- 7. With its bespoke strategy, systems and processes specifically tailored for business of its scale and geographies, new co. will be well placed to see its assets realize their true potential and deliver more productivity.
- 8. Will be lean and flat.
- 9. Chosen regional operating model.
- 10. Will have experienced team led by Graham Kerr as CEO and Chaired by David Crawford, who retired from Co.'s **Board** last week.

- 11. Setup is proceeding to plan.
- 1. Ricus Grimbeek appointed as COO for Australia.
- 2. Mike Fraser, COO for Africa.
- 12. In addition to Mike's departure from Co.'s **Group** Management Committee (GMC), on 11/24/14 announced other changes.
- 7. Proposed Demerger:
- 1. On track for completion in calendar 1H15.
- 2. Will be Australian incorporated entity.
- 3. Would apply for:
- 1. ASX primary listing.
- 2. JSE inward secondary listing.
- 3. Standard listing in London.
- 4. Received number of significant regulatory approvals, including Australia's Foreign Investment Review **Board** and from Australian Tax Office.
- 1. Progressing well on those that remain outstanding.
- 5. In March, expects releasing all shareholder documentation with full details of proposed demerger, including Co.'s Shareholder Circular and Information Memorandum for demerged co.
- 1. Plans holding Extraordinary General Meeting in May 2015 for [BHP Billiton Limited and Co.'s] shareholders to vote on demerger.
- 6. Based on current timetable, new co. is expected to trade in calendar 1H15.
- 8. Safety:
- 1. Continues to improve safety performance in FY14.
- 1. Improved to lowest ever total recordable injury frequency rate, 4.2 for every million hours worked.
- 2. Suffered no fatalities.
- 2. Saddened by fatal injury of one colleague at Worsley Refinery in Western Australia in Sept.
- 1. Extensive investigations are underway to understand how this incident occurred.
- 9. Sustainable Asset Management:
- 1. Since FY07, invested nearly \$0.5b to support emissions reduction and energy efficiency projects.
- 2. Will continue to make more of these investments and to take opportunities to partner with governments, industry, and researchers to invest in technologies that could **lead** to reduction in greenhouse gas emissions from use of fossil fuels.
- 3. Improved performance and reduced greenhouse gas emissions by 1.7m tonnes in FY14.
- 1. Despite producing significantly more volumes since then, greenhouse gas emissions are now below FY06 baseline.
- 4. 22% reduction in potential occupational exposures vs. FY12 baseline.
- 5. Seeks to be valued partner in host communities.
- 1. Works with host communities worldwide to understand their issues and identify opportunities from helping Brazilian coffee farmers improve their productivity sustainably to signing opportunities agreement with three First Nations in Saskatchewan to humanitarian assistance for typhoons in Philippines, bush fires in Australia and Ebola in West Africa.

- 6. Alongside over \$240m invested in Co. last year in community and conservation programs with lasting benefit, own people make difference to communities where they live and work.
- 1. They volunteer their time and donate money, which Co. matches, doubling their contribution.
- 1. In FY14, this amounted to \$12.1m.
- 7. For year, paid \$9.9b in Co. taxes, royalties and certain indirect taxes.
- 10. Driving Volume:
- 1. In FY14, delivered record volumes with 9% increase in **Group** production through investment and productivity.
- 2. Core portfolio, foundation of success.
- 1. Growth in **copper** equivalent terms, 15%.
- 3. During the period, completed six major projects.
- 1. Two delivered under budget and ahead of schedule.
- 4. Looking ahead, ramp-up of aforementioned projects, combined with productivity agenda, will deliver another year of record production.
- 1. Previously stated guidance for each core commodities remains intact.
- 2. Over two years to FY14-end, on track to deliver 23% growth from core portfolio.
- 11. Cost Savings:
- 1. Alongside productivity-led growth, sits almost \$2b of real cost savings embedded last year.
- 1. Confident there is much more to come.
- 2. Western Australian iron ore will reduce unit cost to under \$26 per tonne in 2H14.
- 1. Sees clear pathway to FOB cash costs of less than \$20 per tonne in medium-term.
- 2. There is no reason why Co. shouldn't be lowest all-in cost supplier to China.
- 3. In FY14, Queensland Coal operation reduced operating costs 24% to \$99 per tonne.
- 1. No longer investing for growth in core business.
- 2. All volume increases from now on will come from productivity.
- 3. Expects this focus to yield at another 10% reduction in unit cost at Queensland Coal this year.
- 4. Onshore US:
- 1. Forecasts FY15 unit cost will decline by approx. 10%.
- 2. Business will be free cash flow positive in FY16 and by decade-end, will approach \$3b per annum.
- 3. This is annualized \$5b increase over period, representing growth of more than \$800m in each and every year between now and then.
- 5. Copper:
- 1. Unrelenting focus on productivity and costs.
- 2. Escondida unit costs fell by 22% in last two years.
- 3. In FY15, forecasts further decline of more than 5%.
- 12. Framework to Maximize Shareholder Returns:
- 1. Longstanding capital management framework defines four priorities for cash flow.
- 2. Commitment to:

- 1. Maintain strong balance sheet and solid A credit rating throughout cycle.
- 2. At least maintain or grow progressive base dividend in every reporting period.
- 3. Invest selectively in high-return diversified opportunities through cycle.
- 4. Return excess capital to shareholders in most efficient way.
- 3. Sees solid A balance sheet as precondition to consistently maximize shareholder value and returns.
- 1. Tests forward projections for cash flow to make sure that in low-case scenario Co. can be sure of maintaining A or AA credit rating.
- 4. Should this test indicate that Co. has excess capital once it has paid progressive base dividend and selectively invested in high-return projects, will consider buybacks or special dividends.
- 1. Given underlying volatility, will return excess cash once it is accumulated on balance sheet so that any program has high degree of certainty of being completed.
- 5. By maintaining solid A, achieves three objectives at all points in the cycle.
- 1. Lower cost of funding.
- 2. Access to markets.
- 3. Sufficient liquidity.
- 6. Enjoys access to diverse funding sources and well balanced maturity profile that currently averages 10 years.
- 1. All aforementioned combine equates to efficient capital structure.
- 13. Dividend:
- 1. It's while sitting within the envelop of solid A that Co. has been able to maintain progressive base dividend.
- 1. Only co. in peer group to achieve this over last decade.
- 2. Base dividend has grown at compound annual rate of 17%, superior to peer group.
- 2. Dividend is **firm** commitment.
- 1. Will not rebase or lower dividend should shareholders approve demerger.
- 2. Implies all other things being equal.
- 1. Higher pay-out ratio than 48%.
- 3. Opportunity-rich portfolio and solid A balance sheet allows investing selectively through cycle for value.
- 4. Capacity to complete major projects and invest in new high-return opportunities, even in peers of extreme volatility is important differentiator in industry characterized by boom and bust cycles.
- 14. Disciplined Investment Process:
- 1. Capital allocation framework make sure Co. considers all alternatives for capital as it seeks to optimize for net present value, IRR, ROCE and margin.
- 2. Rigorous progress creates active competition against all possible uses of cash.
- 3. All businesses and their projects compete for capital against one another and ever present option of buying own shares.
- 4. Focused on capital productivity.
- 1. As Co. has reduced spending, increased competition for capital.
- 5. Reduced capital and exploration expenditure in FY14 by 32% to \$15.2b.
- 1. Expenditure will decline again in FY15 to \$14.2b; \$600m below prior guidance.

- 6. FY16 CapEx will decline to \$13b in nominal terms.
- 1. Includes roughly \$2b for maintenance capital, \$1b for exploration, less than \$500m at Jansen, less than \$4b for onshore US and around \$1.5b to maintain steady production in existing conventional petroleum business.
- 2. Remainder is available for mineral projects and execution and diversified portfolio of development options.
- 15. Improving Capital Productivity:
- 1. Reduced expenditure will not impact growth.
- 2. As Co. continues to lowering spend, internal competition for capital and quality of projects will continue to rise.
- 1. Process will drive capital productivity to new level and further differentiate investor proposition.
- 3. Given capital intensity of industry, importance of this process should not be underestimated.
- 1. Projecting avg. rate of return in excess of 20% for portfolio of high-quality development options.
- 4. As Co. further improves capital productivity, can choose either to maintain rate of investment and create more value or to invest less.
- 5. Impressive track record over last decade.
- 1. Progressive dividend remained unbroken.
- 1. Increased at 17% CAGR.
- 2. Returned \$64b to shareholders, including \$23b in form of buyback at less than \$25 per share.
- 1. Total shareholder return, 394% against AX200 total shareholder return of 221%.
- 6. Intends extending distinctive track record even in face of low prices.
- 7. Successful increasing volumes and lowering costs.
- 8. Confident that productivity drive will be accelerated by demerger.
- 1. Expects cash flow will be brought forward and enhanced to increase value and secure yield for shareholders.
- 16. Key Numbers:
- 1. Projected two-year growth rate of core portfolio, 23%.
- 2. New minimum target for productivity, \$4b.
- 3. Minimum cost-out targets, \$2.6b.
- 4. Return Co. can exceed by investing in best projects, 20%.

Marketing Review (M.H.)

- 1. Highlights:
- 1. Develops a range of scenarios that take into account key uncertainties.
- 1. Macroeconomic factors.
- 2. Technology evolution.
- 3. Political developments.
- 4. Governance trends.
- 2. Even in severely carbon constrained world, modeling indicates that Co.'s uniquely diversified portfolio remains resilient with potential upside for **uranium** or high-quality **iron ore** and metallurgical **coal**, potash and likely **copper**.

- 3. Consistent central view.
- 1. Assumes degree of volatility in global economy in near-term and strong global growth over longer-term as developing economies further integrate on investment and trade.
- 1. Sees US maintaining relative position in global growth.
- 2. China continues to successfully pursue reforms required to support their ongoing shift towards increased reliance on consumer demand.
- 3. India pursues stronger reform agenda, resulting in improved growth and increasing prominence.
- 2. Aforementioned scenario yields healthy global growth in long-term in order of 4%, solid commodity demand but also ready access to resources.
- 1. Sees low cost supply keeping up with demand.
- 4. Strong outlook for products and portfolio notwithstanding short-term volatility that Co. is seeing in commodity markets.
- 5. As industrialization and urbanization of developing world continues, ongoing investment and infrastructure will be required to support that process and accompanying productivity gains will translate into higher incomes, which will drive even greater relative growth in consumer demand.
- 1. Will drive resilient demand for things like **copper**, **energy** and food even as demand for steel and steel making raw materials begins to slow.
- 6. Although this evolution is not a given and some countries will likely not make full transition, Co.'s view is that in key jurisdictions, there are sufficient signs of progress taking place in educational, legal, labor and market reforms to give measure of confidence in outlook.
- 1. In China, clear steps being taken to rebalance economy towards consumption, critical shift for sustainable growth in employment.
- 1. Authorities have been adopting degree of result in pursuing the same.
- 7. In phase of recent slowing in property market, efforts to stimulate growth have been measured.
- 1. Certainly more measured than they have been historically.
- 2. Has seen resilience in consumer spending, despite broader economy slowdown.
- 8. UN forecast that urbanized population of middle-income economies will include another 1.7b people by 2050, supporting larger variety of markets and goods as low productivity work in rural areas shifts to more productive and better paying jobs in manufacturing and services sectors.
- 1. Impact of this growth in middle-class can be illustrated by what's been seen historically in other economies.
- 9. Increase in penetration of light vehicles as incomes rise:
- 1. Global light-duty vehicle penetration forecast to increase by 30% for capita to 2030 led by developing countries like **China**.
- 1. Additional vehicles in China alone will require another 20m tonnes of steel, 350,000 tonnes of copper and so on and so forth, not to mention energy required to power them.
- 2. As air conditioner penetration in India grows from 10% to 40% to 2030, expects to see six-fold increase in household **energy** consumption for this use.
- 3. Over longer-term, agricultural demand will increase strongly.
- 1. Could play growing role in portfolio by way of potash.
- 4. Confident that this transition towards consumer and services sector-oriented economy will continue and that portfolio is well suited to meet commodity demand that will accompany it.
- 2. Iron Ore:
- 1. Over past decade or decade and a half, has seen sharp acceleration in demand growth.

- 1. Supply initially struggled to keep pace with demand growth.
- 1. Saw resultant run up in prices.
- 2. Fundamentally not scarce resource.
- 1. Not surprisingly, high prices, incentivized fresh capital into industry.
- 1. Supply of relatively low-cost, high-quality **iron ore** has been able to catch up with demand and then some.
- 2. Has seen displacement of high-cost supply of top-end of cost curve and drop in prices.
- 1. This is something that Co. has experienced or seen certainly in past few months.
- 3. Steel:
- 1. Chinese steel demand growth is slowing as economy transitions from investment to consumption.
- 2. Discussed about its forecast for steel production to peak up between 1.0-1.1b tonnes in early to mid-2020s.
- 1. Increase in proportion of that steel will be for replacement steel as much of infrastructure and equipment that's been added to economy over past decade begins to reach end of its useful life.
- 2. As steel in it gets released, more of steel production will be met by way of scrap rather than by way of pig iron, which is what requires iron ore.
- 3. This combination of slowing steel growth and more of that steel being met by scrap that can be expected to **lead** to decline in demand for seaborne **iron ore** from peak that it will reach in early to mid-2020s.
- 1. This is consistent with outlook that Co. discussed about for last few years and that outlook has been integral to Co.'s commitment to maximize returns from already installed infrastructure and resources.
- 3. Margins over long run will be supported by structural advantage that Co. enjoys in terms of proximity of tidewater, low strip ratio and position relative to North Asia where most of steel demand will continue to be.
- 4. Metallurgical Coal:
- 1. Operations focused on recapturing competitive position.
- 1. Achieved by embedding cost and volume efficiencies.
- 2. At same time, other suppliers rapidly improved their productivity to reduce unit costs.
- 1. There has been overall compression in cost curve.
- 1. Seeing displacement of some high cost production from that market.
- 3. As margins have compressed, high-cost supply has initially been stickier in this market than it's been in **iron ore**.
- 1. Has seen marginal producers announce capacity curtailments of over 20m tonnes per annum this calendar year, some of which are yet to fully take effect.
- 4. 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 less sustainable steps taken to reduce cost begin to unwind or as those under greater financial pressure elect to step back.
- 5. Over longer-term, expects demand to be supported by steel growth in developing economies outside of **China**.
- 1. Indian growth story is starting to gain traction with election of new government there that's committed to improving infrastructure and to supporting private sector and achieving sustained growth.
- 1. Investment in steel capacity in India is gaining momentum with additional 17m tonnes of annual steel capacity committed and to be commissioned by 2016 alone.
- 2. Unlike in iron ore, India does not have indigenous resources of high-quality hard coking coal.

- 1. They are going to need to meet their needs via imports.
- 2. Well positioned to supply this growth in metallurgical **coal** demand.
- 3. Queensland Coal assets characterized by quality of their premium hard coking coals and resource base that can support production for decades.
- 1. These assets have access to well-established infrastructure, enduring close proximity to traditional and growth markets.
- 2. Outstanding work has done there to become more productive now returns Co. to low-end of cost curve, securing competitive advantage in this commodity.

5. Copper:

- 1. Demand expected to increase from 27m tonnes to 40m tonnes by 2030.
- 1. Will be driven by electrical and building construction, which together comprise around half of overall **copper** demand, and production of consumer goods, including household appliances and automobiles.
- 2. Whilst China will remain single most important demand driver, expects to see consistent growth in other regions.
- 3. Supply side:
- 1. While scrap will grow by 30% to 2030, significant fresh, primary supply of **copper** will still be required to meet demand growth.
- 2. Compounding increased requirement for supply to meet outright growth in demand is great decline, which is going to impact current supply base.
- 1. Expected to take about 5m tonnes off of current installed capacity to 2030.
- 4. Cost base in South America, which is largest exporter of **copper**, will be further impacted by increased need for desalinated water and increased **ore** hardness, which will **lead** to higher power consumption.
- 1. Combination of need for Greenfield capacity and structurally-challenged cost base bode well for copper prices longer-term.
- 6. Energy:
- 1. Robust outlook.
- 1. As world's economies and population continue to grow, more people will gain access to electricity and living standards will rise, increasing **energy** demand.
- 2. Expects primary energy demand to grow by around 40% to 2030.
- 1. **Energy** demand growth will be strongest in Asia, which is forecast to comprise 46% of global primary **energy** demand in 2030.
- 1. China and India alone will make up almost half of growth between now and then.
- 2. Demand for all fossil fuels is expected to continue to grow over that period.
- 1. Directionally consistent with views of other globally-recognized forecasting bodies.
- 3. Even in more conservative new policy scenario of International **Energy** Agency, thermal **coal** demand falls as percent of **energy** mix, but continues to grow strongly in absolute terms.
- 1. Absolute demand for natural gas in that scenario grows by 40% and demand for oil grows by 12%.
- 1. Oil figure might sound like a low number but decline curves in oil are such that a lot of new production will need to be brought to market just to stand still.
- 1. Apparent demand and need for new capacity will be much higher.
- 4. Continued global demand depends on access to reliable and affordable energy.

- Connecting new users and improving quality of electricity supply will support strong, global, energy demand
- 5. **Energy** supply and demand outlook:
- 1. Mid-case outlook.
- 2. **Energy** mix will be determined by usual underlying direct economics and how countries shape their response to climate change and their security of supply considerations.
- 1. Factors going to be particularly important in Asia given region's continued development and its strongly increasing reliance on imported **energy**.
- 2. Accepts this uncertainty.
- Just like Co. tests aggregate portfolio against range of different scenarios, it does same with energy portfolio.
- 3. Unique diversity of **energy** commodities de-risks portfolio and provides with attractive growth options under multiple different scenarios.
- 7. Agricultural Demand & Fertilizer or Potash:
- 1. Population growth and greater economic prosperity in developing world will increase demand for agriculture.
- 2. As crops are harvested, potassium is removed from land and it ultimately needs to be replenished and potash is primary means for doing so.
- 3. At global level, major grain demand is expected to increase by 20-30% by 2030.
- 1. This will require development of additional productive land or increasing productivity and yields from existing farmland.
- 4. Believes 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.
- 1. Increasing yield or intensity of crop production is going to be required.
- 2. Potash demand will not only benefit from base increase in agricultural activity, it will be critical to deliver this required increase in crop yields.
- 5. In long-term, confident in potash demand.
- 1. Expects to grow by 2-3% per annum to 2030 with major crop producing regions like **China**, India, Southeast Asia, Brazil and US, making up [around 75%] of that growth in demand.
- 6. Global potash demand saw 7% rebound in 2013.
- 1. Expected to grow by around 9% this year to 58m tonnes.
- 7. Supply:
- 1. Market is in oversupply and Co. can expect it to remain so for foreseeable future as announced Brownfield expansions and first phase of three Greenfields projects are completed.
- 2. Current suite of Brownfield expansions represent last of low-hanging fruit for incumbent producers.
- 1. Many of these mines have reached limits of their shaft or ventilation capacity, and forecasts that new capacity is going to be required by this decade-end.
- 3. Greenfield projects, like Jansen, will be well placed to compete, given that even where future Brownfield expansions are technically feasible, they will be more akin to Greenfield's projects requiring new shafts and associated infrastructure.
- 8. Other Details:
- 1. With Co.'s broad exposure to **iron ore**, metallurgical **coal**, **copper**, full range of **energy** commodities and potentially potash and with long-life resource endowment in these commodities, it is well placed to respond to changes in demand across a range of scenarios.

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

Coal Review (D.D.V.)

- 1. Strategy:
- 1. Broadly, strategy involves:
- 1. Improving safety performance.
- 2. Engaging employees.
- 3. Driving productivity at bottleneck of operations to global benchmarks.
- 4. Reducing absolute costs.
- 2. Delivered \$2.4b of embedded costs and volume efficiencies since 2012.
- 3. All **operations** are cash positive today.
- 4. Confident about outlook for metallurgical and energy coal.
- 1. Current market conditions are challenging.
- 1. It has been essential that Co. focuses on things that it controls to reestablish cost competitive position.
- 2. With compression of cost curve and reducing margins, volume and cost saving initiatives have been essential to ensure all **operations** are cash positive.
- 2. Themes:
- 1. Continuous improvement in health, safety, environmental and community (HSEC) performance is critical to business success.
- 2. Aggressively pursuing productivity improvement.
- 1. Work is predicated on continuing to improve HSEC performance.
- 3. Priorities are to continue improving safety by rapidly improving ability to manage material risk.
- 4. Implemented detailed **site**-based, routinely measured and tested plans, which are lowering risk across all sites.
- 5. Community projects:
- 1. Mt Arthur mine, New South Wales:
- 1. Finalist in global HSEC awards just last week.
- 2. Warrae Wanni Pathways to School program:
- 1. Partnership with local public school in Hunter Valley supports preschool-aged children to attend early learning program to help them transition successfully to school.
- 2. Focused on local, aboriginal and disadvantaged children.
- 3. One of many HSEC projects developed.
- 3. Key Pillar:
- 1. Accounted for 17% of production over last five years.
- 2. Made material contribution to **Group** through:
- 1. EBIT.
- 2. Cash flow.

- 3. Particularly challenging last three years.
- 4. Has been running incredibly hard to reestablish cost competitive advantage.
- 1. Making progress.
- 4. High-Quality Resource Base:
- 1. Success underpinned by high-quality resource base that can support decades of production.
- Three quarters of production forecast in Queensland Coal operations is premium quality hard coking coal.
- 1. Along with well-established infrastructure and proximity to traditional and growth markets, gives Co. competitive advantage against emerging **coal** basis.
- 3. Following proposed demerger, **coal** business will be predominantly focused on major resource basins in:
- 1. New South Wales.
- 2. Central Queensland.
- 4. Set out simple clear strategy to maximize productivity through utilization of installed capacity and to sustainably lower cost base.
- 1. Resulted in reduction in met coal unit costs by 37% and energy coal costs by 21% over last two years.
- 1. Did aforementioned by identifying bottlenecks and value drivers at each operation across value chain.
- 2. Focusing on:
- 1. Benchmarking productivity.
- 2. Renegotiating supply agreements.
- 3. Eliminating waste.
- 4. Engaging people to improve productivity.
- 3. Achieved cost and volume efficiencies of \$2.4b since FY12, representing over a third of Co.'s savings with majority coming from sustainable cost efficiencies.
- 5. Leveraging Marketing Expertise to Maximize Margins:
- 1. Marketing team is major contributor to coal's productivity agenda.
- 1. Transparent pricing and promoting technical properties of high-quality **coal** ensures full recognition of value and use.
- 2. Premium low volatile (PLV) coal price realized vs. index:
- 1. On avg., outperformed competitors.
- 1. Received above-index pricing.
- 2. Optimized end-to-end supply chain; led to:
- 1. Lower rail and port costs.
- 2. Higher throughput.
- 3. Reduced demurrage.
- 6. Productivity:
- 1. Driving labor productivity is one major element in strategy.
- 2. Labor is around 50% of cost base.
- 3. Lowered labor costs by 23% last year and achieved 29% increase in material moved per employee.

- 1. High performance culture has been key to achieving these reductions.
- 4. Achieving diversity in workforce has been key to enhancing labor productivity.
- 1. Includes diversity by:
- 1. Location.
- 2. Source.
- 3. Gender.
- 5. 25% female workforce at Daunia and Caval Ridge mines.
- 1. Achieved aspiration set.
- 6. All improvements facilitated by assistants and processes, which enable internal benchmarking across **operations**.
- 7. Improve equipment utilization:
- 1. Achieved material increase in truck fleet and wash-plant utilization, which are bottlenecks, and this is over 12 months.
- 8. High aspirations:
- 1. Aiming to meet or exceed global benchmark performance for key equipment over coming years.
- 2. Trucks:
- 1. Targeting global benchmark performance of 6,000 hours per annum, excluding queue time.
- 3. Wash plants:
- 1. Targeting benchmark performance of 8,000 hours per annum.
- 2. Aforementioned are only 8,760 hours in a year.
- 3. 8,000 hours is high benchmark.
- 9. With common systems and processes in simplified business, rapid replication of best practice will be significant source of advantage for **coal**.
- 10. Peak Downs mine, Bowen Basin:
- 1. Production improved 8% to 9.8m tonnes last year; record.
- 1. Running for quite a while.
- 2. Annual operating costs reduced by 18% in same year.
- 3. **Coal** preparation plant, which is **site** bottleneck, is currently operating at over 7,500 hours production per year.
- 1. Approaching 8,000 hour target.
- 4. Did aforementioned by detailed bottom-up analysis of critical path, identifying areas of lost opportunities improvement, engagement of workforce and use of measurement and visualization of process.
- 11. Poitrel, Bowen Basin:
- 1. Optimizing mine plant.
- 2. Redesigned **mining** process to optimize amount of **coal** Co. extracts in Poitrel seam.
- 3. Started Strip 11 process; gone up to Strip 14.
- 4. Made improvements as **mining** progressed.
- Suboptimal blasting practices previously impacted up to two meters of mineable coal.

- 6. Implemented more accurate blasting resulting no more than 20 centimeters of coal being impacted.
- 1. Improvement equates to less washing, less waste and significant cost savings.
- 12. Mt Arthur, New South Wales:
- 1. Significant productivity improvements.
- 2. Across functional team with representatives from production, mine planning, and dispatch, underpinned by benchmarking clinical path analysis, identified opportunities to improve utilization and increase productivity.
- 1. Included improvements in truck dispatching, faster driver changes by having drive-through bays, improved mine planning and focus on payload.
- 2. Through these measures, Co. will be able to reduce loading fleets from 12 to 10 and reduce trucking fleet from 88 to 64 over next year.
- 13. All case studies highlight sustainable productivity improvements Co.'s **coal** business is implementing and embedding where it can in all other **operations** rapidly.
- 7. External Spend:
- 1. After long period of significant cost inflation driven by headed market labor, consumables and accommodation, Co. worked tirelessly to rebase costs.
- 2. Banked almost \$400m in supply savings over two years.
- 1. Targeting similar result this year.
- 1. Combined savings have been \$750m since FY12 will be achieved.
- 3. Rapid tendering:
- 1. Involves electronic auctioning process where Co. has proven results.
- 2. Seen 50% lowering in input price for some consumables.
- Starting to institutionalize across all businesses.
- 8. Cost Reductions:
- 1. At Queensland **Coal**, targeting further 10% reduction this FY, bringing costs below \$90 per tonne.
- 1. Forecasting to be \$90.
- 2. At New South Wales **Energy Coal**, forecasting further 15% reduction in unit costs over next two fiscal years, bringing cost below \$45 a tonne.
- 1. At exchange rate of \$0.91.
- 1. Moved on.
- 2. It's further upside.
- 3. Held at \$0.91; consistent with other presentations.
- 3. Plans will be achieved through targeting global benchmarks on productivity, crystallizing further cost reductions and leveraging commerce systems and processes right across all businesses.
- 9. Capacity Utilization:
- 1. For FY15, expects to achieve record metallurgical **coal** production of 47m tonnes.
- 1. Volume increase is from maximizing utilization of existing capacity, including nearly-completed Caval Ridge and Daunia mines operating at full capacity.
- 2. Energy coal volumes expected to remain steady.
- 3. While Co. is seeing strong operation performance at Mt Arthur, will be lower volumes at Navajo Coal due to reduced power plant demand.

- 2. Cerrejon is producing at guidance with upside with right conditions.
- 3. Projects nearing completion:
- 1. Successfully delivered projects in pipeline.
- 2. Caval Ridge delivered three months ahead of schedule and \$160m below budget.
- 1. Port expansion associated with Cerrejon P40 delivered first **coal** on schedule.
- 2. Will remain constrained at 35m tonnes in medium term.
- 3. Hay Point expansion is nearing completion to 55m tonne capacity.
- 4. With growth pipeline behind, going forward, capital expansion will largely be in minor and sustaining capital.
- 5. Productivity and cost work will directly impact efficiency of CapEx going forward.
- 1. Productivity, largely operationally-focused, will have massive spin-offs onto CapEx.
- 10. Simplification:
- 1. Simplification due to demerger.
- 2. With fewer assets, will be able to focus on core capabilities and can leverage common systems and processes to deliver continuous improvement and accelerate productivity gains.
- 3. Demerger will result in reduction of core operations for coal from 19 to 12.
- 4. Intends on extracting synergies from commonality of fleet and concentration of operations, including centralization of maintenance, analysis and improvement.
- 5. Will review functional activities to further streamline for simplified portfolio.
- 11. Summary:
- 1. Driving ongoing improvement in HSEC performance, while aggressively pursuing productivity.
- 2. Has large high-quality resource base.
- 3. Early decisions to close high-cost capacity and extensive productivity and efficiency work have reestablished competitive advantage.
- 4. Volume growth will come from successful ramp up of completed projects mainly from focus approach to productivity.
- 5. Even in this tough environment, all assets are cash positive, which leverages Co. for margin growth and positions it well for future.

Copper Review (P.B.)

- 1. Note:
- 1. Prior to Peter Beaven's appointment as CFO, he was President of Copper.
- 2. Overview:
- 1. Structural challenges make long-term market fundamentals for copper attractive.
- 2. Plans to create significant shareholder value from:
- 1. Maintaining low-cost operation driving what Co. has today as hard as it can.
- 2. Growing business from:
- 1. Debottlenecking low capital intensity super-high returns graded projects.
- 2. Larger more material growth projects.
- 3. Productivity efforts alone delivering substantial unit cost savings; more to come.

- 4. Beyond enormous effort required simply to stand still in this industry, has differentiated growth story.
- 1. Near-term, several exceptionally low capital intensive growth options that will generate returns significantly exceeding 20% and longer-term has world-class resource base that will provide Co. with compelling suite of growth projects.
- 5. Operating in safe and sustainable manner is what matters most to Co.
- 1. Strong safety track record in copper.
- 2. Co.'s TRIFR consistently below three; good number in mining world.
- 3. Escondida:
- World's largest copper mine.
- 2. Has number of very large complex projects underway.
- 3. Huge amount of contracts is there for on site along with Co.'s own operational employees.
- 4. TRIF at moment is 1.7, indicative of business that's in control.
- 5. This safety performance is under pinned by material risk management process that focuses on establishing critical controls, those controls being owned by line people on ground and on daily basis in field verifying their effectiveness using simple and effective tablet-based system.
- 4. Sustainability is key consideration in all decisions.
- 1. Two of biggest challenges facing mining industry, in Chile, in total are power and water.
- 2. Fundamentally believes Co. needs to be aligned with its communities because it needs license to operate to run on multiple-decades basis.
- 3. Co.'s new desalinization plant at Escondida will substantially reduce non-renewable water usage.
- 4. Will enhance sustainable use of aquifers that Co. currently draws majority of water.
- 5. Needs more power to operate and expand at Escondida and to pump water up to Escondida.
- 1. Has Korean partners who are building 500 megawatt gas-fired plant in Mejillones close to Antofagasta helping Co. move from 100% reliance on **coal** to 50:50 split between **coal** and gas.
- 2. In so doing, can reduce carbon emissions by 1.5m tonnes per annum, which is significant.
- 6. In last five years, contributed over \$200m to social programs in communities.
- 1. In Australia, Olympic Dam is supporting programs to improve employment prospects, enterprise development in local indigenous communities.
- 2. In Chile, established Creo Antofagasta organization to create comprehensive long-term plan to make Antofagasta one of most livable cities in Chile by 2035.
- 3. ICARE, which is a think-tank, gave Co. "Company of the Year"; only second time a foreign co. has ever been given it.
- 4. Given scale of **operations** and resources, will continue to be important contributor to communities for decades to come.
- 6. Foundation of safe, sustainable **operations** has underpinned exceptional operating and financial performance.
- 1. In last five years, copper contributed 21% of Co.'s production, underlying EBIT margin 42%, invested \$13b in business and that achieved return on net operating assets 34%.
- 2. Copper truly is one of Co.'s key pillars.
- 3. Success Factors Needed To Be Achieved:
- 1. Does Co.:
- 1. Have best **ore** bodies.

- 2. Is low cost.
- 3. Operate in stable countries.
- 4. Have suite of attractive high return growth prospects.
- 2. Co. ticks all four of aforementioned boxes.
- Has simple portfolio, world-class ore bodies concentrated in stable countries.
- 2. With exception of Peru, all Co.'s countries OECD.
- 3. They underpin Co.'s low-cost position, contains many of industry's best development options and with Co.'s productivity agenda, they are improving every day.
- 3. Four assets in Australia, Chile, and Peru contributed 1.2m tonnes of attributable **copper** production in FY14 making Co. fourth largest **copper** producer in world currently.
- 1. Believes these assets form largest **copper** resource base in industry and in many cases with potential mine lives in excess of 100 years.
- 2. Has competitive cost position.
- 3. Antamina, Escondida firmly placed in first quartile, Spence in second, Olympic Dam moving down cost curve with significantly more productivity gains to come.
- 4. Steep tail in industry cost curve supporting attractive margins for low-cost assets but seen other commodities with steep tail.
- 1. Believes this one is sustainable.
- 4. Industry-wide Challenges:
- 1. Existing Copper Supply Base:
- 1. Will be unable to meet increased primary demand.
- 2. Grade decline in big porphyries that account for much of world's **copper** production and continued demand growth will require additional mined tonnes to balance market.
- 3. Those additional tonnes to balance market have to come from higher cost resources.
- 2. Industry faces considerable headwinds in addition to this in meeting market demand for these additional tonnes because grade decline means that Co. will have to move more tonnes simply to stay same.
- 1. Productivity in moving those tonnes is variable.
- 2. What Co. sees in Chile and in Peru is productivity per person in terms of tonnes moved per person per year is about 50% of that of comparable operations in US and Canada.
- 1. This lack of productivity is exacerbated these days by labor cost inflation.
- 3. Other input costs rising.
- 3. Cost base in South America will be affected by increasing need for desalinated water.
- 1. Higher power consumption required to pump this water to mines located at high altitudes and power cost per megawatt hour in Chile are already significantly higher than other major **copper** producing countries like:
- 1. Peru.
- 2. US.
- 3. Australia.
- 4. Permitting getting harder all the time.
- 1. Has to give more commitments, takes longer.
- 5. Within this context, believes Co. is performing well and will continue to do so.

- 1. Has portfolio of assets of unrivalled quality.
- 2. Has differentiated approach to productivity that's producing great results and capital efficient growth options to go with that.
- 3. Believes Co. is well positioned to outperform.
- 5. Maximizing Utilization of Installed Capacity:
- 1. Gets most out of every piece of installed capacity, most production.
- 1. Ensure maximum throughput at bottleneck.
- 2. Co. is on exactly same journey, leveraging common systems, processes central to operating model to underpin continuous performance improvements.
- 1. Focuses on amount of time infrastructure and equipment is available.
- 2. Maximizing bottleneck utilization has potential to add more value than anything else Co. does.
- 1. Essentially it does not come with huge investment in capital and it produces a tonne that carries a margin with it.
- 3. Focus on basics over past three years has allowed Co. to increase bottleneck throughput to record or near record level at all assets in FY14.
- 1. Record material mined at Olympic Dam.
- 1. Lifting capacity is essentially bottleneck there.
- 2. [22% increase] in mill throughput at Escondida.
- 1. The SAGs, the mills are bottleneck.
- 3. Stacking at Spence, processing and stacking, that is bottleneck.
- 1. Seen 13% increase in that in FY14 to second-highest ever, just a smidgen off record.
- 4. At Antamina, primary crusher is bottleneck.
- 1. Absolutely going at record rates.
- 4. Escondida:
- 1. Systematically moved.
- 2. Changes are small but takes time.
- 3. Systematically moved bottleneck from crushing, conveying to concentrators and now Co. has hit next bottleneck, which is water.
- 4. Needs to look after efficiency gains.
- 5. Benchmarked performance of equipment internally and externally.
- 6. Transparency of results enables pursuit of best-in-class performance.
- 7. Productivity programs identified several initiatives to further improve performance across business.
- 1. Optimized meal breaks, shift changeover practices combined with increased training and development resulted in 11% increase in truck utilization over last 15 months.
- 2. Runs more than 150 trucks.
- 3. Moves about 1.3m tonnes of dirt a day.
- 4. 11% increase in utilization has big impact on bottom line.
- 5. Focus on productivity will support ability to achieve FY15 **copper** production guidance of 1.8m tonnes notwithstanding recent two-day strike and significant water and power availability issues, challenges that have constrained production so far this year.

- 6. Productivity Initiatives:
- 1. Productivity initiatives are directly translating into lower unit costs.
- 2. To offset grade decline, not only moving more tonnes but doing so at lower cost.
- 3. Of three years to FY15-end, anticipates 25% reduction in unit cost across total copper business despite expected 13% increase in material moved over same time frame.
- 1. Achieving substantial reductions through:
- 1. Supply savings.
- 2. Strategic in sourcing of contract activity.
- 3. Improved labor productivity.
- 4. Reducing consumable expenditure.
- 5. Simplifying functional support structure.
- 4. Escondida alone, expects FY15 unit costs to decline by 30% vs. FY12.
- 7. Addressing Grade Variability at Escondida:
- 1. Industry characterized by big **copper** porphyries having variable grades in areas of water and power constraints.
- 2. Escondida is no exception.
- 3. Following several years of strong grades from FY12, again faced with significant near-term declining grades with resulting reduction in volumes.
- 1. Been preparing for this for some time.
- 2. Expects FY16 to represent low point in production for remainder of decade.
- 4. Productivity initiatives will offset some of impact of lower grades.
- 1. FY16 production well above FY12 in spite despite low grade.
- 2. Expects to hold FY16 unit costs approx. 20% below FY12.
- 5. Following commissioning of OGP1 in 2015, created for itself option to extend life of Los Colorados concentrator, original concentrator at Escondida.
- 1. Premise of OGP1, new concentrator Co. is building was that it would build OGP1 and then would demolish Los Colorados and get to **ore** that sat underneath it.
- 2. Created option to extend life of Los Colorados enabling Co. to run three concentrators with resultant 70% up lift in throughput vs. 220,000 tonne per day achieved in FY14.
- 3. Improved mine design will still enable Co. to access high grade ore as originally envisaged from those pushbacks directly adjacent to Los Colorados and truck shop that sits next to it.
- 1. Will reach that in early 2020s.
- 2. That will return mill head grade to 1% from early 2020s, in line with original projections.
- 6. Escondida Water Supply Project (EWS) is critical component of three concentrator strategy.
- 1. Needs water to run that additional concentrator.
- 2. Balances increasing water requirements with commitment to ensure sustainable use of aguifers.
- 3. Against that backdrop, following commissioning of EWS in calendar year 2017 with three concentrators installed, Escondida can maintain production for a decade without need for any major capital investment.
- 8. Los Colorados Extension:
- 1. Believes Co. has opportunity to extend life out to FY30 created by mine plan optimization.

- 2. Executing series of smaller push backs with steeper pit gradients.
- 1. In so doing, going to cut that pit wall right up against existing infrastructure but Co. can do that safely and can access high grade ore that is adjacent to concentrator without needing to demolish it.
- 2. Can process ore from high grade zone adjacent to Los Colorados in early 2020s, consistent with original mine plan.
- 3. Can potentially achieve combined mill throughput capacity 375,000 tonnes per day.
- 3. LCE will require only modest low-risk investment essentially just to construct a new crusher.
- Current crushing and conveying system will continue to feed Laguna Seca and it will be devoted to feed OGP1.
- 2. Water supply will be largely met through desalinization and from existing resources.
- 3. Planning full ramp up of Los Colorados or re-ramp up to coincide with EWS commissioning.
- 4. Ore from LCE will be highest grade material that is currently feeding sulfide leach.
- 1. Diverting it from sulfide because if Co. puts that ore to sulfide leach, gets around about 35% recovery.
- 1. If put into a concentrator, going to get more than 80%.
- 2. Sulfide leach will continue post LCE albeit at marginally lower grade because Co. essentially it brings avg. grade down off material it feeds to sulfide leach.
- 1. Will probably have some lower tonnes in few years, some of years in future, because Co. will be using trucks to continue to feed concentrators at full capacity.
- 3. Still has to optimize material handling approach between concentrators and sulfide leach.
- 1. Studying that but that is Co.'s current view at the moment.
- 5. Three concentrated strategy, incredibly low capital intensity option providing exceptional returns.
- 1. Essentially gets new concentrator for price of crusher.
- 2. Postpones requirement to invest in new concentrator if Co. ever wanted to build OGP2.
- 1. Can keep pushing that out.
- 3. Saves \$100m in previously planned demolition costs of Los Colorados.
- 4. Will avoid need to replace truck shop.
- 6. Following commissioning of EWS, three concentrators installed, will be able to maintain production for a decade without need for any major capital investment.
- 1. Currently in concept study, expected to move to pre-feas 1H of CY15, subject to internal approval.
- 2. Commissioning can be achieved by FY18 simultaneously with availability of water from EWS.
- 9. Water & Power:
- 1. Water supply is bottleneck at Escondida.
- 1. FY16 is most impacted year.
- 2. Addressing this in short-term by constructing new water pipeline to replace existing one that carries water from [500 liters a second] de-sal plant in Colosso.
- 1. Will allow Co. to run that at full capacity; not quite running at full capacity at the moment.
- 3. EWS, 2,500 liters per second de-sal facility on schedule for commissioning in calendar year 2017.
- 1. Once Co. gets EWS, will basically with LCE in operation, will be getting over 80% of water from non-fresh water sources.

- 4. Going to be higher costs associated with that because its de-sal water, more expensive than taking it from cellars; much more than mitigated by increased throughput that it enables.
- 1. This is just to maintain sustainability of that site.
- 2. Has to get more power at competitive cost.
- 1. Caused development of 517 megawatt gas-fired plant.
- 2. Korean consortium (inaudible) Samsung, under long-term contract with Co.
- 3. Co. puts gas in and takes power out.
- 4. Will help Co. to achieve full security of supply for power for Escondida's existing operations and its committed projects and it also has expansion options, which will be good for LCE, for Spence or anything else Co. has got going in region.
- 5. Project is underway.
- 1. On time and on budget.
- 10. Olympic Dam:
- 1. Currently executing low capital intensity program of projects designed to increase **copper** production at Olympic Dam by approx. 50,000.
- 2. [Hitting 230,000 to 235,000 tonnes a year rate].
- 3. Doing this in two ways:
- 1. Needs to get a better grade.
- 1. Suffered 20% grade decline over last 10 years because Co. has been sitting in Northern part of **ore** body.
- 2. Needs to get back into Southern area where those originally high grades are and that is where Co. is going to develop.
- 2. Got to spend probably about a couple of hundred **million** dollars on incremental debottlenecking investment on surface essentially around smelter in particular, a little bit on concentrator.
- 3. That would then match [235,000 that sits its capacity in refinery]; currently underway.
- 1. High quality and low cost expansion opportunity.
- 11. Spence:
- 1. Spence bottleneck is tankhouse, 200,000 tonne a year.
- 2. Has recovery optimization project.
- 1. This has been underway.
- 2. Has been studying leaching in research facilities for a decade or so.
- 3. Now got potential to offset grade decline that Spence follows.
- 4. Like everything else, will be able to increase recoveries by 14% from FY16.
- 5. Will achieve that by acceleration of heap leach kinetics, increased utilization of leach pads, those things together.
- 6. Co. should be able to reach tankhouse capacity of 200,000 tonne per annum for two years post commissioning.
- 1. Thereafter grade decline will get Co. again.
- 2. Expects grades to avg. just about 0.7% during remaining life of reserve.
- 3. Reserve is supergene only that sits on top part of that resource.

- 7. This SRO project is expected to deliver exceptional returns with low CapEx required; currently in pre-feasibility.
- 12. Longer-Term Growth Projects:
- 1. In addition to these low-cost fast payback debottlenecking projects, Co. has couple of other interesting major projects.
- 2. Spence:
- 1. Studying development of 2.3b tonne hypogene resource.
- 2. If Co. gets this into production, will increase mine life by more than 50 years.
- 3. Will access hypogene ore that sits below current supergene that Co. exploits.
- 4. Like many in porphyries, has supergene that sits on enriched portion and then large hypogene that sits below.
- 1. Tends to be harder, tends to be lower grade.
- 5. Because Co. accesses it below, eliminates need for pre-stripping and new mining equipment.
- 6. Has to build 95,000 tonne per day concentrator and related infrastructure.
- 1. It will rely as always in Chile on de-sal water, but leaching will continue in parallel using existing infrastructure.
- 7. When supergene reserve is depleted as expected in mid-2020s, SRO projects will enable ongoing leaching of hypogene **ore**.
- 1. Hypogene traditionally been difficult to leach in heap context but again with this technology that Co. has developed, it will be able to leach this and will able to achieve recoveries of up to 60%; helpful to ensure that it has economies of scale on that **site**.
- 2. Got good moly and those by-product credits expected to support at least second quartile C1 cost performance, and Co. has ongoing optimization to further drive down costs.
- 3. With attractive **copper** and moly grades and expected avg. **copper** recovery in concentrator of close to 90% over life of resource, Co. thinks project is well positioned to compete for capital.
- 8. Currently in pre-feasibility.
- 1. Taken time to study but Co. believes it was really value-added because it managed to reduce capital intensity vs. original project that it had in mind.
- 2. Co. believes that small delay is worth it to shareholders.
- 3. In this regard, Co. sees further potential lowering of upfront capital required via outsourcing of required infrastructure like de-sal plant.
- 4. Project has potential to deliver first production in FY20.
- 13. Olympic Dam:
- 1. World's fifth largest **copper** deposits.
- 2. Evaluating low-risk modular capital efficient underground expansion.
- 3. Expanded underground designs supported by current stope **mining** method; no changes there.
- 1. Significantly smaller footprint than previous open-cut design.
- 4. Intends to increase ore hoisted capacity to 21m tonnes per annum, currently Co. [drilling about 10.5m], roughly a doubling.
- 1. On surface, the change, will go with heap leach operating in parallel with current concentrator cathode process.
- 1. No reason to change what Co. got at moment.

- 2. This approach will substantially reduce combination of this approach staying underground on heap leach will substantially reduce capital intensity of mine expansion project and surface infrastructure.
- 2. Technology remains a key enabler of this lower capital intensity growth path.
- 3. Lots of testing over many years, but that heap leach test program delivering promising results.
- 5. Projects has potential to enable OD to produce over 450,000 tonne per annum of **copper** with associated **uranium**, **gold**, silver by-products by middle of next decade.
- On copper equivalent basis, that's 750,000 tonnes of copper per annum.
- 2. If one puts this mine into Chile where Co. had limited, that would certainly make it probably second biggest copper mine in world.
- 6. Costs will be lower given economies of scale and low-cost nature of heap leach.
- 1. This will cement planned first quartile C1 cost position.
- 2. Project doesn't inhibit ability in future to go if economics change and so on and circumstances change, Co. can still go with open-pit, it won't obviate optionality in that regard.
- 7. Project is expected progress pre-feasibility in calendar year 2015.
- 14. Other Details:
- 1. Beyond these attractive major growth projects, unique quality of resource provides deep optionality across all assets.
- 2. Escondida:
- 1. Co. has ability to put another concentrator.
- 2. There is high grade at depth.
- 3. Co. could build underground mine, sweeten ore as in long-term start to get into more of chalcopyrite and one gets into reserve grade.
- 4. That could support high margin production for over a century; its huge.
- 3. Cerro Colorado:
- 1. Can leverage successful leaching technology deployed at Spence.
- 2. Does not see any problem with that.
- 3. There is more **ore** there.
- 4. Has hypogene.
- 1. Co. can pursue multi-decade low capital intensity life extension projects or even replicate an SGO-type concept.
- 4. Antamina:
- 1. Working with partners.
- 2. Has to extend life of reserve.
- 1. Currently constrained by tailings dam.
- 2. That project is underway, needs to build another tailings dam.
- 3. Got excess sag capacity.
- 4. Crusher is bottleneck.
- 5. Got good sag capacity there.
- 6. Needs to make sure that Co. closes gap and enable that mine to increase its throughput.

- 3. There is also high grade at the depth.
- 4. In future, undoubtedly going to have underground mine alongside open pit.
- 5. Resolution:
- 1. [Does own 45%].
- 2. One of largest and highest grade undeveloped copper assets in world.
- 3. Permitting is challenging.
- 4. Eventually going to become one of largest **copper** producers in North America and in fact one of biggest **copper** producers in world.
- 6. Notwithstanding world-class resource base, targeting tier 1 discoveries in Americas via focused exploration program.
- 1. Co. only pursues opportunities that have potential to compete with its organic development options.
- 15. Summary:
- 1. Maximizing potential of world-class copper portfolio to create sustainable long-term value for owners.
- 2. Focused on few, large, long-life, low-cost assets in stable producing regions.
- 3. Has structured approach to productivity allowing Co. to proactively address ongoing challenge of grade decline.
- 4. Got unique and sustainable solutions to industry-wide constraints of power and water availability.
- 5. Resource position can support suite of compelling longer-term growth options that will deliver substantial increase in production while at the same time further lowering unit costs.
- 6. Believes Co. is well positioned to benefit from attractive copper market fundamentals.

Closing Remarks (A.M.)

- 1. Note:
- 1. To be unequivocal about things, \$4b of productivity savings Co. is talking about are only from core portfolio.
- 1. That's going forward from FY14.
- 2. Additional productivity savings that Co. can get from new core portfolio while it still sits in that are not counted and does not count anything that will be delivered and it believes they will be substantial.
- 3. Will hear more from them through separate listing and them having their own bespoke strategy.
- 4. That would come in addition anything from FY14 onwards to what Co. has already stated.

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