

**Speech: Olympic Dam – building on a legacy**  
**BHP Billiton Olympic Dam Asset President, Mr Darryl Cuzzubbo**

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Good afternoon everyone. I am delighted to be here today at the 40<sup>th</sup> Annual Essington Lewis Memorial Lecture. Essington Lewis needs no introduction. An eminent leader of the Australian mining industry, born and educated here in South Australia, he was responsible for the early rise of BHP Billiton as an efficient steel maker globally; and for effectively preparing Australia for its role in World War II.

At BHP Billiton, we are fortunate to have had him at our helm. He joined BHP at the turn of the century in 1904 and retired fully from the company in 1952. He was a visionary, dedicated to work and steered BHP and indeed Australia through some turbulent decades. A true leader, he was undaunted by challenges and faced them head on, overcoming them with his zeal for hard work, organisation, efficiency and expansion.

In my talk today, I would like to highlight the similarities between our challenges today and those of Essington's time, what he did about them and why his approach and character traits are just as relevant today as they were back then. In particular, I would like to talk about three things that stood out for me about Essington as I learnt more about him:

- He saw challenges as opportunities and rose to meet them, rather than be consumed by them.
- He realised the importance of focusing on efficiency first and then expansion.
- He was able to see the big picture but also get into the detail, to manage execution flawlessly.

There are some similarities to what Essington Lewis faced and triumphed over and our current environment today. He faced turbulent political and economic times – to some degree not unlike what our industry faces today. An Ernst and Young mining and metals report dated September this year highlighted the following among the top 10 business risks for the resources industry:

- productivity improvements
- capital dilemmas
- social license to operate
- capital projects
- price and currency volatility
- infrastructure, and
- water and energy access.

These are issues that the resources sector in Australia has grappled with over the past few years and will continue to challenge us in the medium term.

From an Olympic Dam perspective, the prices of copper, gold and uranium have dropped 33, 35 and 50 per cent respectively from their 2011 highs to now. As you can imagine, this has

created a very tough situation for our business, especially as we have a high fixed-cost infrastructure.

But we can draw inspiration from Essington from how he overcame adversity. In 1921, when he was General Manager of BHP, the Australian steel industry was struggling and could not compete with imported steel. In 1922, Essington was dealt yet another blow when fires at Newcastle Steelworks decimated the operation and led to the dismissal of 5,000 people. He took the opportunity to analyse the efficiency of the plant, men and processes. He put in place infrastructure changes and upgrades which also extended to the safety code and system of transport at the plant. All these proved effective and in 1935, following the Great Depression, our steel business was well ahead of its European rivals that it had previously lagged behind, had produced well over half a million tonnes of steel and had 10,000 employees and a similar number of shareholders.

As we look for ways to make Olympic Dam stronger and more competitive, we too reflect on how we can turn our current situation into an opportunity. There are many examples, but one is using the current climate to establish strong partnerships with key suppliers where our futures are intertwined; and we look together at how we can improve effectiveness and reduce costs through creativity and improved efficiency.

A good example of this is an initiative implemented by ODT Australis, a long-time and loyal supplier. Over the years, they have been instrumental in copper recovery operations which involve recovering large pieces of scrap copper. A lot of the copper was not in an easily treatable form and was spread out across the site. Much of it was too large to be lifted and they developed a saw for cutting it and then proceeded to cut all our oversize scrap copper. Through this process over 800 tonnes of copper were recovered representing millions of dollars of additional revenue.

I make a point of this as we are no doubt in challenging times. However, I would say, that Essington has shown us there is always opportunity – but we will only find opportunities if we are looking for them.

Essington also realised that before expansion, there needs to be a focus on efficiency. This focus took the company to new heights as he realised the key to BHP's survival as Australia's premier steel producer depended upon comprehensive efforts to drive down costs. To this end Lewis embarked upon a policy of vertical and horizontal integration based upon the retention of sizable amounts of company profits to finance new plant and equity participation. This was to lay the foundation for an impressive expansion of the company's interests. Between 1919 and 1925 the company became independent of outside shipping through its purchase of a small fleet of ore carriers to transport ironstone from South Australia to Newcastle. In the mid-1920s BHP also purchased collieries in the northern New South Wales coalfields, and in 1935 it secured mines on the southern and western coalfields as well.

His efforts positioned Australia as a global player, earning him the title of The Steel Master in Professor Blainey's biography. In the same vein, we are diligently looking for efficiencies at Olympic Dam, before we expand.

This situation is not exclusive to Olympic Dam. Across BHP Billiton we are also diligently implementing productivity improvements – a journey which began more than two years ago. Andrew Mackenzie, our CEO, has highlighted productivity improvements as a goal. In the 2014 financial year, we reported a strong financial performance underpinned by significant improvements in productivity. Our underlying attributable profit increased by 10 per cent to US\$13.4 billion. We embedded productivity-led volume and cost efficiencies of US\$2.9 billion, exceeding our target by 61 per cent or US\$1.1 billion. This means we have now delivered more than US\$6.6 billion of sustainable productivity-led gains over the last two years.

At Olympic Dam, it is critical that we run our business as efficiently as possible. Like Essington, as we grapple with a challenging and dynamic environment, we first analysed what was important and would deliver the greatest benefits. This has led to the development of our top 10 cost and value drivers for each operational area and we are benchmarking ourselves against the best in the world as we seek to do the best we can with what we already have. In some areas, we are at or close to benchmark whilst other areas we have some way to go.

Let me share just a couple of examples that demonstrate our focus and intent in this regard.

A key driver for our development team in the mine is meters advanced per day per jumbo. We undertook internal research to understand the benchmark and implemented some key actions to close the gap. Our results to date show an improvement of 15 per cent representing a 50 per cent of progress towards the benchmark from FY13 results.

A second example is delivering increased stability for the flash furnace in our smelter. The new Flash Furnace Heat Balance Model is used to control (promote or decrease) accretions on the interior bricks of the Flash Furnace. When correctly balanced it minimises the damage to the furnace throat as well as the waste heat boiler. In addition, it promotes a more stable performance from the Smelter and provides a safer working environment. As a result, we saw a 5 per cent increase in reliability for the flash furnace.

While we still have a long way to go our committed workforce and management team were able to deliver 11 per cent more Copper last year at a substantially lower cost.

It is initiatives like these and many more like them that will drive our success. We believe that to achieve the prize we are after we must first build the right foundation. Over the past couple of years, we have put the right building blocks in place from both a systems and process perspective. This has now enabled us to understand what the critical safety, cost and value drivers are, and see how we are performing against them. We are also able to benchmark our performance against other businesses in the company and easily transfer best practice.

In doing so, we are doing the best with what we have and demonstrating that we have the capacity and capability to build a strong, profitable business. It is only reasonable that we do the best with what we already have before we ask for substantial capital for a potential expansion. Furthermore any expansion is closely linked to efficiency as it is often the operating cost of an expanded plant that, more than anything else drives the return on capital. For us, the financial model of any planned expansion is naturally going to be based on our current operating cost which only reinforces the criticality of getting this right.

Once we are able to run our existing operation at full capacity, we then and only then earn the right to grow. We continue to research all options for expansion and initially focussed on a divergent process where all options were evaluated to ensure that we left no stone unturned. We invited experts from around the world to ensure that all options were considered. We are now applying financial analysis to determine the best possible future options. This is not something that we can or should take lightly as it will likely shape the path of Olympic Dam for the rest of this century.

We see that achieving success in this challenge is both an obligation and a privilege.

As leaders, we must also be visionaries, as Essington was, and be able to see the big picture clearly. He saw and understood the ramifications of the big picture but was also credited with an incredible capacity to organise and implement. In short, to be strategic and selectively tactical. We must all be able to step back and see the big picture to ensure we have the right strategy. Our primary goal as leaders has to be making sure that we have the right people in the right roles focused on the right things which we can't do if we don't have an overarching game plan. This sounds so obvious but it is so easy to get caught up in the urgency of day-to-

day issues that we sometimes don't take the time to take a step back and look at the bigger picture over the long term.

As narrated by Professor Blainey in the video clip earlier, Essington's visit to Japan in 1934 convinced him of the inevitability of a war with Japan in which Australia would be inextricably involved. Upon his return he began the active promotion of BHP's involvement in a range of defence initiatives including the promotion of the Commonwealth Aircraft Corporation in 1936 with a view to establishing Australia's capability in aircraft production. In the same year he secured the building of a pilot munitions plant at Newcastle. In 1937, Lewis took steps to make Australia virtually self-sufficient in special steels for war purposes, and in 1939 BHP agreed to enter the shipbuilding industry for defence purposes.

His ability to not only recognise the strategic implications of what he saw, but also put into action a plan to prepare Australia appropriately, helped armed Australia in the war and also introduced a range of industrial techniques that were to have a profound effect upon Australian manufacturing industry in the post-war years.

He was successful because he didn't chase everything. He was first and foremost able to correctly identify risks and opportunities and was then able to isolate the areas in which to get deeply involved. His interpretation of the arming of Japan and the related imperative for Australia to be prepared is a clear example of focusing on what is critical, and not being consumed or distracted the possibility of pursuing many good ideas but rather selectively picking those that would have the most profound impact and pursuing them to the full extent possible.

When we apply this approach to Olympic Dam, it is important to not only run Olympic Dam efficiently but run it the right way. In order to do this, we have to take a step back to understand where our focus will deliver the best results. At the moment, the mine is our bottleneck which means that we are starving our high fixed-cost surface processing infrastructure of copper. By running different scenarios, we see that it makes more economic sense for the refinery – which is the back end of our processing infrastructure – to be our bottleneck. This requires significant investment in opening up the underground mine so that it is no longer the constraint, and to de-bottleneck the surface so that we always keep the refinery fed. Our immediate challenge is how we self-fund the required investment by being prudent and creative with our capital and engaging our workforce to not only reduce costs but also accelerate the initiatives that will reduce our costs.

The times we face today are not easy. But in reality, they are no less daunting or difficult to the challenges that leaders like Essington faced before us. To succeed, we must be able to tap into our resilience, determination and creativity; while keeping a strategic focus and understanding what drivers add the most value.

At Olympic Dam we are in a unique and privileged position. We have always understood the value of the prize and believe that as we live up to the legacy of Essington Lewis, we will unlock the incredible value that this orebody can deliver. The orebody is one of a kind and will deliver economic benefits to the people of South Australia, Australia and the world.

The copper and uranium that we produce every day is helping to meet a growing global demand for energy and lifting millions of people out of poverty. It is this aspiration that continues to drive us and to challenge us to safely and efficiently mine this resource.

Thank you for your time this evening. I would be happy to take any questions that you might have.

***Check against delivery.***