

Expert submission

Tahmoor South Coal Extension Project (SSD 17_8845): Objecting: On the basis of greenhouse gas implications

20 April 2021 Addendum

In response to Additional Material

Submitted by: Professor Penny D Sackett

Distinguished Honorary Professor, ANU Institute for Climate, Energy and Disaster Solutions

1. I have made previous submissions to the NSW Independent Planning Commission (IPC) regarding the Tahmoor South Coal Extension Project (SSD 17_8845, hereafter ‘the Project’), namely those dated
 - a. 17 February 2021,
 - b. 18 March 2020, and
 - c. 10 October 2019,each objecting to the development of the Project on the basis of its greenhouse gas emissions and their effect on the environment of NSW, in particular, and the world more generally.
2. The significant concerns I raised in my previous submissions have not been meaningfully addressed. I refer the IPC to these older submissions for background material related to the comments that I make in this submission.
3. In this submission, I respond briefly to a few points in the Additional Material regarding the Project, which comprise:
 - a. Letter from Applicant (SIMEC) to the Department, dated 9 April 2021; and
 - b. Letter from Department, dated 12 April 2021.
4. In its letter dated 9 April 2021, the applicant states: “. . . the scale of the predicted annual average Scope 1 GHGE from the Project is 0.49% of the total 327 Mt CO₂-e Scope 1 annual emissions in Australia in 2019-20. . . . GHG emissions from the Project are insignificant with regard to the scale of emissions across Australia.”

5. A comparison to the current total emissions of Australia is irrelevant to any discussion of greenhouse gas (GHG) emissions and subsequent damage by climate change. There are thousands of single-point emitters across Australia, each of which could make a similar claim, yet their combined effect is to make Australia one of the highest emitters per capita in the world, as well as the world's largest exporter of fossil fuels.
6. Appealing to *status quo* arguments ignores the fact that continuing on a *status quo* path means global warming would reach 3°C to 4°C above pre-industrial temperatures before the end of the century¹, the year in which babies born during the Black Summer fires will turn 80 years of age. In such a world, Black Summer type fires would be common, even if there were plentiful rainfall.² On such a path, by the time the babies referenced above turn 30 years of age, last century's 'once-in-one-hundred-year' extreme sea level events will be occurring annually.³ In such a world, it is likely that several *tipping points* will have been crossed that will accelerate global warming further, and perhaps irreversibly.⁴
7. An appeal by the applicant to the approval over the last 15 years of NSW coal mines with comparable GHG emissions to the Project is another such *status quo* argument, one that the Department, in its additional material, repeats.
8. Crucially, in Table 2 of its additional material, the applicant lists its predicted Scope 1 and Scope 2 GHG emissions for the Project. It is unclear why the lifetime (2021 – 2032) Scope 1 emissions from the Project are listed in this table as 19,310,249 t CO₂-e, whereas the Project's Air quality and GHG assessment (referred to as Appendix H, dated 22 July 2020) undertaken by ERM gives the Scope 1 emissions *as less than half that* at 9,397,498 t CO₂-e. This requires a thorough investigation.
9. In its additional material, the Department *endorses* the larger number in paragraph 8 as a Scope 1 target, should a target be imposed the IPC. I cannot see any reason why a Scope 1 target more than twice that given in the applicant's own GHG assessment of 22 July 2020 be

¹ Climate Action Tracker (2020), <https://climateactiontracker.org/>

² Sanderson, B. M. & Fisher, R. A. (2020) A fiery wake-up call for climate science. *Nat. Clim. Change*. 10, 175–177

³ CSIRO/BOM (2020) State of the Climate 2020, Commonwealth of Australia. <http://www.bom.gov.au/state-of-the-climate/>

⁴ Lenton, T. M., Rockström, J., Gaffney, O., Rahmstorf, S., Richardson, K., Steffen, W. & Schellnhuber, H.J. (2019) *Nature*, vol 575, pp 592 – 595.

advised by the Department or accepted by the IPC. This seems counter to any notion of reducing GHG emissions. GHG targets are meant to reduce emissions, not increase them or hold them to a *status quo* value.

10. In its additional material, the applicant makes reference to the purchase of carbon credits or the planting of trees as “offsets” or methods to deal with “exceedances” of Project GHG emissions over targets that may be imposed by the IPC. Neither the purchase of a monetary commodity (carbon credit) or the planting of trees is a true offset for release of GHGs into the atmosphere. Carbon credits do not take into account the full social cost of emitting GHGs, and tree planting produces sizeable reductions in carbon only when the trees reach maturity in decades time, before which time they may have been burnt in the increasing forest fires expected from climate change, or climate *tipping points* may have been crossed.
11. Whereas in its additional material the Department makes reference to NSW’s GHG reduction target of 35% by 2030 on 2005 levels, the Department does not provide analysis as to the impact of the Project on meeting those goals. The Project will, in fact, produce every year a substantial fraction⁵ of the emissions that NSW is seeking to reduce annually, but it in *opposite direction*: The Project will be adding these emissions, not reducing them. Other NSW industries and communities would need to make up for this additional burden by decreasing their emissions *even further*, in order to meet NSW’s 2030 target.
12. Nowhere in the Additional Materials are Scope 3 emissions from the Project discussed, despite the fact that Scope 3 emissions affect the environment of NSW identically to the same amount of Scope 1 or 2 emissions. The only difference here is that the Scope 3 emissions from the Project will in fact be much *larger* than its Scope 1 or 2 emissions.
13. Pending any further amendments to the Project application, or public hearings or other consultation processes, I wish to reserve the opportunity to make additional comments.

Respectfully submitted on 20 April 2021,



Penny D Sockett

⁵ Estimated be about 30% in my 17 February 2021 submission to the IPC