VICKERY EXTENSION PROJECT (SSD-7480)

Submission to the Independent Planning Commission

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21 June 2020

PRELIMINARIES

I am independent economist and financial consultant with over 45 years of experience working as an economist, policy adviser and financial markets analyst for both the Government and the private sector.

I am concerned that the proposed extension of the Vickery Coal Project will have significant negative economic and social effects, both for the immediate region, for NSW and for Australia more generally.

In this submission I wish to outline those concerns for the consideration of the Commissioners reviewing this application.

In my view, based on these concerns, the Commission should decide that the project should not proceed.

BACKGROUND

The proposal seeks to extent the existing Vickery coal mine, so that coal production will rise to up to 10 million tonnes per annum, up from an existing 4.5 mt per annum. The markets for the proposed increased coal production are "export markets in our region"[1]. Whitehaven Coal, the proponents of the mine, claim that it will lead to 500 jobs being created during the construction phase and to 450 jobs in the longer-term operational phase. Whitehaven's major investors are based overseas: Lazard Asset Management; and AMCI International, both with head offices in the USA. Together these hold more than 20% of Whitehaven stock on issue[2].

[1] https://whitehavencoal.com.au/our-business/our-assets/vickery-extension-project/
[2] https://www.marketscreener.com/WHITEHAVEN-COAL-LIMITED-6499701/company/

CONSIDERATION OF ISSUES

Employment gains

According to Whitehaven, approval of this project will lead to an ongoing increase in employment of 450 jobs.

In my view, this is too small a number to be of significant impact on employment prospects in the region.

Summing the latest ABS data for employment in the region (incorporating the largest towns near the mine: Gunnedah, Narrabri and Tamworth) total employment is 35,933[3].

Hence, an extra 450 jobs in the region represents only a 1.25% increase in job availability.

Also, many of those jobs would be skilled jobs, such as fitters and turners, electricians and skilled machine operators. These are not occupations where the number of workers is in excess supply in the Naomi region. Many of those jobs would probably go to workers from outside the area, actual or akin to fly-in fly-out workers who bring only modest economic benefit to the regions where they are employed.

Market Developments for Coal Exports

The advent of the Corona virus has led to a substantial fall in the global demand for coal. According to the London *Financial Times*, Coronavirus lockdowns have hit the market for thermal coal, where demand is expected to fall by the most this year since the second world war, after factories closed down to prevent the spread of the virus[4]. Australian benchmark coal prices for the Asian market fell to $51 a tonne, down nearly 20% from a month before[5].

Falling coal prices mean that the economics of opening up a new mine, to supply yet more coal to a market already in structural downturn, just makes no sense.

[3] http://stat.data.abs.gov.au/index.aspx?queryid=917
[4] Financial Times, 5 May 2020
[5] Ibid

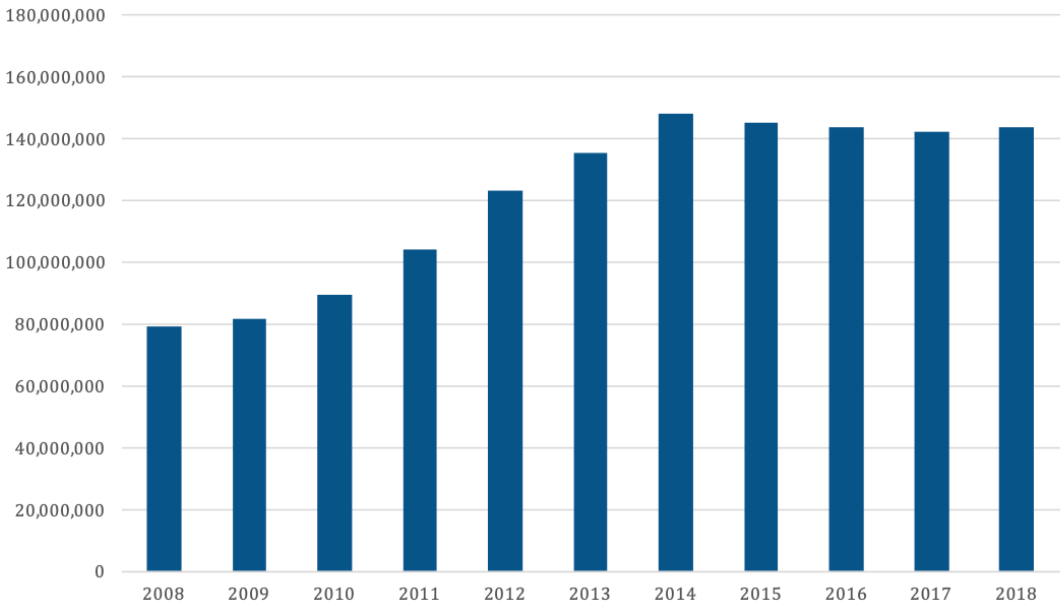
Some will say that the recent downturn in coal prices will be temporary and pass, once the threat from the virus has receded. They will argue that the IPC should not take the lower prices into account.

While it is true that a bounce back in coal prices is inevitable, once the economies of major coal importers start revving up again, developments over the past few years mean that it is quite likely that lower prices for coal are inevitable over the coming couple of decades.

The data suggests that global seaborn trade in coal has probably peaked and is now in structural decline, as the world shifts energy use toward less polluting sources and the cost of renewable power becomes cheaper.

Detailed analysis of the outlook for Australia's export coal markets published last year by Institute for Energy Economics and Financial Analysis (IEEFA) shows that Australian thermal coal exports seem to have peaked in 2014. IEEFA expects ongoing falls in demand ahead.

Figure 1 Australian Thermal Coal Export probably peaked in 2014 (tonnes)



Source: IEEFA, p.7
https://www.parliament.nsw.gov.au/ladocs/submissions/65393/Submission%20-%20122.pdf

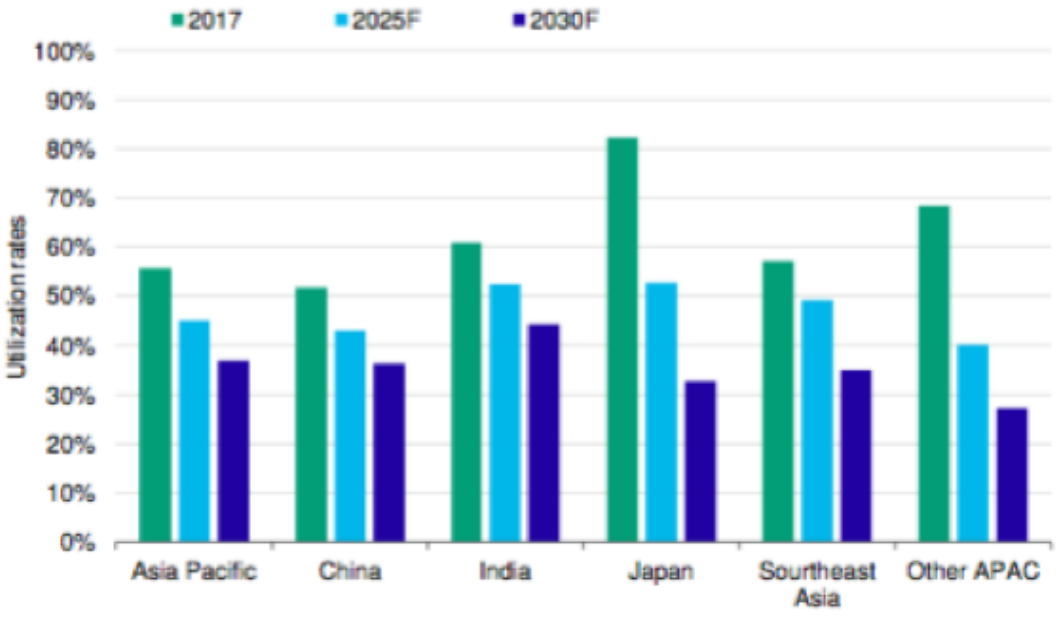
Australia's major markets for export coal are likely to see large falls in demand over the coming two decades.

The International Energy Agency has developed a projection model for its *Sustainable Development Scenario,* that assumes nations take a path toward achieving climate stabilisation, reduced air pollution, and universal access to modern energy. Under the IEA's Sustainable Development Scenario, global thermal coal trade volumes drop by 65% by 2040 from 2017 levels. Thermal coal trade for power generation drops by 79% by 2040 under this scenario.

If these projections are anywhere near accurate, then Australian coal miners are likely to see strongly rising competition from alternative suppliers, such as Indonesia, already the world's largest thermal coal exporter, for shrinking markets.

According to estimates from the IEA, Australia's top coal markets in Asia - China, South Korea, Japan and India – are all likely to become much less reliant on coal fired electricity in the next couple of decades, as the world moves towards more sustainable development policies.

Figure 2 Asian Coal Plant Utilisation Rates Under IEA's Sustainable Development Scenario



Source: IEEFA, Ibid, p.11

High School Economics explains that this cannot end well for miners: prices will continue to fall, and many mines are likely to become financially unviable. The mines will become 'stranded assets'.

Of course, that would not be good news for the region surrounding the Vickery mine, from a social or economic perspective. If the mine were to become a stranded asset, the region would be saddled with a massive open pit mine that had ceased operating, with derelict infrastructure, and surrounding overburden leaching into the water table, creating a horrible eyesore and potential environmental disaster for the region.

For the IPC this should be a major minus against approval for the mine. If it becomes a stranded asset, there is risk that the owners of the Vickery mine will not have the capital to make good any commitments to rehabilitate the mine site after the closure or mothballing of the site. This means the mine could become a lasting eye-sore on what is still today a beautiful vista of rural landscape.

Renewables Driving the Transition Away from Coal

Of course, it is not just action to combat climate change which is causing the shift away from coal as a source of energy. Modern technological innovation is causing an exponential decline in the cost of renewables. In turn, this is accelerating the shift away from coal fired electricity towards more cost-effective generation methods.

In January 2020 the he Qatar General Electricity and Water Corp revealed it had accepted an 800 MW solar tender at final price of QAR0.0571/kWh ($US0.016/kWh) – the lowest winning bid ever registered in an auction for large scale renewable energy.

At these prices, there is no way that new coal fired power stations can compete and even existing coal power plants, completely depreciated with no capital costs, would be struggling to compete.

Battery costs are also falling exponentially, hastening the transition to renewables, as many old coal fired plants are retired and replaced by less costly, non-polluting solar and wind power.

Greenhouse Gas Emissions Policies Drive Renewables Transition

The Paris Agreement set in place a goal to keep the increase in global average temperature to well below 2 °C above pre-industrial levels. Many countries have interpreted this to mean achieving zero net emissions by 2050. To date many countries have signed on to the Agreement with the notable exception of the United States.

Australia's Government so far has not fallen into line with most other Western Countries and many developing countries to adopt a zero emissions target, although the Government has pledged to cut emissions by 26% by 2030, a rather modest target.

However, all Australian States and Territories have adopted the zero emissions by 2050 target, including NSW.

The objective of the Paris target is to attempt to limit the rise in temperatures caused by global warming, in order to protect as much of the world's environment as possible and to prevent a potential existential threat to human existence from excessive climate change.

Climate Change is an Economic Policy Issue

To me the problem of climate change is in essence an economic problem and one which should have been sorted out long ago by policy makers.

Climate change is now accepted by the vast majority of scientists working in the field as being caused by man-made emissions of green house gases from the burning of fossil fuels.

GHG emissions are a negative external cost created by the economic entities responsible for the pollution. Market failure exists because no one has property rights over the atmosphere so there is no-one to charge the polluters for the costs of their emissions. They pump that pollution into the atmosphere for free. The social cost of the pollution is borne by the community and the polluter gets to go on polluting for free.

Higher School Certificate Economics tells us that the obvious solution is to charge the polluter a price for that pollution, equal to the cost imposed on society generated by that activity. A carbon tax is good example of such a price.

Once polluters face that cost, it is likely they will either take steps to reduce their pollution or they will cut back production of the polluting activity.

As the *New York Times* has reported, over 40 countries have adopted carbon pricing in some guise but most countries have found it politically difficult to set prices that are high enough to cause substantial reductions in carbon emissions[6].

[6]The New York Times
https://www.nytimes.com/interactive/2019/04/02/climate/pricing-carbon-emissions.html

The Cost of Climate Change to the Australian Economy

For Australia, the threat of climate change is very real with the annual cost of rising temperatures to the Australian economy likely *each year* to exceed the total economic hit to GDP from the impact of the Corona Virus.

Modelling by researchers from the ANU, Melbourne University and CSIRO has quantified the economic cost of rising temperatures due to climate change, using state of the art modelling techniques.[7]

They consider a rise above 2°C, following a 'business-as-usual' track, to 4 °C. For Australia, their modelling estimated an annual loss in Australian GDP of about $94 billion.

This is getting up towards double the expected 10% peak to trough Corona virus-induced drop in GDP, which translates to about $50 billion. Only, of course, the annual climate change cost will be ongoing.

What is further troubling is that the negative impact globally is concentrated around the equator, so our neighbours such as Indonesia, Malaysia, the Philippines, Vietnam, Thailand and the Pacific Islands have more severe negative ongoing economic effects than is the case for our country. This will negatively affect our export markets and could lead to ongoing disruption from 'climate change refugees' for Australia.

In my view both the Government and the Legal System should be taking firm steps for Australia to become a leader in reducing GHG emissions and hastening the transition to renewables.

There are many advantages from a rapid transition for the Australian economy because Australia has a comparative advantage in generation of renewable energy. The country's abundant sources of wind and solar power could be used to export green electricity, via direct cables to our north and indirectly through using that power to produce 'green' smelted metals, such as aluminium and even steel, produced using hydrogen created from renewables. As Ross Garnaut, the eminent ANU economist says, Australia could become an "Energy Superpower".

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[7] Tom Kompas, Van Ha Pham and Tuong Nhu Che, *The Effects of Climate Change on GDP by Country and the Global Economic Gains from Complying with the Paris Climate Accord,* Earth's Future, Vol. 6, No. 8, pp 1153-1173

Treatment of Stage 3 Emissions

My understanding is that if the Vickery Extension is approved, the mine over its life will potentially see 168 million tonnes of coal dug up, at a rate of up to 10 million tonnes per year and exported for burning. That will add 370 million tonnes of greenhouse gas emissions to the atmosphere.

I am aware that the proponents will say that the IPC should not take into account Stage 3 emissions in its deliberations and that there is new legislation currently stalled in Parliament which would mean, if passed, that Planning Authorities will not be able to impose 'regulations' on the export of coal.

However, the Minister, Rob Stokes, has stated publicly that this will not restrict the IPC from considering Stage 3 emissions.

It therefore appears to me that the IPC should consider such emissions and if they share my concerns, should reject the proposed extension outright.

Such a decision would be consistent with existing legislation and the intent of the Bill before Parliament, by not imposing any conditions on the mine, but simply rejecting the proposal, because the Stage 3 emissions it would release are not consistent with the Paris Agreement commitments made by the State of NSW.

Vickery Extension Poses a Threat to Governments and Exporters

Another economic reason for rejecting the Vickery Extension proposal is that, if it were to go ahead, it could pose an economic threat to both the NSW State Government and other exporters in NSW and the Australian economy more generally.

This threat arises through recent actions and pronouncements by overseas Governments and Government Institutions, that look unfavourably on Australia's record as a source of GHG pollution.

The Swedish central bank, Riksbank, is already acting to divest its foreign exchange reserves held in the form of bonds issued by governments of regions with high levels of GHG emissions.

Riksbank recently announced that it had sold its holdings in bonds issued by the States of Queensland and Western Australia, stating that Australia and Canada were countries "not known for good climate work" and noting that their "greenhouse gas emissions per capita are among the highest in the world" .

In a separate punitive step, in March the European Commission unveiled a new European Climate Law, which commits the EU to zero emissions by 2050 and includes a Carbon Border Adjustment Mechanism — effectively a carbon import tax — to be applied to imports from countries that aren't working to reduce their GHG emissions.

The EC's proposed border tax is designed to prevent carbon contamination from free riders outside the EC and to protect its workers and businesses from "unfair competition".

While the EC's threat appears real, the President of the EC has pointed out that they would prefer an international effort to combat climate change.

In my view, Australia's economy will become increasingly the target of punitive measures if mines like the Vickery Extension are permitted to go ahead, adding to the international perception that Australia is a pariah on climate change policy.

This is another reason why I request that the IPC reject this proposal, on the grounds of public interest.

Threat to Other Industries

Australia has a strong reputation as a supplier of fresh produce, grain and other high quality agricultural products to export markets. We also have a reputation as a safe, unpolluted country to visit.

Since I was a child growing up in the Newcastle region with farmers as my forebears, I've known about the Liverpool Plains as being highly productive agricultural land and a beautiful landscape.

Research suggests that allowing this mine to go ahead would be a substantial risk to the agricultural sector of the region and to its growing tourist trade.

In particular, the proposal relies on large amounts of water for the operational viability of the mine. The extraction of this water would be a threat to the fabled agricultural production of the area, noting that water will become scarcer as global warming persists, in itself a risk for agriculture.

Moreover, it is clear that the mine operations would pose a substantial threat to the water table, from the likelihood of leaching of chemical residues. If this were to occur in substantial measure, again this would be a substantial risk to agriculture in the region.

In my view, agriculture in Australia is likely to be a significant economic sector, long after the last coal mines have ceased operation. Some analysts suggest that in 10 years' time, many mines might already be closed.

It would be a body-blow for the region if the Vickery Extension were to be granted permission to go ahead; proceeded to be developed for the short term gain of a handful off mainly offshore mining investors; then closed down, having polluted the water table and rendering agriculture, an industry with a long run future, unviable because of polluted ground water left behind by the miners.

CONCLUSIONS

The proposal for the Vickery Mine Extension, if it goes ahead, will provide some relatively short term economic gains for (mainly overseas) investors, jobs in the region during the construction phase and some spin off benefits to local suppliers.

On-going employment in the mine would represent an insignificant gain to job availability in the region, noting that workers from outside the area are likely to be recruited to at least some of those jobs.

Approving the mine goes against the Paris Agreement targets of the NSW State Government and would lead to some 370 million tonnes of green house gases being released into the atmosphere. This would further add to perceptions that Australia is a pariah on emissions reductions policies and could affect the ability of the State Government to issue bonds into the international market and damage the prospects of higher value-added exporters into market such as Europe, because of proposed carbon import taxes.

Coal mining profitability is likely to come under threat, as demand for coal exports continues its structural decline, as export destination countries adopt Paris based climate policies and as lower cost renewable energy is adopted throughout the world.

Coal mine profitability is a real issue for the region surrounding the proposed mine extension because the mine could become a stranded asset within 10 years. If this happens, then opportunities to rehabilitate the mine site and to counter any ground water pollution from the mine could evaporate.

Allowing the mine to proceed would threaten the viability of other industries with assured long run futures in the area, such as agriculture and tourism.

Agriculture would be threatened via competition for available water supplies and indirectly through pollution of the ground and the water table.

When one takes a medium-term perspective, economically the region would be much more viable if the Vickery Mine Extension is not allowed to go ahead. Hence, it would be a major blow if the mine were to proceed for those people and businesses who see a long-term future in the region.

On purely economic grounds, in my view, on balance, I urge the IPC to reject the proposal.

That said, from an aesthetic and 'liveability' perspective, proceeding with the mine would be a major disruption to the rural environment and the Commission should consider the wellbeing of many of the residents of the region who have opposed this development.

The proposal should be rejected.

Robert J Henderson

Rob Henderson *is an economics and finance consultant, and formerly a chief economist at NAB and Dresdner Bank. He also worked at the Productivity Commission, the Department of Finance and the Prime Minister's Department in Canberra*