

Submission to the Independent Planning Commission regarding Restart of Redbank Power Station (SSD-56284960)

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18 August 2025

About the Wilderness Society

The Wilderness Society is an independent, community-based, not-for-profit environmental advocacy organisation. Our vision is to transform Australia into a society that protects, respects and connects with the natural world that sustains us. We are committed to protecting, promoting and restoring wilderness across the continent for the survival and ongoing evolution of life on Earth. From community activism to national campaigns, we seek to give nature a voice to support the life that supports us all. We are powered by more than 150,000 supporters from all walks of life.

Overview

The Wilderness Society opposes the restart of Redbank Power Station and its conversion to a biomass power plant. We call on the Independent Planning Commission to refuse the Development Application.

If approved, the restart of the Redbank Power Station with the use of biomass as a primary fuel source will have serious climate and biodiversity implications that directly contradict NSW's emissions reduction and conservation targets. It would also be contrary to NSW Labor policy that recognises that burning timber and cleared vegetation for electricity is not carbon neutral or renewable, and should not be permitted.

Allowing the project to proceed would result in a huge increase in land clearing and pave the way for future variations to include native forest residues. Habitat clearing is the greatest threat to species in NSW and it has a significant impact on the state's emissions.

After the unprecedented destruction of the Black Summer Bushfires, the imperative to protect high conservation value forests in NSW from deforestation is even more urgent.

Climate impacts of using biomass as a fuel source

In order for Australia to reach its climate goals, it is essential we safeguard land-based carbon stocks in addition to ending fossil fuel burning. Australian forests store incredibly significant amounts of carbon, and these storages, stocks and flows are most resilient to climate events, including bushfire, when they are at maturity. Pro-forestation—that is, supporting forests to recover from previous impacts such as logging—is the best possible way to manage these carbon stocks, and additionally to ensure forests provide the greatest array of benefits and are most resilient to bushfire events.

Verdant Earth Technologies has claimed that burning biomass is a “net-zero” source of generating electricity, with their reasoning being that the carbon released during burning of wood will then be offset by forest regrowth. This is a grossly misleading statement that ignores the key science underpinning carbon sequestration and forest carbon dynamics. NSW Labor has recognised as much in the ALP's 2024 NSW Labor platform, which states: “NSW Labor recognises that burning timber and cleared vegetation for electricity is not carbon neutral and is neither clean or renewable energy, and therefore forms no part of a credible strategy for reducing greenhouse gas emissions. Labor will introduce legislation prohibiting the burning of any forests and cleared vegetation for electricity.”

Burning wood produces significant carbon emissions, with wood-fired power plants producing more CO₂ per kWh than coal.¹ Additionally, the cumulative net emissions from a wood-fired power station can exceed those of a fossil fuel system for decades or even centuries, due to the low efficiency of wood as a fuel source, and the time-lag between carbon emission and sequestration from forest regrowth.² Burning wood releases carbon instantly, but the carbon removal from forest regrowth is a much longer process, leading to a carbon imbalance that can last decades even after the biomass plant has ceased operations.³

¹ Sterman, J., L. Siegel, and J. N. Rooney-Varga. (2018), Does Replacing Coal With Wood Lower CO₂ Emissions? Dynamic Lifecycle Analysis of Wood Bioenergy. *Environmental Research Letters* 13, no. 1: 015007.
<https://doi.org/10.1088/1748-9326/aaa512>

² Mackey, B.G., Lindenmayer, D.B., Keith, H. and de Bie, J. (2025), Burning Forest Biomass Is Not an Effective Climate Mitigation Response and Conflicts With Biodiversity Adaptation. *Climate Resil Sustain.*, 4: e70015.
<https://doi.org/10.1002/cli2.70015>

³ Ibid.

It is false accounting to consider that an in-perpetuity management regime that regularly impacts and drives deforestation would or could lead to reductions in carbon emissions if those materials were burnt for energy. Spruiking biomass as a net-zero energy source is disingenuous to NSW and Australia's emissions reductions targets, and sets a dangerous precedent that could redirect investment away from decarbonised energy systems, such as solar and wind power.

Environmental impacts of using biomass as a fuel source

Verdant Energy Technologies' proposal relies heavily on the clearing of invasive native Species, which is poorly regulated and environmentally destructive. The company claims that the power station will be "fueled with ecologically sustainable biomass", yet the Environmental Impact Statement fails to assess off-site impacts as there is no environmental assessment of the lands intended for clearing. The clearing and burning of tens of thousands of hectares of native vegetation cannot be described as ecologically sustainable.

Project would increase land clearing

Verdant Earth Technologies' has stated the company intends to use "invasive native species" as a biomass fuel source. The term "invasive native species" is misleading, as this is a vital scrub habitat for local biodiversity, otherwise described as invasive by landowners who want it cleared for agriculture. This is a dangerous loophole that will lead to clearing of native vegetation on private land with little to no regulation. The project would provide a market for native vegetation that will drive a significant increase in land clearing.

Land clearing and resulting habitat fragmentation is the single greatest threat to biodiversity in NSW. Since European colonisation, over half of all forests and bushland in NSW have been lost to logging and land clearing. This is putting immense pressure on NSW's native plant and wildlife species, with 500 native species now at risk of extinction within the next century. The state-wide scale impact regarding the intensification of deforestation in NSW that would result from the approval of this project would undoubtedly increase species extinction risk that could be directly attributable to the approval of biomass as a fuel source.

The majority of land clearing is based solely on self-assessment, where approval is based on inadequate desktop evaluations and there are no requirements for surveys of important habitat for threatened species. Many landowners have a poor understanding of the requirements and some have a lack of interest in implementing them.

The 2019-2020 Black Summer megafires severely impacted NSW forests, burning over five million hectares across the state. This climate-driven disaster led to more than 1 billion animals being killed, injured or displaced in NSW alone, impacting the prospects for long-term survival of some species. Despite the massive loss of NSW's forest estate during the 2019-2020 fires, recent data from the NSW Government as part of its annual Statewide Land and Tree Study (SLATS) survey shows that 66,498 hectares of NSW bush was destroyed across the state in 2023 – a 47% increase from 45,252 hectares cleared in 2022. There is an urgent need for NSW to protect its remaining forest cover, instead of incentivising increased land clearing by driving demand for biomass fuel.

Project doesn't rule out burning native forests

Alarmingly, loopholes for the use of native forests for power generation still exist and could be utilised by future governments to allow native forests to be burned. The burning of native forest wood and residues was not explicitly excluded in the development proposal, therefore there remains a serious risk that native forests may be impacted in future by this development. The development of a major new, and unnecessary market for so-called residues, or pulpwood, would introduce new economic drivers into the state's forestry industry, and drive changes in logging intensity and frequency, resulting in further conversion from diverse forests to younger forests at a landscape-scale.

If so, there will be heightened bushfire risk as a result of increased forest logging intensity and frequency. Logging causes a more open canopy layer, which can lead to a drier, more flammable forest floor that is more susceptible to bushfire.⁴ Increases in forest management leads to a younger canopy structure that is relatively drier and therefore less resilient to bushfire risk compared to a mature forest. It may also cause an ecological shift from a less fire-prone wet sclerophyll forest to a more fire-prone dry sclerophyll forest.

Other impacts to local communities

The burning of biomass at an industrial scale will also pose serious air quality and health risks to the local communities living near the Redbank power station. This is due to the emission of particulate matter, nitrogen oxides and other pollutants including heavy metals, carcinogens, and carbon monoxide. This puts local communities at risk of developing serious health conditions such as respiratory and cardiovascular issues.

If approved, the project would cause a massive increase in road traffic. Verdant Energy Technologies' plans for sourcing fuel assumes that 42 tonne capacity B-double trucks will

⁴ Mackey, B.G., Lindenmayer, D.B., Keith, H. and de Bie, J. (2025), Burning Forest Biomass Is Not an Effective Climate Mitigation Response and Conflicts With Biodiversity Adaptation. *Climate Resil Sustain.*, 4: e70015.
<https://doi.org/10.1002/cli2.70015>



take 56 trips to the power station per day to haul the required biomass feedstock. That is more than one truck every half hour on average and equates to 20,238 trips per year per year.

Conclusion

In light of the extremely concerning implications outlined in this submission, the Wilderness Society strongly recommends that the Independent Planning Commission reject the Restart Redbank proposal.