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Cobbora coal project: Submission to Planning and Assessment Commission

Submission
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Introduction

The Australia Institute welcomes the opportunity to make a submission to the Planning and Assessment Commission (PAC) on the Cobbora Coal Project. Our submission focuses mainly on the economic aspects of the project and how these were addressed in the Department of Planning and Infrastructure's (DPI) recent Environmental Assessment Report (EAR).

The proposal is to develop an open cut coal mine near the towns of Gulgong and Dunedoo, east of Dubbo, NSW. The mine would extract up to 20 million tonnes per annum (Mtpa) of run of mine (RoM) coal to produce around 12 Mtpa of saleable coal. The mine was originally to be developed by the NSW government-owned Cobbora Holding Company (CHC) to supply coal to domestic power generators at fixed, low prices.

The main author of this submission, Rod Campbell, was the author of an earlier submission on this project by Economists at Large. Rod now works at The Australia Institute.

The Economists at Large submission in 2012 emphasised that the Cobbora project represented a large financial loss to the state government, in contrast to the CHC consultant's economic report.[1] Similar sentiments have long been widely reported in the media.[2] The new state government quickly ended the low-price contracts to benefit selected generators due to the financial losses that would ensue.[3]

It is interesting to note that the first Cobbora PAC considered itself unable to assess the project's economic implications in its review report:

> *The Commission considers that Treasury is best placed to examine the project's costs and benefits at the state level and its economic justification, in tandem with its consideration of any alternatives available, as part of the business case development process. Consequently the Commission has not undertaken a detailed assessment of the economic impacts of the project at a state level.*[4]

The Commission should note that Treasury and DPI have contradictory assessments of this project. Treasury believes it will lose money, while DPI considers that it will bring large economic benefits. Our analysis of the costs and revenues of the project supports Treasury's position and the position adopted by more global assessments of low-quality coal assets in high cost locations.

In considering this project and the contradictory assessments, it is fortunate that one of the members of this PAC is an economist, Paul Forward. It is concerning however, that Mr Forward was until recently a principle at Evans and Peck, consultants who provided services to the PAC relating to this project. The PAC should explain this apparent conflict of interest.

[1] (Economists at Large, 2012)
[2] see for example (Robins, 2011)
[3] (Robins, 2013)
[4] (NSW PAC, 2013) p51

Economics of Cobbora project

The Department of Planning and Infrastructure's (DPI) assessment report concludes that the Cobbora project will bring substantial economic benefit:

> *Overall, the Department believes that the project would generate substantial economic benefits for the State and region. It is also satisfied that there is a demonstrable need for the project; that it would not significantly impact on other land uses in the region, including agricultural land; that any demands it may generate for local infrastructure and services can be adequately addressed; and that the project would result in a substantial net benefit for NSW.*[5]

In recent media reports, DPI chief Chris Wilson puts a dollar figure on this supposed net benefit:

> *"A cost benefit analysis calculated the project would have a net benefit to Australia in the order of $1.9 to 2.1 billion, including more than $400 million in royalties to the NSW government during the mine's lifetime," Mr Wilson said.*[6]

Mr Wilson is referring to the original economic assessment commissioned by the proponent and a later modification by the same consultants.[7] These assessments contrast starkly with Treasury's assessment in the 2013-14 budget papers:

> *The final feasibility study for the Cobbora coal mine has confirmed that around $1.5 billion of capital expenditure is required to develop the Cobbora coal mine until it produces first coal. Forecast cash flows are insufficient to cover subsequent capital and operating expenditure over the life of the mine. The total loss to the Government, if arrangements are unchanged, would be in excess of $1.5 billion.*[8]

DPI seems unconcerned about the large disparity between the assessment offered by the proponents and the views of Treasury. DPI's adherence to the original assessment is all the more puzzling considering the long running scepticism related to the project's economics, both in the media and in public submissions.[9] In its assessment report DPI acknowledges this debate, but refuses to engage in it:

> *Some submissions raised concerns about components of the [economic assessment] methodology, claiming that the analysis may have overstated benefits and underestimated costs. The Department notes that it is common for people to argue about the assumptions used in any [economic assessment], and commonly carries out its own sensitivity testing of these assumptions during any merit assessment.*[10]

It is difficult to see what sensitivity testing can have been done. If DPI had done any testing of assumptions of the original economic assessment[11] or later revision[12], they would have found that the most important costs and benefits have been misrepresented and that Treasury's estimate seems far more likely.

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[5] (NSW DPI, 2014) p44
[6] (Bartley, 2014)
[7] (Gillespie Economics, 2012, 2013)
[8] (NSW Treasury, 2013) p11
[9] For example (Robins, 2011) and (Economists at Large, 2012)
[10] (NSW DPI, 2014) p44
[11] (Gillespie Economics, 2012)
[12] (Gillespie Economics, 2013)

Costs

According to the original environmental assessment the project will aim for 20 Mtpa of run of mine coal to produce 12Mtpa of saleable coal.[13] The original economic assessment estimated average annual operating costs per year of $392 million.[14] This includes mining, processing, administration and transport costs, but excludes royalties. This assessment suggests operating costs per tonne of saleable production of under $20 per tonne. This would make the Cobbora mine the lowest cost mine in Australia. By way of comparison, Morgan Stanley estimated last year the median cash costs per tonne for thermal coal mines in NSW and Queensland was USD $80, around AUD$89.[15]

A detailed estimate of the cash costs of the Cobbora project is beyond the scope of our submission. However, there is little evidence to suggest that the project's costs would be substantially below average, as pointed out in the appendix to the PAC's review report:

> *Cobbora is distinguished from other large Australian open cut coal mines because…It is a low quality coal deposit, with the target coal seams containing many stone bands….ash levels of the coal plies range from 18 to 67%, with the weighted average ash content being approximately 40%. To produce a consistent market product of 26% (max) ash at 12% (max) moisture, the coal needs to be washed.*[16]

While strip ratios reported in the EA seem favourable, it seems highly unlikely that Cobbora represents the mine with the lowest operating costs in Australia as suggested in the economic assessment. Treasury's findings that operating costs would not be covered by revenues also suggests higher costs. Revenues also seem likely to have been overstated.

Revenues

The economic assessment values the project's coal at $77 per tonne. We assume this is in Australian dollars, as most discussion in the original assessment is related to Australian dollar values and the project's original aim to supply domestic power stations under fixed contracts. The later amendment to the economic assessment claims this price:

> *reflects its true economic value, and in the [original assessment] was the world price for this coal allowing for its lower energy value.*[17]

The PAC should pay close attention to the specifications of the project's coal as they do not correspond to the Newcastle benchmark, nor to the lower Newcastle 5500 or API 5 indexes published by Platts and Argus Media respectively. The project's coal has lower rank than even these specifications.

According to the original EA, the coal specifications of the project are:[18]

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[13] (EMM, 2012b)
[14] (Gillespie Economics, 2012)p5
[15] (Morgan Stanley, 2013)
[16] (NSW PAC, 2013) Appendix 5, p2
[17] (Gillespie Economics, 2013) p3
[18] (EMM, 2012a) table 3.1

Moisture	%	10
Calorific value[19]	Net as received kcal/kg	4879
Carbon	% dry, ash free	35.7
Ash	% as received	24

These specifications compare unfavourably to the Argus and Platts indexes, which require 5500 kilocalories per kilogram net as received and a maximum of 24 per cent ash.[20] A basic estimate of the discount Cobbora's coal would attract can be estimated by taking the ratio of the calorific values and multiplying by the market price. These coals have recently been trading at an average price of USD$65.7 per tonne,[21] approximately AUD$70. Factoring in the discount for the lower calorific value would give a price of around AUD$62 per tonne.

A further discount is likely due to the high ash content even of the washed product coal. Other possible sources of discount, such as sulphur content are not listed in the EA.

With the project likely to encounter higher costs and lower revenues than the original economic assessment forecast, it is unlikely the project will be able to achieve such economic returns as suggested by DPI. DPI appear not to have assessed the assumptions behind the original economic assessment, despite public submissions questioning these assumptions.

Even if Cobbora can operate as one of the cheapest mines in Australia on a cash cost basis, it will struggle to cover these costs given the low calorific value of its product coal. It is unlikely to provide a return on capital sufficient to attract investment. Treasury's assessment that it will be unable to provide a return on its initial investment seems justified.

As the Cobbora project will struggle to attract investment or generate returns to the state necessary to offset its environmental and social impacts, we recommend against its approval. The uncertainty for surrounding landholders and related impacts on agricultural revenue and investment that were noted by the previous PAC will continue indefinitely if the project is approved. Ongoing stimulus packages will be sought by the surrounding industries and councils, such as the current $20 million Cobbora Transition fund.[22] This represents an ongoing cost to the state, along with the operation of CCH. Millions could be saved by hastening the end of this uneconomic project and its associated companies and programs.

Wider context

DPI place the project in the context of state and global energy supply:

> *The Department recognises that society (both at a domestic and international level) is heavily reliant on coal to meet its basic energy needs. Coal provides around 90% of*

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[19] This has been converted from 21.5 Mj/kg "gross as received" (GAR) in the EA to kilocalories per Kg "net as received" to enable comparison with the index requirements. Calculations were as follows:
21.5Mj/kg * 239 = 5139 kilocalories/kg
5139 kcal/kg GAR – 260 = 4879 kcal/kg NAR

[20] (Argus Media, 2014c)
[21] (Argus Media, 2014a)
[22] http://www.infrastructure.nsw.gov.au/projects/cobbora-transition-fund/cobbora-transition-fund-faqs.aspx

> *NSW's electricity needs, 75% of Australia's electricity needs and 40% of the world's electricity needs.*
>
> *…*
>
> *Therefore the ultimate need for the project is driven by both domestic and international demand to meet current and future energy needs. The Department is satisfied that there is a demonstrable need for the project in terms of meeting society's need for adequate, reliable and affordable energy.*[23]

DPI is suggesting that the Cobbora project is important to state, national and global energy needs. This is untrue. There is no shortage of coal either locally or globally, as is made clear by the International Energy Agency:

> *Coal resources will not be a constraint for many decades, yet the cost of supply is likely to increase moderately in real terms as a result of rising mining and transportation costs.*[24]

This is part of the reason coal prices have returned to long term averages, at which the Cobbora project is uneconomic. Far from there being a shortage, some industry watchers lament a lack of "supplier discipline":

> ***Supply growth weighs on Asia-Pacific coal***
>
> *A lack of supply discipline among Asia-Pacific coal producers will likely keep coal prices under pressure this year, with mining firms expected to continue increasing their output volumes to try and reduce unit costs amid weak prices.*[25]

Furthermore, the DPI neglects to mention the role that coal-fired electricity generation plays in global greenhouse emissions and the need to reduce them. Again, the International Energy Agency makes clear that coal consumption must decline if dangerous climate change is to be avoided:

> *The 450 Scenario, which assumes that strong policy measures are implemented to keep long-term greenhouse-gas-induced temperature changes to 2 degrees Celsius, sees global coal use fall by 33% over 2011-2035. This is a return to the level of demand in the early 2000s. As a result, coal's share in the global energy mix declines by twelve percentage points, reaching 17% in 2035.*[26]

With the potential for widespread policy measures to reduce coal use, industry watchers are concerned about the potential for "stranded" coal assets. Assets that are unable to be profitably developed or sold, and are overvalued on companies' financial statements. Cobbora's position is similar to a recent description of stranded assets and "unburnable carbon":

> *For example, a high cost producer of low quality thermal coal, in a land-locked geographic region with strong local carbon constraints and a lack of export infrastructure, may see market demand fall away, and be unable to seek alternative markets.*[27]

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[23] (NSW DPI, 2014) p42
[24] (IEA, 2013) p139
[25] (Argus Media, 2014b) p6
[26] (IEA, 2013) p141
[27] (Citi, 2013)

With such low quality coal, further from Newcastle than most NSW mines, facing Australia's current mining costs for both development and operations, it is hard to think of a stronger NSW candidate as a stranded asset than Cobbora.

Potential conflict of interest for Commissioner Paul Forward

Given the focus on the economic aspects of the Cobbora project, it is pleasing that one commissioner, Paul Forward, is an economist. Mr Forward is the PAC's only member to claim postgraduate economic qualifications.[28]

Until recently, Mr Forward was a principal at consulting firm, Evans and Peck. While his profile has been taken down from the company's website, professional networking website LinkedIn still lists him as a principal at time of writing.[29]

Evans and Peck and related company Worley Parsons consult to the coal industry. More importantly, they were commissioned by the earlier PAC on this project, which also included Mr Forward, to conduct a "Review of Potential Water Impacts" of the Cobbora project.[30]

It is unclear if Mr Forward was working for Evans and Peck after beginning this PAC assessment, or indeed if he is still associated with the company. Regardless, the appointment of consultants with such close ties to a commissioner could contravene parts of the PAC Members Code of Conduct. For example:

> *1.1 PAC members have a duty to act honestly and in good faith for a proper purpose. They should act in the public interest, rather than in their private interest.*
>
> *1.2 PAC members must not place themselves under any financial or other obligation to any individual or organisation that might reasonably be thought to influence them in the exercise of their functions.*
>
> *1.3 PAC members must not make a decision or take action that is motivated by their obtaining:*
>
> - *a financial benefit (including avoiding a financial loss); or*
> - *other benefits for the member, their family, friends or business interests.*
>
> *1.4 PAC members have a duty to promote and support the key principles of this Code by demonstrating leadership and maintaining and strengthening the public's trust and confidence in the PAC and its role in the planning system.*
>
> *3.1 A conflict of interest exists when it is likely that a PAC member could be influenced, or perceived to be influenced, by a private interest when carrying out their functions. Private interests can be pecuniary or non-pecuniary (see further below).*
>
> *To uphold the probity of PAC decision making, PAC members should avoid conflicts of interest. If an actual or potential conflict does arise, it is the member's responsibility to identify and disclose the conflict as soon as possible.*

[28] http://www.pac.nsw.gov.au/Members/tabid/57/Default.aspx
[29] http://au.linkedin.com/pub/paul-forward/14/2b8/836
[30] (NSW PAC, 2013) see appendix 8, p131

> *When identifying whether or not a conflict exists, members should consider how others would view their situation. If a member is unsure whether a conflict exists, they should discuss it with the PAC Chair.*

We note this is not the first time such concerns have been raised about Mr Forward and the awarding of PAC consulting work to Evans and Peck. His earlier role in assessment of the Macquarie River Pipeline has also attracted controversy.[31] The PAC should explain this apparent conflict of interest or appoint an alternative commissioner before assessment of this project continues.

Conclusion

The current PAC faces a difficult decision in relation to the Cobbora coal project. While Treasury considers the project to be unviable, DPI is touting the proponent's original economic claims of large benefits. One of these departments must be wrong.

Our assessment supports Treasury's view that the project is unlikely to cover costs and provide a return on capital. Costs claimed in the original assessment are cheaper than almost every known coal mine in Australia, unlikely as the geology of the project has various unfavourable impacts. Furthermore, the quality of the coal is low and will trade only at a heavy discount even to lower ranks of coal. Industry observers are wary of such projects, realising that in current markets they can easily become stranded assets.

In light of the project's apparent financial non-viability, it should be rejected. It will provide no financial benefit to the state or jobs for the region. It will continue to impact on local agriculture and communities, impacts which are already attracting government compensation.

The PAC must also explain why a company closely linked to one of the commissioners was awarded work relating to this project. This apparent conflict of interest reflects badly on the PAC and the NSW planning system.

[31] (ABC, 2013)

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