Restart of Redbank Power Station by Verdant Earth Technologies

Submission from the Australian Conservation Foundation Community in the Hunter

16 August 2025

The ACF Community in the Hunter does not support restarting the Redbank Power Station using biomass primarily from land clearing and potentially from native forests.

The project threatens biodiversity, isn't carbon neutral, and will ultimately undermine NSW's climate and conservation goals.

ACF Hunter disagrees with the Department that the project:

- recommended conditions will ensure all fuels used would present a low risk to human health and the environment.
- meets the NSW strategic policy framework for actions to address climate change.
- would not result in any significant impacts on the local community or the environment.

The independent expert consultant, Arup Australia, also raised numerous concerns about aspects of the project.

There are too many uncertainties associated with the project, with inadequate critical evaluation and implausible information and data provided. This includes the accounting of greenhouse gas emissions, the source and content of the biomass, the growth of fuel crops, water use and approvals, and air pollution. Even the economics of this proposal seems doubtful.

These issues and shortcomings were clearly highlighted and detailed by a large group of well qualified and well informed speakers at the public meeting in Singleton on Monday 11th August 2025.

Threat to biodiversity through land clearing

One of the primary concerns of ACF Hunter is the impact of the project on biodiversity. It would create a new market for wildlife habitat destruction by incentivising native tree clearing for fuel stocks and for growing fuel crops. The proposed 'invasive native species' as a major fuel source (50-70%) are in fact an important resource for native species. Removing them will have ongoing negative impacts.

Based on information provided by Verdant, at least 20,000 hectares of invasive native species will need to be cleared to provide the required fuel levels during the project's first year. The proposal seeks to exploit NSW land management rules that are unequivocally failing nature and that are currently under review by the Natural Resources Commission.

The environmental impact statement (EIS) fails to sufficiently identify the specific areas and species to be cleared or reflect on the cumulative impacts of intensive clearing over the life of the project; it also fails to assess off-site impacts – only considering impacts on

the 18ha of land the power station sits on, ignoring the potential biodiversity impacts from the thousands of hectares of land clearing required off-site.

In years 1-4 of the project 1,480,000 dry tonnes of wood is anticipated to be produced from clearing. This high volume should make it a matter of National Environmental Significance and require assessment under the Environment Protection and Biodiversity Conservation Act 1999 for its impacts on federally listed threatened species.

In terms of fuel crops, Verdant states 'in order to meet the total required biomass demand, a total planted area of 72,000 hectares would be required' and seeks to convert grasslands to crops. The project plan specifies it will target marginal agricultural lands. The project should only use degraded agricultural lands. It does not specify how native vegetation, like biodiverse grasslands, will be protected.

Land clearing and associated habitat fragmentation is already one of the greatest threats to biodiversity in NSW, threatening endangered species and ecosystems. Clearing native vegetation destroys habitat and prevents desperately needed ecological recovery. Over time, the effects of land clearing - through fragmentation and disturbance - further degrade the condition and habitat values of remaining vegetation.

Australia is one of the world's most biologically rich and diverse countries – but we're also a world leader in species extinction. The latest NSW State of the Environment Report listed an additional 36 more animal and plant species as threatened with extinction, with an additional 35 species being critically endangered. Across the state, distribution of native land mammals continues to shrink, with fewer habitats left to offer safe refuge. The clearing of native vegetation remains significantly higher than before land clearing laws were loosened in 2016.

Inadequate carbon accounting

Biomass burning is not clean. It emits more greenhouse gases per unit of energy than coal. Biomass burning is not GREEN.

As it stands, burning woody biomass for power emits carbon dioxide and involves cutting down forests, which means removing carbon sinks, destroying biodiversity and releasing more CO2 into the atmosphere.

The claim of "near-net zero" emissions, due to the regrowth of feedstock, is not supported. Trees cleared for land clearing will not grow back, future growth and carbon storage is lost and other emissions from soils and processing are not counted.

Verdant claims that burning vegetation bulldozed from agricultural lands will have a neutral effect on greenhouse gas levels; this is false. Burning vegetation will release instantaneous bursts of carbon dioxide in the air.

There is no plan to replace the woody vegetation that has been cleared – resulting in a net loss. Burning vegetation is very different to the slow carbon release that occurs when vegetation falls to the ground and rots slowly over time.

The emissions from biomass burning is compared to high emitting coal plants rather than wind and solar, significantly overestimating the emissions benefits.

The lifecycle analysis of the project shows that the release of 'CFCs' which contribute to ozone depletion are more than four times higher than burning coal.

The EIS provided fails to account effectively for the greenhouse gas emissions from the plant, AND from the broad scale tree clearing that underpins this project and the transport of the biomass. Electricity generated by burning pulverised native forest wood cannot be used to create tradeable Large-scale Generation Certificates.

The significant understatement of the greenhouse gas emissions was highlighted by several highly qualified people at the public meeting on 11th August.

Local impacts will worsen air quality and increase road traffic

Biomass has negative and unjust health impacts including releasing deadly air pollution. Burning biomass can have even more significant public health impacts than burning coal.

The proponent's plans for sourcing fuel assumes that 42 tonne capacity B-double trucks move to and from the power station 112 times PER DAY to haul the required biomass feedstock in and the resulting ash out. That is more than one truck in and out every half hour on average and equates to 20,238 trips per year.

Future burning of native forests not ruled out

Although excluded from the current proposal, the loophole that allows the use of native forest trees for biomass energy production still exists. There is no guarantee that native forests won't be allowed for use under future governments.

The banning of any native vegetation for electricity is a commitment from the NSW Government

NSW Labor has had a longstanding commitment to close the loophole that allows the burning of any native vegetation for electricity "Labor recognises that burning timber and cleared vegetation for electricity is not carbon neutral and is neither clean or renewable energy".

Better alternatives

To reach our renewable energy goals NSW should focus on high value cleaner energy solutions like solar and wind power.

While biomass energy may have potential in NSW in the future, further scoping is needed to determine the best opportunities in NSW that will not have unnecessary impacts on ecosystems and biodiversity.