

Tahmoor coal - submission on additional material greenhouse gas

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INTRODUCTION

The Australia Institute welcomes the opportunity submit on the additional material provided to the Independent Planning Commission (IPC) by the applicant and the Department of Planning, Industry and Environment (the Department). Our earlier submission highlighted the economic assessment of the Tahmoor Project is based on flawed methodology and overstates the value of the project.¹

COSTS OF EMISSIONS ABATEMENT

In the additional material, the applicant opposes conditions requiring further abatement of scope 1 greenhouse emissions due to excessive cost, particularly reducing ventilation air methane (VAM):

In relation to the Project, the total cost of implementing a VAM plant would be in the order of \$100+ million over the life of the project, which is not currently economically viable.²

This statement is contradicted by the applicant's economic assessment, which claims "the Project is estimated to generate a pre-tax profit of \$490.0 million in NPV terms."³

¹ Campbell (2021) *Please sir, I want Tahmoor: Submission on the Tahmoor South Coal Project*, <https://australiainstitute.org.au/report/please-sir-i-want-tahmoor/>

² See page 5, Simec (2021) Response to NSW Independent Planning Commission regarding Scope 1 greenhouse gas emissions, https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2020/10/tahmoor-south-coal-project-ssd-8445/correspondence/department/210409-in-applicant-letter-to-dpie-regarding-scope-1-greenhouse-gas-emissions_redacted.pdf

³ EY (2020) *Economic impact assessment of amended Tahmoor South Coal Project*, <https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-8445%2120200803T055900.593%20GMT>

Note that this profit is expressed in “net present value” terms, while the VAM expense appears to be estimated without discounting of future costs. In undiscounted terms the total profit is \$698 million.⁴

The applicant cannot have this both ways. Either the EY economic assessment overstates the value of the project, or the claim of the project not being viable using VAM technology is unfounded.

The Department provides no scrutiny of proponent economic claims, with the Assessment Report simply repeating the estimates of the economic assessment. Executive Director Mike Young repeated these claims to the IPC concluding:

At the end of the day...if the price is not right, then the project won't be developed. Or it will be [but] will cease earlier than expected.

Mr Young is right, of course, but the fact that his Department has not critically appraised the applicant's claims means that it cannot provide the IPC with useful information in a situation like this, where a condition may or may not affect the overall economic case for the project. The Department's claim in the additional material that “further reductions in Scope 1 emissions cannot be reasonably applied at this time”⁵ is not supported by any evidence or analysis other than the unsourced claims by the applicant.

The claim that VAM technology would cost \$100 million is also problematic. There is no source for this estimate. VAM research funded by NSW and Australian taxpayers does not suggest such high costs and claims to be “progressing well”:

- \$1.5 million in funding from Coal Innovation NSW for VAM technology trials, with test units “successfully installed” at the nearby Appin mine.⁶
- Research funded by the Australian Government and Low Emissions Technology Australia (previously Coal21 fund) found VAM technology was “an effective and commercially viable way to mitigate low concentration methane emissions found in underground mine ventilation air.”⁷

⁴ assuming equal profit in each year and a 7% discount rate.

⁵ DPIE (2021) *Tahmoor additional material*, https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2020/10/tahmoor-south-coal-project-ssd-8445/correspondence/department/210412-in-dpie-cover-letter-regarding-scope-1-greenhouse-gas-emissions_redacted.pdf

⁶ Coal Innovation NSW (2020) *Annual report*, <https://www.parliament.nsw.gov.au/tp/files/78882/2019-2020Annual%20Report%20of%20the%20Coal%20Innovation%20NSW%20Fund.pdf>

⁷ LETA (2021) *VAM – ventilation air methane abatement*, <https://www.letaaustralia.com.au/projects/vam-ventilation-air-methane-abatement/>

Again, the coal industry cannot have this both ways. Either this technology works, is affordable and should be required at the Tahmoor mine, or these claims and the taxpayer subsidised research should be abandoned.

The \$100 million figure applied to the 19 million tonne emissions of Tahmoor implies a cost of just over \$5 per tonne of abatement, while the EY economic assessment uses \$16 per tonne as a carbon price based on auctions to the Emissions Reduction Fund. If these figures are correct, the VAM project may be able to bid for the next round of ERF funding and actually make a profit for the applicant!

Finally, a basic internet search for VAM costs finds studies that contradict even the \$5 per tonne estimate:

- A United States EPA study estimates a cost range of \$US1.20 per tonne to US\$3.40 per tonne.⁸
- A Federation University study from the Hunter Valley found an average cost of A\$1.28c/t.⁹

The content of these studies sits outside of The Australia Institute's expertise, but in our understanding, they contradict the applicant's claims.

CONCLUSION

The applicant, its consultants Ernst and Young and the Department provided misleading economic assessment in the EIS, utilising methods described as "clearly wrong" by the NSW Land and Environment Court. This additional material appears to continue the low standard of information being submitted to the IPC. We repeat our suggestion that the IPC make a firm statement about the need to improve economic assessment standards in the NSW planning process.

⁸ US EPA (2003) *Assessment of the Worldwide Market Potential for Oxidizing Coal Mine Ventilation Air Methane*, <https://nepis.epa.gov/Exe/ZyPDF.cgi/6000049W.PDF?Dockey=6000049W.PDF>

⁹ Holmes (2016) *Mitigating ventilation air methane cost-effectively from a colliery in Australia*, https://cornettscorner.com/wp-content/uploads/2021/03/Mitigating_Ventilation_Air_Methane_Cost-Effectivel-1.pdf