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Ulan coal modification 4

Assessment of the Ulan mine expansion does not meet NSW guidelines and overstates potential benefits. It should be rejected on economic and climate grounds.

Author: Rod Campbell
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INTRODUCTION/SUMMARY

The Australia Institute welcomes the opportunity to make a submission to the Independent Planning Commission (IPC) in relation to the Ulan Coal Mine MOD4 application. The application should be rejected on the following grounds:

- The economic assessment of the project does not include a systematic comparison of costs and benefits and so does not meet NSW economic assessment guidelines. None of the previous assessments of the Ulan project meets the required guidelines. Earlier assessments are based on methodologies and sources that have been thoroughly discredited in economic literature and in the NSW Land and Environment Court.
- The assessment does not consider the uncertainty of mines producing to the end of their economic lives. This is particularly relevant to thermal coal mines as under the Paris Agreement thermal coal demand almost halves during the life of this mine. Estimates of royalty revenue should therefore consider whether this expansion is incremental or whether it simply replaces another part of the Ulan resource, or production from another NSW mine. In such scenarios, the economic benefit of the expansion to NSW is zero.
- Estimated royalties should be discounted to give decision makers an understanding of their present value, which can be compared to costs such as impacts on groundwater resources. The assessment presents estimated royalties of $39.5 million in undiscounted rather than present value terms. Given the uncertainty around the future of thermal coal, a discount rate of 10% is appropriate, giving present value of $10.2 million.

- Approval of this project sends a message to other coal mines that approvals are malleable and sends the message to Australians and the world that the NSW planning system is not planning for a transition to a low-carbon future.

ECONOMIC ASSESSMENT

The economic assessment of the modification does not meet NSW guidelines.[1] The two pages of the environmental assessment by consultants Eco Logical has no formal cost benefit analysis of the proposal to assess whether the modification is in the best interests of the NSW community.[2] Even outside of formal cost benefit analysis, there is no systematic comparison of benefits and costs, providing decision makers with little useful economic information.

Rather than conducting a through assessment of this proposal, Eco Logical claim their work is 'based upon economic assessment undertaken for the UCCO Project' in 2009 and another assessment in 2015.[3] Neither of these assessments complies with the 2015 guidelines, or the 2012 draft guideline that preceded them.

The 2009 assessment is based on simplistic multiplier analysis that overstates the employment and output impacts of the project and does not consider costs. No working is shown for the multipliers used. One of the references used to justify the approach is a study by Hunter Valley Research Foundation, which was thoroughly discredited in the Land and Environment Court case between Bulga Milbrodale Progress Association and the Warkworth mine.[4] The Chief Judge of the Land and Environment Court wrote of this analysis:

[1] NSW Government (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.ashx

[2] Eco Logical (2018) *Ulan Continued Operations Project - Modification 4 Longwall Optimisation Project. Prepared for Ulan Coal Mines Limited*, see p121-122

[3] Coakes Consulting (2009) *Ulan Continued Operations Project - Modification 4 Longwall Optimisation Project. Prepared for Ulan Coal Mines Limited*, www.ulancoal.com.au/en/about-us/approvals-licenses/EAVol6/Appendix15.pdf; Umwelt (2015) Ulan West Modification environmental assessment, http://www.ulancoal.com.au/en/about-us/approvals-licenses/OperatingApprovalsDocs/EA-Modification-to-Ulan-Coal-Continued-Operations-(Mod-2).pdf

[4] HVRF (2009) *An economic assessment of the Warkworth coal resource*, prepared for Warkworth Extension Environmental Assessment. Note HVRF has been renamed Hunter Research

> I am not persuaded that it is appropriate to accept the conclusions drawn in the analysis as to the quantum of economic benefit derived in the form of economic output and jobs created in the Hunter region.[5]

The 2015 Guidelines for the economic assessment of mining projects outlines key steps in economic assessment, including comparing a well-defined project to a base case and estimating costs and benefits in present value terms. The assessment of the Ulan modification has not taken either of these steps.

ESTIMATE OF ROYALTY VALUE OVERSTATED

The Eco Logical assessment estimates the expansion would pay $39.5 million in royalties, an estimate repeated uncritically by the Department of Planning and Environment's (DPE) assessment.[6] However, this estimate does not consider:

- Whether this volume of coal is an incremental increase on a base case, or
- The timing of this payment.

The Ulan complex has approval to operate until 30 August 2033,[7] although NSW IPART estimates the mine life at just 11 years with a terminal date of 2030.[8] All mines are at risk of not operating to the end of their initially claimed economic lives. If this occurs at the Ulan mine, the coal related to this modification may not be extracted at all. Alternatively, it may be extracted in the place of another part of the project's coal resource, with the same overall result that no additional coal is extracted. In either case, the additional revenue to the NSW government is zero.

This is particularly the case for thermal coal mines, given that climate policies will reduce future consumption. Under the Paris Agreement, which Australia is a party to and the NSW Government has publicly supported, global coal use should almost halve during the life of the Ulan mine. Figure 1 below shows the International Energy Agency (IEA)'s estimates for global coal demand under its three modelled scenarios. The green line labelled "SDS" represents the sustainable development scenario' in line with the Paris Agreement:

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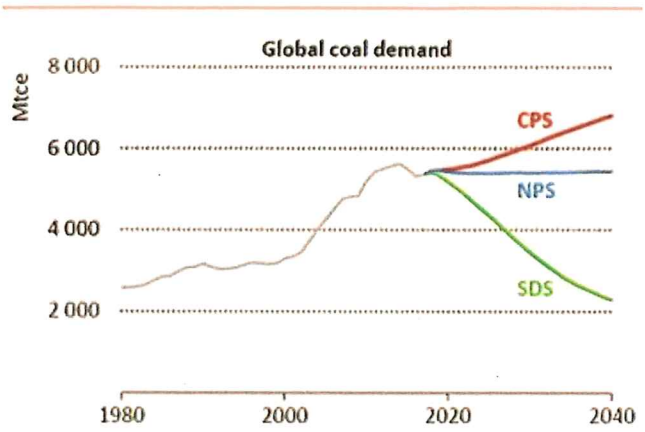
[5] Preston (2013) *Judgement of Bulga Milbrodale Progress Association Inc v Minister for Planning and Infrastructure and Warkworth Mining Limited,* NSW Land and Environment Court.

[6] In fact, DPE rounds up to $40 million on page 32

[7] Eco Logical (2018) *Ulan Continued Operations Project - Modification 4 Longwall Optimisation Project. Prepared for Ulan Coal Mines Limited,* page 134.

[8] IPART (2019) *NSW Rail Access Undertaking – Review of the rate of return and remaining mine life,* https://www.ipart.nsw.gov.au/Home/Industries/Transport/Reviews/Rail-Access/Rate-of-return-and-remaining-mine-life-from-1-July-2019

Figure 1: IEA coal demand estimates



Source: IEA (2018) *World Energy Outlook 2018*, www.iea.org

Figure 1 shows that under the SDS scenario coal demand declines significantly in the years ahead, reducing by two thirds by 2040. This would have a major effect on the Hunter Valley industry as the IEA expects the volume of traded coal to decline from over 1,100 million tonnes per annum (Mtpa) in 2017 to 815Mtpa in 2025 and 518Mtpa in 2040.[9] In such a situation, the demand for Hunter Valley coal is likely to be below the potential output of approved projects and NSW mines will, to some degree, compete against each other. Should the Ulan mine continue operating to the end of its mine life, the extended production in this modification is likely to come at the expense of other coal output in NSW, meaning the royalty estimate provided by Eco Logical would be overstated.

The estimate of $39.5 million in royalties is in nominal rather than present value terms – Eco Logical state that this relates to production "over the life of the mine".[10] Assuming that an additional 6.4 Mt is extracted in the final stated year of the mines life and discounting at the standard guideline rate of 7% gives a present value of $15.1 million. Standard practice in NSW coal assessments is to discount at 4% and 10%, these calculations are summarised in Table 1 below:

Table 1: Present value of additional production

Discount rate	4%	7%	10%
Present value	$ 22,521,528	$ 15,124,872	$ 10,269,919

[9] IEA (2018) *World Energy Outlook 2018*, table 5.1, www.iea.org.

[10] Eco Logical (2018) *Ulan Continued Operations Project - Modification 4 Longwall Optimisation Project. Prepared for Ulan Coal Mines Limited,* page 21

Given the uncertainty facing thermal coal markets in the fourteen years to 2033, using a higher discount rate is most appropriate.

CONCLUSION

With NSW in the grip of drought exacerbated by a drying climate, it is clear that the world does not need new coal mines. While this proposal is relatively small, its approval based on assessment that fails to meet basic guidelines, sends a signal to all other coal mines in NSW – that existing approvals are easily extended. This could drive further expansion, putting downward pressure on coal prices, leading to more emissions. It also delays the necessary transition away from coal that NSW authorities resolutely refuse to plan for.

Approval of this modification would also sends a message to other Australians and people all around the world – that the NSW planning system is indifferent to the need for coal to stay in the ground.