


To the NSW Independent Planning Commission,

I am a forest ecologist with more than 43 years of experience in working on Australia's forests, woodlands and the nation's biodiversity. I have published more than 980 peer-reviewed scientific articles and 49 books on biodiversity, forests, woodlands, vegetation cover, and biodiversity (see <https://scholar.google.com.au/citations?user=4a2XbLwAAAAJ&hl=en>).

I have been made aware of the proposal to restart the Redbank Power Station and burn up to 700 000 tonnes of biomass annually. I strongly oppose this proposal for the following key reasons:

1. Burning biomass is a major source of Greenhouse Gas Emissions; biomass is therefore not clean energy (Mackey et al., 2022). This is due to the long lag times between carbon emissions and when that carbon is fixed in the biosphere or geosphere – up to 2000 years (see Mackey and Lindenmayer 2014).
2. Biomass burning invariably leads to accelerated forest degradation (as has been occurring in Europe) (Mackey et al., 2025) and has the potential to contribute significantly to elevated rates of land clearing. This, in turn, contributes to increased levels of biodiversity loss through intensified erosion of forest and woodland condition and forest and woodland cover (Mackey et al., 2025).

I am more than happy to provide substantial further evidence in support of the two key reasons presented as to why burning large amounts of biomass in the Redbank Power Station is a very poor outcome for the climate, for the environment, and for biodiversity.



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References

- Mackey, B., Lindenmayer, D.B., and Keith, H. 2022. Burning forest biomass for energy. Not a source of clean energy and harmful to forest ecosystem integrity. Griffith University Climate Action Beacon. <https://research-repository.griffith.edu.au/handle/10072/417933>
- Mackey, B.G. and Lindenmayer, D.B. (2014). Fossil fuels' future – Letter. *Science*, 345 (6198), 739-740. <https://doi.org/10.1126/science.345.6198.739-d>.
- Mackey, B., Lindenmayer, D.B., Keith, H. (2025). Burning forest biomass is not an effective climate mitigation response and conflicts with biodiversity adaptation (*Climate Resilience and Sustainability* 4: e70015. <http://dx.doi.org/10.1002/cli2.70015>