



econetwork
 port stephens
 PO Box 97,
 Nelson Bay NSW 2315
www.econetworkps.org

EcoNetwork Port Stephens objects to the proposed modification (DA 183/1993) of the Redbank power station to substitute wood for coal.

Why is an environmental group from Port Stephens objecting to a power plant that appears to have all the correct green credentials?

EcoNetwork-Port Stephens is a grassroots community-based environmental and sustainability network comprising 30 community and environment groups and eco-businesses with a focus on sustainable planning. We are non-party political and do not donate to political parties.

Our objection to the Redbank proposal is based on current research, backed up by world events that we are in climate and extinction emergencies.

1. Firstly, we argue that burning biomass is not a green initiative as claimed.
2. Secondly, we question whether the NSW Environment Protection Agency (EPA) will be able to provide the necessary oversight and monitoring required to ensure the health of the people of Singleton and surrounds.
3. Thirdly, we speak up urgently for the survival of our forests. Forests are worth more standing: for biodiversity, carbon storage and water catchment integrity.

1. Burning Biomass will not provide green baseload renewable energy.

Redbank claims that.... *upon restart, Redbank will be one of the largest green baseload renewable energy providers in NSW and the ONLY existing facility capable of providing continuous green 24/7 power with Net Zero CO2 emissions, adding to grid stability.*

Waste Biomass feedstock will be obtained from a variety of sources, including forestry waste residues with a medium-term goal of operating on waste biomass sourced from mixed waste timber – provides an important alternative to landfill.

Verdant has options to build other renewable energy sources on the current Redbank site and when combined with Redbank will form the Redbank Green Energy Hub capable of generating 261MW of renewable energy – the second largest renewable generation facility in NSW behind the snowy mountain hydro scheme¹.

The problem is that this carbon accounting trick is strongly contested by scientists around the world.

¹ <https://www.verdantearthtechnologieslimited.com/wp-content/uploads/2021/02/Redbank.pdf>

The well respected policy institute Chatham House in a research paper states Wood is not a carbon neutral energy source: *The problem ... is that in fact biomass, when burnt, emits more carbon per unit of energy than most fossil fuels. The exact amount varies with the type of biomass and the type and age of the power plant, but figures from the Drax power station, Europe's largest consumer of wood pellets, show that in 2013 it emitted about 13 per cent more carbon dioxide per unit of energy generated from biomass than from coal.*²

The proponent claims that biomass is a renewable energy source which generates net-zero emissions. Carbon accounting classifies burning wood as zero emissions in the energy sector, as trees are assumed to re-absorb the CO₂ when they grow back. What isn't accounted for are the decades it takes for the trees to grow back.

The parliamentary inquiry into "Sustainability of energy supply and resources in NSW" that reported to the NSW Government in August 2021 demonstrated bipartisan support for the recommendation that **native forest biomass not be allowed in energy generation facilities**.

The committee:

- stated that "**Native forest biomass isn't a renewable energy source**. It reduces the ability of NSW forests to absorb atmospheric carbon and produces carbon emissions".
- recommended the NSW government **exclude native forest biomass from being classed as renewable energy**, and ensure that it is not eligible for renewable energy credits.
- want the definition of native forest biomaterial under the Protection of the Environment Operations (General) Regulation 2009 amended to **prevent the burning of wood from native forests to generate energy**.

US experience shows that biomass power generators take a huge amount of wood "waste" to keep running. They rapidly run out of "waste" and go straight to cutting down trees, in other words the power station requirements tend to define the amount of "waste". This is not sustainable as indicated by the findings of the NSW Parliamentary committee.

2. Is the EPA capable of providing the regulation required?

*Biomass is defined in the NSW EPA Eligible Waste Fuel Guidelines as forestry residues, sawmilling residues and clean uncontaminated wood waste. This project will focus on securing quality fuels that are considered residual materials in forestry operations, sawmilling and from urban sources (e.g. timber manufacturing) to provide a new sustainable fuel source for the power station.*³

This biomass will be delivered daily to the plant at Warkworth by 70 B-Double trucks from sources that are at least 300km away, in Moree to the northwest, Yamba to the north or Moruya in the south. These B Doubles will travel on our already congested M1 Freeway and the New England Highway and with a round trip of 600km per day will contribute to our already high greenhouse gas

² <https://www.chathamhouse.org/2017/03/wood-not-carbon-neutral-energy-source>

³ P5 Exec Summary <https://www.verdantearthtechnologieslimited.com/wp-content/uploads/2021/02/Redbank.pdf>

levels.⁴ (Our sympathies are with the people of Singleton who still do not have the promised town bypass and will have many of these B Doubles driving through their main streets from the north)

There are several worrying aspects to this information from the EPA. The EPA has stringent guidelines about contamination of the biomass material and will be responsible for ongoing monitoring of emissions levels⁵ from the plant when it is operational.

However, Singleton already records some of the highest pollution levels in the country, monitored by the EPA. One has to ask how effective is EPA monitoring of current emissions and pollutants in the Singleton area. The Upper Hunter has had over 68 air quality alerts due to PM10 levels so far this year according to the Singleton Argus.

For more than 20 years Dr Bob Vickers and other members of the **Doctors** for the Environment Group as well as community groups such as Singleton Shire Healthy Environment Group, SSHEG, and the Upper Hunter Air Quality Monitoring Network have been challenging the NSW State government and the EPA to adequately monitor and regulate air pollution in the Upper Hunter, particularly around Singleton. It is recognised that The Dust Stop Program and Pollution Reduction Programs (PRPs) as required under mine Environmental Pollution Licences are not successfully keeping regional air pollution at acceptable levels.

3. Redbank Power Station provides a further threat to our forests.

Both NSW and Commonwealth Governments have systematically removed the numerous prohibitions on burning biomass from native forests for electricity generation to pave the way for this development, and the NSW Government has increased allowable logging intensities in forests to feed it. Our suffering forest wildlife will be impacted most severely as forest degradation accelerates with previously uneconomic trees taken.

The NSW Government recently changed the logging rules for State Forests to reduce the number of trees that need to be retained by 50%, while zoning 140,000 hectares of public coastal forests from Grafton to Taree for clear felling.

The NSW Government's draft logging rules for Private Native Forestry also intend to reduce the number of trees that need to be retained by 50%, while allowing 20% of the logging area to be clear felled in each operation. We are not surprised the Nationals tried to remove protection for core Koala habitat, environmental zones, wetlands and littoral rainforest, because Redbank will burn a million tonnes of forest timber per year. Redbank will become a major market for forest resources.

These changes are all about allowing more trees to be logged as biomass for electricity generation. As both public and private forests are becoming increasingly devoid of large sawlogs the push is on to take smaller and defective trees to make money. To the logging industry, forest residues or

⁴ Transport is Australia's third largest source of greenhouse gas emissions, with the highest rate of growth.

<https://www.climatecouncil.org.au/wp-content/uploads/2017/09/FactSheet-Transport.pdf>

⁵ P55 <https://www.verdantearthtechnologieslimited.com/wp-content/uploads/2021/02/Redbank.pdf>

'waste' are those trees not considered suitable for a sawlog. In Eden more than 90% of trees logged end up as woodchip, and this is called 'residues'.

Forestry Corporation NSW has a record of breaking the law. In 2013 Forestry Corporation NSW was fined \$35000 for igniting fires within a prohibited zone under the Threatened Species Conservation Act.⁶ The court ruled the organisation had *insufficient training and procedures in place*.

In 2018, the Forestry Corporation NSW was in court again⁷ facing more than \$1m in fines for the alleged illegal logging of trees in protected areas, including koala habitat, in the state's north. In July of the same year, the EPA issued a stop-work order to the Forestry Corporation for clearing two giant protected trees also in the Wild Cattle Creek State Forest. In 2020 Forestry Corporation NSW was issued with a stop work notice by the EPA for the same offence. (The EPA alleges that during an inspection on 9 July 2020 EPA officers observed two giant trees which had been felled.⁸)

We cite these examples to illustrate that our lack of faith in those who will be determining suitable *forest residues and waste* to feed a power station are well founded. This anxiety about what will be taken from forests is only compounded by reading the EPA description of suitable native timbers in the Redbank proposal, reproduced here:

Native forest biomaterial is specifically prohibited from use for electricity generation in accordance with the Protection of the Environment Operations (General) Regulation 2009. The Regulation exempts some native forest residues from forestry operations authorised by a private native forestry property vegetation plan, integrated forestry operations approval or an invasive native species order. **Native forest biomaterial**

The use of native forest biomaterial for electricity generation is regulated through the Protection of the Environment Operations (General) Regulation 2009, clauses 96 to 98. These clauses expressly prohibit the use of native forest biomaterials in electricity generation, but also provide exemptions for certain types of native vegetation or woody waste from the definition of native forest biomaterials.

The material exempted from the definition is able to be burned for the purpose of electricity generation. Native forestry biomaterial can be used in electricity generation if it is:

- invasive native species cleared in accordance with property vegetation plans that have been approved under the *Native Vegetation Act 2003* or an invasive native species order under the Native Vegetation Regulation 2013
- pulp wood logs and heads and off-cuts from clearing carried out in accordance with a private native forestry property vegetation plan or forestry operations carried out in accordance with an integrated forestry operations approval under the *Forestry Act 2012*
- trees cleared as a result of thinning carried out in accordance with a private native forestry property vegetation plan or an integrated forestry operations approval.

More information can be found at www.epa.nsw.gov.au/licensing/natforestbiofuel.htm⁹

⁶ <https://www.abc.net.au/news/2013-07-12/forestry-corp-fined-for-far-south-coast-environmental-offences/4815682>

⁷ <https://www.theguardian.com/australia-news/2020/oct/08/forestry-corporation-of-nsw-could-face-1m-in-fines-for-alleged-logging-in-koala-habitat>

⁸ <https://www.nationaltribune.com.au/epa-orders-stop-work-on-forestry-operations-in-wild-cattle-creek-state-forest/>

⁹ P66 Additional information <https://www.verdantearthtechnologieslimited.com/wp-content/uploads/2021/02/Redbank.pdf>

The EPA specifies that, *Native forest biomaterial is specifically prohibited from use for electricity generation in accordance with the Protection of the Environment Operations (General) Regulation 2009. The Regulation exempts some native forest residues from forestry operations authorised by a private native forestry property vegetation plan, integrated forestry operations approval or an invasive native species order.*

However, they then go on to list exemptions, which could be used by an organisation such as Forestry Corp with a proven record of... *insufficient training and procedures in place* to further degrade our native forests. We know that Land clearing is lethal to native animal populations. Over the past few years, we have seen huge land clearance particularly across NSW and South East Queensland, for farming, forestry, housing development and mining. We know that offsets don't work and that their effectiveness is now being increasingly questioned. The koala is a keystone species in serious decline in NSW and if the Redland Power Project goes ahead it will be another factor in their extinction, predicted by 2050.

The National Koala Conservation Strategy 1998 states:

*"Loss of habitat is the major threat to the koala and is the main factor responsible for declining populations. This continuing problem, which results mainly from clearing or fragmentation of forest and woodland, must be addressed".*¹⁰

In addition, a recent press release by the Australian Koala Foundation, AKF, on koala population estimates stated, "There were no upward trends anywhere in Australia. Only one area in the study was estimated to have more than 5,000 koalas, and some regions were estimated to have as few as five or 10."¹¹

A recent independent report by the AKF estimated that the koala population has "dropped to less than 58,000 this year from more than 80,000 in 2018, with the worst decline in the state of New South Wales, where the numbers have dropped by 41%".

There are many local factors that should encourage Singleton Council to reject this proposal. The projected employment will be mostly in transport and forestry so not a jobs bonanza for Singleton. The increase in pollution to the local area should be a major area of concern. But over and above local factors are the looming threats of climate change and species extinction. The proposed Redland Power Station will certainly have a negative effect on these and we ask that you reject the proposal.

Kathy Brown

Sec, EcoNetworkPS

Ph 0422 261 057

secretary@econetworkps.org

¹⁰ p6 Australian and New Zealand Environment and Conservation Council (1998) National Koala Conservation Strategy 1998. Accessed via: <https://webarchive.nla.gov.au/awa/20110327174828/http://environment.gov.au/biodiversity/publications/koala-strategy/koala-strategy-1998.html>

¹¹ Redmayne, J. (2029) Australia has lost one-third of its koalas in the past three years, Reuters (Asia Pacific), 21st September 2021. Accessed via: <https://www.reuters.com/world/asia-pacific/australia-has-lost-one-third-its-koalas-past-three-years-2021-09-21/>