

Planning Assessment Commission – Meeting 11th December 2014

Watermark Coal Project

PAC Members: Ms Lynelle Briggs AO, Chair, Jan Murrell and Mr Joe Woodward, PSM

Introducing myself and the group I represent, IEEFA

Slide 1 - I am Tim Buckley, Director of Energy Finance Studies Australasia for the Institute of Energy Economics and Financial Analysis, IEEFA for short. I have more than 25 years financial market experience analysing companies and projects, covering both Australia and international markets.

My role involves a focus on the increasing risk of Stranded Assets, hence why I am present today in the context of Watermark Coal.

Introduction

In consideration of the merits of the Shenhua Watermark project, the PAC examines the environmental, social and economic impacts. My presentation will focus on financial trends that have negatively affected the economic impact of the project.

I aim to emphasize the significantly reduced financial viability of this coal project caused by the collapse in global coal prices.

This also means there is an increased risk of Watermark being left as a *stranded asset*, unable to generate a commercial return and potentially that it will either be significantly delayed, not approved to proceed by Shenhua or closed well before the end of what is deemed the economic life as it is implied today.

Furthermore, this puts increased emphasis on the potential loss of value in the agricultural sector, given this is a perpetual source of high value economic activity for Australia relative to the limited life nature of coal mining for this private foreign firm.

The need for coal

Slide 2 - In its strategic context, the NSW Department of Planning & Environment states that society is heavily reliant on coal to meet its basic energy needs, both at the domestic and international level. Coal provides 90% of NSW electricity needs, 75% of Australia's electricity needs and 40% of the world's electricity needs.ⁱ

- Firstly, 80% of NSW coal is exported, and for this proposal, Watermark is entirely an export mine – so citing NSW or Australia's coal reliance in electricity is not relevant.
- Consistent with the International Energy Agency World Energy Outlook 2014, IEEFA forecasts that the global reliance on coal over the next decade will diminish due to a combination of:
 - **Slide 3** - Global Policy initiatives to reduce coal use;
 - Energy efficiency initiatives; and
 - A massive increase in investment of all alternative commercially viable alternatives, including hydro, nuclear, gas, wind and solar.

- The Department also cites that China is the primary intended destination of coal from the Watermark Coal Project,ⁱⁱ yet we note that China in October 2014 introduced an import tariff to *reduce* China's reliance on Australian coal imports, and in the last three months coal imports into China are down significantly.
- China's coal imports were down 26% year-on-year for the month of November and total coal imports were down 9.4% for the first 11 months of 2014.
- IEEFA forecasts that China will return to being an opportunistic exporter of coal with the next few years.

Seaborne Thermal Coal has Entered Structural Decline

- **Slide 4** - China's coal consumption year-to-date 2014 is down more than 1%, despite electricity sector demand growth of 4% and Chinese real GDP growth of 7.3% year on year.

I cite these figures as current data that strongly reinforce conclusions reached in a major global thermal coal study IEEFA published in conjunction with Carbon Tracker in September 2014.ⁱⁱⁱ The three key conclusions reached were:

1. China will reach peak coal consumption by 2016;
2. Global consumption of coal will peak in 2016, concurrently with China; and
3. Seaborne coal markets as a result have entered structural decline.

Slide 5 - Major global investment banks have increasingly come to a similar conclusion.

- Bernstein Research in June 2013 called for a peak in China's coal consumption by 2016 in their seminal Blackbook: *"China: The beginning of the end of Coal"*.
- Morningstar in April 2014 published *"Burned Out: China's Rebalancing Heralds the End of Coal's Growth Story"*.
- UBS, Citigroup, Deutsche Bank, Morgan Stanley and Goldman Sachs have likewise massively downgraded their demand and price expectations for coal.

The China-US Climate Change Agreement of November 2014 also strongly reinforces the IEEFA projection. This agreement commits to building upon a number of significant actions to move aggressively away from fossil fuels and transition towards a lower carbon energy mix.

India is the third largest domestic thermal coal market in the world. On 12 November 2014 India's Energy Minister Piyush Goyal said he plans for India to cease importing thermal coal in 2-3 years. This is a part of a well conceived and ambitious development of the Indian electricity sector. Minister Goyal's comments do however raise significant questions over the strategic rationale of the plan by Adani to export 2/3 of the Carmichael coal back to India. India's Minister is making it clear India can't afford to solve energy poverty using expensive imported coal, and will increasingly diversify the electricity sector away from coal.^{iv}

A greater reliance on energy efficiency and improved grid efficiency, plus a significant boost in the installed base of nuclear, gas, hydro, wind and solar will all facilitate this transition.^v

Coal Price Collapse

Slide 6 - The global coal price peaked in 2008 and has since declined by more than 60%.

As an example, the Newcastle benchmark has declined from US\$180/t in 2008 to US\$140/t in 2011, then US\$85/t in 2013. This decline has if anything accelerated in 2014, with a further 25% decline to US\$62/t today.

This reflects a prolonged period of oversupply coupled with significantly lower than anticipated growth in demand, plus the increased probability being ascribed to coal having now entered structural decline.

Wealth Destruction

Slide 7 - The share price collapse evident in global coal mining equity prices over the last four years is nothing short of staggering.

Slide 8 - The average listed coal company is down 80-90% in the last four years. This is evident both in Australian coal companies like Whitehaven, but also globally across the US, Indonesia and China. Being a lot more diversified, China Shenhua Energy is only down 50% in the last four years.

This is enormous almost unprecedented wealth destruction, and to me clearly reflects the growing equity market concerns over the structural decline of coal.

Value of the Project to NSW

Using the 8.2% open cut royalty on all 159Mt of production forecast over the next 30 years using current coal export prices and the A\$/US\$ at the recent lows of US83c and deducting the coal washing allowance of A\$3.50/t, this gives an over the life of the project royalty value of A\$720m, half the Department's estimate of \$1.5bn.

Shenhua's own report puts the expected royalties at A\$565m in NPV terms.^{vi}

The revenues of the project are A\$15bn, 20% less *on current prices and exchange rates* relative to the Department estimate of A\$19bn. This reflects the magnitude of the deterioration of export coal markets over the last 1-2 years alone, notwithstanding the rapid decline in the A\$/US\$.

We note that none of these values have been discounted to adjust them for the time value of future cashflows further diminishing their current value. Further, all the figures assume the mine is economically viable for its full 30 year life, as assumption that will be increasingly questioned as the whole issue of stranded fossil fuel assets becomes more accepted given global progress towards a climate change solution.

Slide 9 - We note the UK Energy Secretary Ed Davey warned only last week that fossil fuel companies could become:

"the sub-prime assets of the future... Investing in new coal mines is going to get very risky".^{vii}

Thermal to SSCC price differential

We note that more than 80% of the coal production targeted from Watermark is semi-soft coking coal (SSCC), a higher grade coal than the Newcastle thermal export coal benchmark. However, the SSCC segment is relatively niche, and the pricing has largely followed the relative movements of thermal coal. As such, the argument that Watermark is at less risk of being a stranded asset than other export thermal coal mine proposals has not proven correct in the last four years.

Value of the Project to Shenhua

We note that the independent, global coal industry expert Wood MacKenzie puts the net present value of the Watermark project today at negative US\$200m. We note this includes using what IEEFA would deem to be very optimistic coal pricing assumptions, for example Newcastle thermal coal prices exceeding an average US\$130/t over the life of the project i.e. double current levels. Further, Wood Mackenzie assumes as a base scenario assumption that Watermark does not commence full production for another 15 years i.e. 2029.

Strategic Value to China and Shenhua

Back in 2008 at this project's inception, China had a strategic imperative to acquire coal assets abroad. Six years on, that imperative is largely gone. China could return to being 100% domestic coal self-sufficient in 2015, making this proposed project surplus to needs.

Slide 10 – The key reason for this change has been the dramatic reduction in renewable energy costs due to rapid technology and economies of scale gains in the last five years.

We note yesterday's announcement by Anglo-American Plc to exit South African and Australian thermal coal. Having argued so strenuously for Drayton South to be approved, clearly management have misled – their real purpose in pursuing this approval was to give Anglo American an extra growth option so they could potentially get a higher price on sale of their Australian thermal coal operations.

On the bigger picture, when global mining majors like BHP, RIO, Anglo American, and major Japanese trading houses like Sumitomo and Itochu are all trying to reduce their coal exposures in Australia in 2014, this clearly flags a need for Australia to reassess our future for this sunset industry. Approving major new greenfield mining areas in the hope of growth that is increasingly less likely to occur will leave Australia with oversupply, lower prices, zero profit margins and more mining job losses – i.e. stranded assets.

In conclusion

IEEFA considers that purely on financial terms, the NPV value of the Watermark Coal project is negative, even before considering all the negative externalities detailed by previous speakers with respect to water, health and agricultural impacts, loss of biodiversity and loss of Aboriginal heritage.

The world is moving on, coal is in structural decline and Watermark looks to me to be a stranded asset in the making.

Thank you

ⁱ page 20, May 2014

<http://www.pac.nsw.gov.au/Projects/tabid/77/ctl/viewreview/mid/462/pac/445/view/readonly/myctl/rev/Default.aspx>

ⁱⁱ NSW Planning & Environment, State Significant Development Assessment, Watermark Coal Project, page 21, May 2014

ⁱⁱⁱ <http://www.carbontracker.org/wp-content/uploads/2014/09/Coal-Demand-IEEFA.pdf>

^{iv} <http://in.reuters.com/article/2014/11/12/india-coal-imports-idINL3N0T234F20141112>

^v <http://reneweconomy.com.au/2014/indias-plan-stop-importing-coal-deals-another-blow-australia-68894>

^{vi} Page 25 Watermark Coal Project Response to PAC Review Report, Hansen Bailey, October 2014

^{vii} <http://www.telegraph.co.uk/finance/newsbysector/energy/11277546/Fossil-fuel-investing-a-risk-to-pension-funds-says-Ed-Davey.html>