

Verdant Earth Technologies

Restart of Redbank Power Station and Use of Biomass (Excluding Native Forestry Residues from Logging) as a Fuel SSD-56284960

Applicant Presentation for Public Meeting & Response to Community Issues
11 August 2025

Dr Mark Jackson, Director, JEP Environment & Planning



https://www.jacksonenvironment.com.au/

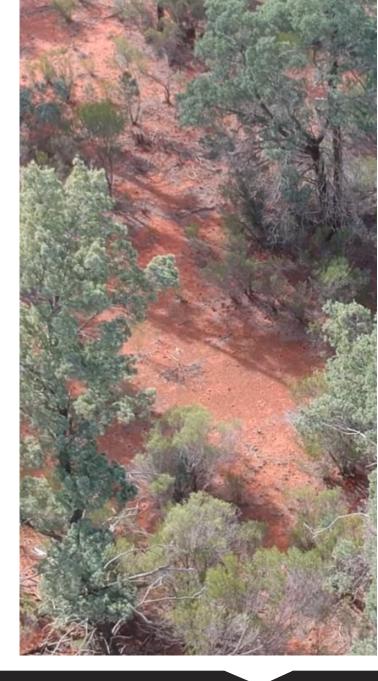
Biodiversity and Land Clearing Concerns

- Submissions from individuals and organisations including the Wilderness Society and others raised concerns that the Proposal will increase native forest clearing and cause loss of important biodiversity; and
- ❖ It will be a major driver of irreversible clearing and habitat loss
- How the applicant has addressed this matter:
 - The fuel strategy now excludes all waste from native forestry logging and sawmilling operations
 - ❖ Biomass material MUST meet the definition of an EPA 'Eligible Waste Fuel' that has been lawfully sourced from non-forestry sources (i.e. invasive weeds on agricultural land with LLS guidelines approvals or vegetation removed from approved construction works), and
 - Purpose grown fuel crops will be grown on lands in the Hunter and surrounds on coal mine sites to support rehabilitation programs and on marginal agricultural land



Biodiversity and Land Clearing Concerns

- Controls for use of Invasive Native Scrub (INS) as a biomass source:
 - Only INS generated by landholders and strictly approved under the Local Land Services Act 2013 and the Land Management (Native Vegetation) Code 2018 will be used as a source of biomass fuel
 - INS must have no higher order uses and be approved by EPA under a Specific Resource Recovery Order and Exemption (Consent Conditions B4 and B5)
 - Records of sources, quantities and testing must be kept for a period of 6 years under an EPA Specific Resource Recovery Order and Exemption
 - Please note that clearing under the Native Vegetation Code is not permitted on coastal wetlands, old growth forests, littoral rainforests, core koala habitat and critically endangered ecological communities
 - Only biomass sourced from sustainably managed INS that strictly complies with the law and the Managing invasive native scrub to rehabilitate native pastures and open woodlands - A Best Management Practice Guide for the Central West and Western Regions (2014)¹ (the Guidelines) will be used – audit program will be implemented
 - Note that these guidelines have been developed to maximise ecological benefits and improve net biodiversity outcomes through a research program involving NSW Department of Environment, Climate Change and Water, CSIRO, Natural resource consultants, Industry & Investment NSW, University of New England (UNE) and Landholder community
 - The Proposal cannot and will not result in biodiversity loss or land clearing



¹ Central West Local Land Services (2014). Managing invasive native scrub to rehabilitate native pastures and open woodlands.

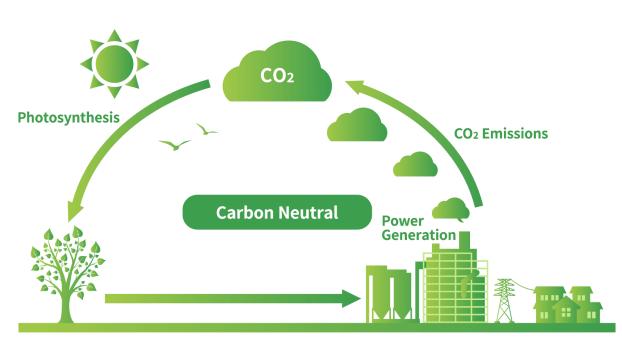
Reliability of Biomass Fuel and Changes to Legislation

- Concerns around the sustainability, economics and adequacy of fuel supply, including from various organisations such as the North East Forest Alliance and National Parks Association of NSW
- How the applicant has addressed this matter:
 - Independent market research by ARCHE demonstrate significant quantities of lawful biomass with no higher order uses are available to support operations
 - Eligible waste fuels to be used (with no other higher order uses) will make up 93% in year 1 declining to 30% by year 5
 - Application will work to implement a purpose grown short-rotation woody cropping program which will make up to 70% of the fuel needs by year 5
 - These are fast-growing trees (e.g. coppice crops) that are harvested every three to five years
 - Hunter Valley Region alone has an estimated 130,000 ha of coal mining lands – opportunities for future business, employment, renewable energy
 - Fuel strategy based on current laws in NSW and can be adapted if a change in law occurs (through an increase in purpose grown crop production)



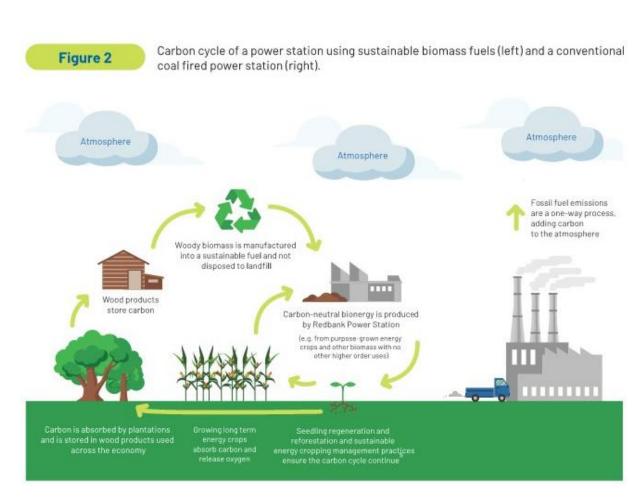
Concern Over Climate Change Impacts

- ❖ Submissions included concerns over actual CO₂ emissions at the point of combustion not being considered, and the Proposal's contributions to GHGs and global climate change. These included submission from individuals and from organisations such as the Australian Forests & Climate Alliance
- How the applicant has addressed this matter:
 - Explained in the application that the IPCC 6th Assessment Report released (2022) acknowledges Modern Bioenergy as an important tool for mitigating climate change by reducing CO₂ emissions from traditional fossil fuel electricity generation
 - Under international IPCC convention, the emission factor for CO₂ from the combustion of biogenic carbon (for energy) is zero – as trees/plants absorb CO₂
 - Greenhouse Gas Assessment from the EIS has been accepted by NSW EPA as the State's Climate Change regulator
 - ❖ The Proposal will be a "near net zero" CO₂ project and a small contributor to GHG emissions in NSW representing 0.02% of state-wide emissions in 2030, and 0.07% in 2050



Is Biomass a Form of Renewable Energy?

- Concerns over the Proposal as a genuine form of renewable energy was raised by individuals and several organisations including the North Coast Environment Council and the Nature Conservation Council
- How the applicant has addressed this matter:
 - ❖ It is noted that IPCC Working Group III report acknowledges that bioenergy can be harmful when biomass is sourced from old growth forests, where land conflicts and biodiversity loss occurs or when poor technology is used (causing air pollution)
 - ❖ IPCC also notes that Modern Bioenergy done well can retain biodiversity, manage resource use, prevent deforestation and prevent potentially negative land-use changes – and is defined as "renewable"
 - Modern Bioenergy is highlighted as a critical pathway to achieving Net Zero by 2050 by the world leading authorities on climate change and sustainable energy including IPCC and the International Energy Agency



Air Quality Concerns

- Community submissions received indicated concern over local air quality
- How the applicant has addressed this matter:
 - The application is supported by a rigorous air quality impact assessment that found that the proposal will have minimal impact on local air quality
 - The proposal can meet all EPA air quality criteria
 - Advanced air pollution controls and continuous monitoring will be put into place
 - Air quality will be continuously monitored and reported to EPA in accordance with strict emission limits which cannot be exceeded
 - Consent Condition B13 requires that within three months of commencing operations, an air emission monitoring and a post commissioning monitoring and verification report must be prepared in consultation with the EPA and provided to the Planning Secretary
 - Ongoing monitoring, reporting and EPA regulation will ensure that local air quality is protected at all times



Human Health Concerns

- Community submissions received indicated concern over human health
- How the applicant has addressed this matter:
 - Application is supported by a Human Health Risk Assessment
 - Emissions from the Proposal will have a negligible impact on human health, including negligible impact on water quality in rainwater tanks used for drinking water and on crops and produce grown in the area
 - Only biomass fuel that has been NATA laboratory tested for compliance with specification and EPA requirements will be received by the power station
 - Comprehensive Quality Control and Assurance Plan will support the fuel supply program
 - ❖ The power station will be subject to strict EPA compliance requirements for emissions, with continuous reporting to EPA and the community to ensure that no impacts on air quality or human health occur



Ongoing Community Engagement

The Proposal also commits to ongoing community engagement commitments including:

- Regular engagement with Council, residents, and businesses in the LGA
- Community complaints line advertised via web to receive and address any community complaints or enquiries
- Community Consultative Committee: Verdant, the community, and key stakeholders with representatives of Singleton Council, NSW EPA, Verdant, and two community representatives approved by Council
- Publication of environmental monitoring results (including noise and air quality) on the Verdant Earth website
- Recruitment and Training Strategy (RTS) and a Local Content Plan (LCP) to encourage local business participation and target the use of local people and resources
- The applicant's management team are here today please introduce yourself your voice and concerns are important and your interest and contributions are highly valued



