United Wambo Mine

May 2019 comments to Independent Planning Commission

Latest assessment by Deloitte, commissioned by the mine proponents, confirms Australia Institute analysis that mine voids can be filled leaving a $139 million surplus, based on EIS figures.

Rod Campbell
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Summary

The Australia Institute's February 2019 submission showed that according to the proponents' economic assessment documents, the United Wambo Project could fill in the proposed final voids and still deliver net producer surplus (a basic measure of profit) of $139 million.

In a response to our submission, consultants to the proponents Deloitte Access Economics "have not found any factually incorrect statements" and "broadly agree with [the Institute's] suggestion that dollar values based on different discount rates should not be added together."

This confirms our interpretation of Deloitte's figures in the Environmental Impact Statement and later assessment void filling costs. If the proponent intends to rely on its claimed economic benefits, these findings contradict the proponents' claim that the Project is uneconomic if they are required to fill in final voids.

Deloitte does not contest the need to reduce coal use to avoid dangerous climate change or the recent declines in the coal market, but their approach leaves environmentally and socially important decisions on coal use to the market. The Australia Institute contends proper planning is needed to manage a transition to a low coal future.

Introduction

The Australia Institute made a submission to the Independent Planning Commission (IPC) on the United Wambo Open Cut Coal Mine Project (**Project**) in February 2019. Our key points were:

- The proponents' economic assessment documents show that the mine could fill in final voids and still deliver net producer surplus (a basic measure of profit) of $139 million.
- There is no justification for large new thermal coal mines given the urgent need for emissions reductions and associated decline in coal consumption.

The proponents have produced a document titled *Response to IPC February 2019 Public Meeting* that includes a section *Response to comments by The Australia Institute* by Deloitte Access Economics (**Deloitte Response**). We provide the following comments on the Deloitte Response to assist the IPC's consideration of the Project. Upfront, we note Deloitte's finding:

> We have not found any factually incorrect statements made by TAI relating to Deloitte Access Economics' analysis and the reported dollar values are accurate. (pdf page 97)

Mine voids

In discussion with the IPC, the proponents claim that if they are required to fill either mine void, the Project would be economically unviable:

> MR WILLS: Both options of filling in either void does have a – is cost-prohibitive to the project from an economic return.
>
> MR PEARSON: So when you say – I just want to be really clear on this point. When you say cost-prohibitive, it means the project – your assessment of the economic feasibility of the project under one void or filling both voids is the same in that the project is unlikely to proceed.
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> MR WILLS: Yes.[1]

This claim is contradicted by the proponents' environmental impact statement (**EIS**), which estimates 'net producer surplus' (a basic measure of profit) at $268 million and the proponent's *Response to IPC* report, which estimates the cost of filling in voids at $129 million.

This leaves a surplus of $139 million to the proponents even after filling in both mine voids, as noted in our February 2019 submission and the Deloitte Response:

> TAI provide analysis of net producer surplus after filling in the mine void. TAI argue that, when using a discount rate of 7%, the net producer surplus remains positive even after accounting for filling in mine voids.

While Deloitte describes this as TAI analysis, both the producer surplus and the void fill cost estimates were made by Deloitte, based on data provided by the proponents. As Deloitte point out, both surplus and cost estimates are in 'present value' terms discounted at 7%.

Present value calculations 'discount' the future at a given discount rate to account for uncertainty and other factors. To compare future costs and benefits in relation to a project, they need to be discounted at the same rate. Deloitte make this clear in the Deloitte Response:

[1] IPC (2018) Meeting with applicant re: United Wambo Open Cut Coal Mine Project, https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/general/transcripts/wambo/united-wambo-20181206_applicant.pdf?la=en&hash=BF522BEC9E28EACFACEF6541E073112F page 54-55.

> We broadly agree with the [sic] TAI's suggestion that dollar values based on different discount rates should not be added together.

This is important because the proponents have advocated using a different discount rate for the cost of filling the voids:

> Deloitte Access Economics was engaged to undertake an assessment of the present value of the cost of backfilling the voids. Using the recommended discount rate of 4% for an exercise of this type, filling the void is expected to cost $274 million in present value terms.[2]

The reason the proponents place emphasis on the $274 million dollar figure discounted at 4% is that it would outweigh the $268 million surplus estimate discounted at 7%, supporting their claim that filling in the voids is cost prohibitive.

Instead, Deloitte's analysis actually shows that the voids can be filled economically. This is unlikely to depend on the discount rate – while Deloitte does not provide an estimate of producer surplus discounted at 4% it is certain to be substantially larger than $274 million.

The proponents claim that filling in voids should be considered as a discrete project, one that is socially beneficial and so should be discounted at a social discount rate:

> In the exercise for filling in the void, it was a discreet project. It's essentially akin to a social or a public infrastructure work. So there's no revenue risk associated with it. Hence the independent expert feel [sic] that it's more appropriate to have a lower discount rate of four per cent, which is similar to the – say a public infrastructure works or a social factor associated with this type of activity.[3]

This approach of discounting a mining project at one rate and its rehabilitation requirements at another has no precedent and contradicts the *NSW Guidelines for the economic assessment of mining and coal seam gas proposals*.[4] Our February 2019

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[2] United Wambo (2018) Response to IPC recommendations, page 67, https://majorprojects.accelo.com/public/057b0415d22a4402fec0a7d34eec89d6/United%20Wambo%20Response%20to%20IPC_%20Main%20Text.pdf

[3] IPC (2018) Meeting with applicant re: United Wambo Open Cut Coal Mine Project, https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/general/transcripts/wambo/united-wambo-20181206_applicant.pdf?la=en&hash=BF522BEC9E28EACFACEF6541E073112F page 54-55.

[4] DPE (2015) *Guidelines for the economic assessment of mining and coal seam gas proposals*, https://www.planning.nsw.gov.au/-/media/Files/DPE/Guidelines/guidelines-for-the-economic-assessment-of-mining-and-coal-seam-gas-proposals-2015-12.pdf?la=en

submission argued that it is impossible to separate the assessment of filling the voids from the Project itself and the Deloitte Response makes no counter argument.

It is unclear which experts 'recommended' to the proponent to use a different, lower discount rate for rehabilitation. Deloitte's 2018 assessment of the void filling costs stated:

> A case could be made that the decision to fill the void should be assessed through a social or environmental lens. In this case, both the costs and benefits would be best considered using a social discount rate rather than a commercial discount rate.

Even if this is considered a 'recommendation', no attempt has been made by Deloitte or the proponents to quantify the benefits of filling in the voids, or even to seriously discuss them in a qualitative way, including consideration of different options that could address any environmental concerns that may arise.

In summary, it is clear that according to Deloitte's assessment, commissioned by the proponents, the United Wambo Project would generate sufficient surplus to fill in the voids and still deliver a substantial return to the proponents. The proponents' claim that filling the voids is not economically feasible rests on comparing costs and benefits at different discount rates and ignoring the benefits of site rehabilitation. This is against standard economic practice, NSW Guidelines and is not supported by their own consultants in Deloitte's latest response.

Coal and climate change

Our February 2019 submission argued that if the world is to achieve the goals of the Paris Agreement, which Australia has signed and the NSW Government supports, coal use will rapidly decline. Given the capacity of coal mines already operating and approved, there is no justification for further approvals. Reflecting climate policy and renewable technology development, global coal consumption has declined, NSW coal exports have flatlined and plans for expansion have been cancelled, such as the T4 coal terminal project at Newcastle.

Deloitte does not contest these points:

> Coal demand forecasts are not directly incorporated into the economic assessment, as a market analysis of global coal demand is beyond the scope of economic assessments. The economic assessment is based on the Project being able to sell its output at market prices…Coal demand is indirectly considered within the CBA via coal prices.

Deloitte's approach would leave decisions about which mines proceed and which close, entirely to the coal market. This is inappropriate given the social and environmental impacts of such decisions. Decision makers should be made aware that not all coal proposals in NSW can go ahead, or will operate to the end of their proposed project lives.

In fairness to Deloitte, comprehensive analysis of how to transition the Hunter region and NSW towards a future without coal can hardly be expected in the appendices of the Project's assessment. Indeed, no such planning appears to be being conducted by the NSW Government or public service. Nevertheless, failure to acknowledge this reality contributes to the current policy inertia and increases the risks of poor economic, social and environmental outcomes.

Conclusion

The United Wambo Project should be rejected on the grounds that new coal capacity is not justified in a world looking to avert dangerous climate change.

If the Project is further considered, the filling of mine voids should be required to reduce costs and risks to the NSW community. The proponents' commissioned analysis by Deloitte shows that this can be achieved while leaving considerable economic surplus to the proponents.