

**Submission to the
NSW Independent Planning Commission
regarding the Restart of Redbank Power Station**

18 August 2025

About NCC

The Nature Conservation Council of New South Wales (NCC) is the state's peak environment organisation. We represent over 200 environment groups across NSW. Together we are dedicated to protecting and conserving the wildlife, landscapes and natural resources of NSW.

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In conjunction with this submission, please see:

1. Expert witness report for the Redbank Power Station, Barraband Consulting
2. Expert witness report for the Redbank Power Station, David Watson

Acknowledgement

The Nature Conservation Council NSW acknowledges that we live and work on the land of First Nations. This land has been cared for since time immemorial by Traditional Owners, whose sovereignty was never ceded. We pay our respects to the Traditional Owners past and present of the many Countries within so-called New South Wales.

We respect the leadership of Traditional Owners in caring for Country, and support the development of treaties that meaningfully empower them to do so. We acknowledge the dispossession of First Nations People and the harm inflicted on people and Country since colonisation began. We acknowledge that colonisation is an unjust and brutal process that continues to impact First Nations people today. As people living and working on First Nations Country it is incumbent on us to play our part in righting the historical and ongoing wrongs of colonisation. Indeed, our vision of a society in which nature and communities thrive together depends upon it.

The Nature Conservation Council of NSW (NCC) respects and supports all First Nations people's right to self-determination as outlined by the UN Declaration of the Rights of Indigenous Peoples (UNDRIP), which extends to recognising the many different First Nations within Australia and the Torres Strait Islands. NCC commits to maintain open lines of communication and to build respectful mutual relationships with First Nations people in all the work we do and wherever possible, seek aligned outcomes with and support the goals of First Nations groups.

We commit, as an organisation, to empower and work together with First Nations people to protect, conserve and restore the land, waters, air, wildlife, climate and culture of the many First Nations people in NSW.

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Introduction

The NSW Nature Conservation Council of NSW (NCC) appreciates the opportunity to provide feedback on the proposed State Significant Development (SSD) project ‘Restart of Redbank Power Station’ that seeks to burn up to 700,000 tonnes per year of dry biomass to produce energy.

The NCC is concerned that the departmental assessment of the proposed SSD has not appropriately assessed the biodiversity and climate impacts of the ‘Restart of Redbank Power Station’ proposal, nor the alignment of the project with current state policies.

The department report overlooked the significant biodiversity impacts that would incur off-site from the value chains created by the project for biomass from native vegetation classified as ‘invasive native species’ (‘INS’) (also known as regrowth vegetation), particularly during the project’s first three years of operation.

To understand why the proposed project would drive significant off-site biodiversity impacts from this fuel source, three interlinked concepts are explained in this submission:

1. That establishing a value chain would increase ‘INS’ removal beyond current rates
2. That ‘INS’ provides biodiversity values to many species, and
3. That clearing of ‘INS’ will occur under the existing legal framework, and this framework does not protect biodiversity values.

The latest NSW State of the Environment report identified land clearing as one of the biggest drivers of extinction and more than 50% of NSW’s threatened species are expected to go extinct within the next 100 years¹. In this context, we ask the Independent Planning Commission to consider the serious and irreversible impacts that would be created through the proposed project.

Also underestimated by the proponent and the departmental assessment is the climate impacts of the project, where several sources of emissions have not been accounted for – including the loss of ‘INS’ from the landscape, whose carbon storage is twice that of the open pasture it would be replaced with.

The NCC engaged independent experts via the Environmental Defenders Office (EDO) to review the project: 1) Barraband Consulting (Professors Andrew Macintosh and Don Butler) and 2) Professor David Watson from Charles Sturt University.

Attached to this submission are the two independent expert reports.

Below we detail the likely off-site biodiversity impacts generated by the project’s proposed value chain for native vegetation biomass, climate considerations, conflicts with relevant government policies and legislation and grounds to refuse the project.

¹ Environment Protection Authority 2025, [NSW State of the Environment 2024](#)

Summary of recommendations

The NSW Independent Planning Commission should not approve this project.

The NCC believes that the project should be refused on the following grounds:

- The potential offsite impacts of the project have not been quantified and considered in the Department's assessment report.
- The significant increase in land clearing generated by the proposed value chain for 'INS' in the proposed project is likely to have a serious and irreversible impact on native vegetation
- 'INS' harvesting under the land management (native vegetation) codes does not align with best practice ecological principles thus likely to result in significant and unacceptable impacts on biological diversity.
- That the proposed conditions of approval rely on the *Local Land Services* Act for regulation of clearing which cannot satisfactorily reduce the levels of impact on the environment.
- The departmental report has not assessed biodiversity impacts created along the value chain.
- The departmental report has incorrectly stated that the project would not result in offsite impacts to other native vegetation when INS laws permit clearing of up to 20% of non-INS species.
- The proposed project is in conflict with existing Government policies, plans and determinations for key threatening processes.
- Carbon emissions and climate impacts have not been fully accounted for.

1) Biodiversity impacts created through the proposed SSD

Defining ‘Invasive Native Species’

Throughout this document we will regularly refer to ‘Invasive Native Species’ (INS) to match the existing language used in the NSW Land Management Framework and for easy reference to the proponent’s documentation. However, we note that ‘Invasive Native Species’ is a controversial classification that is used in agricultural settings but in other contexts, is referred to as regrowth vegetation. ‘Invasive Native Species’ in NSW legislation includes 45 different native species, that provide a range of habitat values to other species. Biodiversity values of ‘INS’ (regrowth vegetation) are discussed later on.

Implications of the proposed SSD on land clearing rates

Land clearing rates across NSW

The NSW Government is responsible for the ‘Statewide Landcover and Tree Study’ (SLATS) that maps the location and extent of vegetation clearing each year using satellite imagery. The latest available data indicated that 66,000 hectares of native vegetation was cleared in NSW in 2023². The latest NSW State of the Environment Report, released June 2025, recognises ‘habitat destruction through the clearing of native vegetation’ as one of the main threats to the survival of native wildlife.

Data on existing rates of ‘Invasive Native Species’ clearing in NSW

Of the 66,000 hectares of native vegetation cleared in 2023¹:

- 32,847 hectares of woody vegetation³ was cleared
- Agriculture was responsible for 59% (19,364ha) of woody vegetation clearing
- Of woody vegetation cleared for agriculture:
 - 48% of clearing was authorised or presumed allowable
 - 52% of clearing was unallocated (i.e. land clearing where there was no formal authorisation and the department cannot presume authorised or allowable use based on visual cues in the satellite imagery).
- Of authorised/presumed allowable clearing for agriculture:
 - A total of 6,221 hectares was approved for ‘invasive native species’ clearing:
 - > 810 hectares was cleared under Part 2 Division 1 of the native vegetation code - ‘Low impact clearing of invasive native species’
 - > 5,410 hectares was cleared under Part 2 Division 2 of the native vegetation code – ‘Moderate impact clearing of invasive native species’

Land clearing required by the proposed SSD

Verdant Earth Technology propose utilising ‘Invasive Native Species’ (INS) from Central West and Western Local Land Services regions to make up the bulk of required biomass during the project’s first three years of operation, and as a smaller proportion for the remaining life of the project (see Table 1). In the proponents ‘Independent market study of eligible waste fuels proposed for use at

² NSW Government 2005, [NSW Statewide Landcover and Tree Study \(SLATS\) dashboard](#), viewed 16 August 2025.

³ The vegetation classified as ‘Invasive Native Species’ falls in the woody vegetation category.

Redbank Power Station', they identify 'INS' biomass yields around Cobar and Bourke areas have been estimated in the range of 5-27 tonnes/ha and 8-40 tonnes/ha in two different studies⁴. The market study indicates 25 tonnes per ha is used as a central estimate of available biomass across all densities of 'INS'. Based on the biomass densities provided by the proponent, we have calculated the potential lower and upper limits of 'INS' land clearing required to meet the project's needs during the first three years (Table X).

Table 1. Potential 'INS' land clearing required to meet the demands of the project for its first three years, dependent on 'INS' biomass density in the landscape.

	'INS' biomass required by proponent	Land clearing required if 'INS' biomass density is 5t/ha	Land clearing required if 'INS' biomass density is 25t/ha	Land clearing required if 'INS' biomass density is 40t/ha
Year 1	500,000 tonnes	100,000 hectares	20,000 hectares	12,500 hectares
Year 2	450,000 tonnes	90,000 hectares	18,000 hectares	11,250 hectares
Year 3	350,000 tonnes	70,000 hectares	14,000 hectares	8,750 hectares

The proponent's 'Independent market study of eligible waste fuels' claims that 'the clearing of vegetation will occur regardless of its end use and therefore mitigates and environmental concerns'. This statement is false.

Based on the average biomass yield estimation of 25t/ha provided in the proponents 'Independent Market Study', the project will need to source around 20,000 hectares of 'INS' to fuel the power station in Year 1 (for further information see attached expert report by Barraband Consulting).

This is more than three times the amount of authorised 'INS' that was cleared in 2023, as reported in government data. The amount of land clearing required will fluctuate depending on the amount of biomass available in the landscape; even when biomass occurs in the upper density estimate provided by the proponent, required biomass from 'INS' land clearing exceeds existing rates of 'INS' clearing across all three years. These results indicate that **rather than utilising an existing 'waste' product, the project would need to increase existing land clearing rates** and would have flow on effects for biodiversity and climate.

Grounds for refusal

The above data demonstrates the proposed project would need to accelerate 'INS' land clearing beyond existing levels. Therefore, we recommend that the project is rejected on the following grounds:

- The potential offsite impacts of the project have not been quantified and considered in the Department's assessment report.
- The significant increase in land clearing generated by the proposed value chain for 'INS' in the proposed project is likely to have a serious and irreversible impact on native vegetation.

⁴ Note: original sources of information on biomass density in Bourke and Cobar areas were unable to be reviewed due to inaccessible/insufficient reference information provided in the proponent's report.

Potential impacts of increased land clearing (by the proposed SSD) on biodiversity

Understanding ‘Invasive native species’

There are currently 45 native plant species listed in the NSW land management codes as ‘invasive native species’ (also sometimes referred to as ‘woody weeds’); this list includes eucalyptus, wattles, native pines, acacias, casuarinas and other species typically associated with western landscapes. In western NSW, Europeans have cleared the majority of natural vegetation for farming, and extractive land-uses have an ongoing impact on the composition of vegetation in the landscape. While ‘invasive native species’ is a term used to refer to trees and shrubs that have proliferated and encroached upon agricultural land, such habitat types have been a natural part of the landscape. Savannah and shrubby woodlands dominated by species like river red gum, coolabah, black box, poplar box or white cypress pine, once formed part of a continuous belt of temperate woodlands that extended from Queensland to Victoria⁵ and were frequently reported in journals of early European invaders across western NSW in the 1800s⁶. For further information refer to attached expert report by Professor David Watson.

In an agricultural context, the biodiversity value of ‘invasive native species’ is often over-simplified and understated, and the biodiversity impacts misrepresented. While proliferation of shrubs and trees is likely to reduce agricultural values (such as livestock carrying capacity and land productivity) – the biodiversity effects are more nuanced and require a case-by-case assessment.

A comprehensive study has explored the impacts of shrub ‘encroachment’ on biodiversity and landscape function in three regions of western NSW: Cobar, Wanaaring-Louth and Ivanhoe.⁷ In each region, multiple sites of shrub density varying from 30 to 5230 shrubs per hectare were surveyed. Species richness (i.e. the number of flora and fauna species) did not change between sites of differing woody shrub cover however, species composition did. In Wanaaring-Louth, increased shrub cover significantly increased soil stability, however no relationships between soil surface condition and shrub cover or density were detected in the other regions. The study concluded ‘woody weeds’ have biodiversity values, with many taxa utilising shrub-encroached areas and that the ‘woody weed’ problem should be reidentified as a ‘predominantly production-oriented problems.’

This study exemplifies the ecological complexity of ‘invasive native species’ that is not accounted for by the current land clearing framework (see page 11) and are often downplayed or not understood by landowners,

⁵ Cox, Sivertsen & Bedward 2001, ‘Clearing of native woody vegetation in the New South Wales Northern wheatbelt: extent, rate of loss and implications for biodiversity conservation’, *Cunninghamia*, vol. 1, pp. 101-155.

⁶ Jurskis, V 2009, ‘River red gum and white cypress forests in south-western New South Wales, Australia: ecological history and implications for conservation of grassy woodlands’, *Forest Ecology and Management*, vol. 258.

⁷ Ayers, *et al.* 2001, ‘[Woody weeds, biodiversity and landscape function in Western New South Wales](#)’.

Case study: Potential biodiversity values on sites targeted by the proponent – Bookaloo station

Creating an incentive for ‘INS’ clearing could have unintended consequences on biodiversity where land clearing is undertaken under the existing land management codes. In a [video](#) submitted to the IPC, Verdant Earth Technologies conducted an interview with Bookaloo Station, as a potential source of ‘INS’.

Bookaloo Station is a 10,000 hectare property, directly adjacent to Gundabooka National Park. **There are 21 plant communities in Gundabooka;** according to the [park’s plan of management](#) “these are dominated by mulga, bimbale box, red box, ironwood, white cypress pine, belah, leopardwood, bloodwood and grey mallee.” **Gundabooka National Park is home to at least:**



Images taken in Gundabooka National Park by: Michael Hains, Candice Bartlett, Liz Noble & Michael Pennay.

Bookaloo has the potential to provide continuous habitat for wildlife in the area; an important feature that supports species survival in the landscape. **Many of the dominant plant species in the area – mulga, bimbale box, red box, ironwood, white cypress pine and belah – are not protected on private land as they are classified as ‘INS’.** For Bookaloo Station to achieve outcomes for biodiversity through vegetation management – an initial ecological assessment would be required to understand the biodiversity values on site followed by identification of environmental goals, planning and monitoring. Without such structures, claims in the proponent’s video that biodiversity is restored when ‘INS’ is cleared, are unfounded.



Case study: Findings from the Natural Resource Commission review of cypress woodlands



In the central west of NSW, cypress forests are among the most significant native vegetation patches remaining within a largely cleared agricultural landscape.

In 2010, the NSW Natural Resource Commission (NRC) assessed the value and management of cypress forests of south-western NSW. According to the NRC **‘around 74% of white cypress forests and associated woodlands have been cleared in the central division and around 30% in the western division’**. They found **that cypress forests were associated with a range of flora and fauna**, including threatened species and endangered ecological communities and that biodiversity values are greatest where there is floristic and structural diversity. The NRC identified that inappropriate livestock grazing and fire regimes were risks to the ecological value of cypress forests. They acknowledged that **‘stands of invasive native scrub still provide habitat for many native flora and fauna and can act to connect remnant patches of vegetation, providing for movement of animals across the landscape.’**

The NRC made a number recommendations to manage forests for both timber production and ecological values, including:

- **Cypress across the central division landscape should be managed to create or maintain ecological connectivity** and networks of habitat across public and private land.
- **Strategic planning should be undertaken that identifies, protects and manages north-south and east-west corridors** to aid faunal movement between remnants, and to allow flora and fauna species to migrate and adapt to climate change.

At the time, the review deemed that under the existing management structures cypress forests were being appropriately managed, with some minor recommendations for improvement.

In 2010, management of native vegetation on private land was regulated under *Native Vegetation Act 2003* that required properties to develop a property vegetation plan (PVP). For a PVP to be approved, **it had to meet the ‘improve or maintain’ test**, which means that any activities must improve or maintain environmental outcomes.

In 2016 the *Native Vegetation Act 2003* was repealed and replaced with the current vegetation code provisions under the *Local Land Services Act*. **This resulted in a significant weakening of native vegetation management**. Landholders were no longer required to improve or maintain environmental outcomes. Under the current codes are permitted to clear up to 90% of native white cypress (*Callistris glaucophylla*) and black cypress (*Callitris endlicheri*) woodlands on their property following a self-assessment.

The lack of regulation and environmental objects in the current land management framework creates a high risk of mismanagement of cypress woodlands on private lands.

Ecological value of regrowth and recolonising vegetation ('invasive native species')

Recent research shown that retaining more regrown forests and woodlands could be an easy and cost-effective way to protect threatened species. The study, led by the University of Queensland, examined the habitat values of different ages of regrowth vegetation for 30 threatened species in Queensland⁸. Whilst the study was based in Queensland, many of the species assessed occur in NSW such as the squatter pigeon and koala.

The research found that some species, such as the squatter pigeon, benefitted from regrowth as young as three years, while koalas could use regrowth as young as nine years old. The average age at which regrown forests and woodlands provided valuable habitat and food for the 30 threatened species was 15 years. Some species, such as the greater glider, need much older mature forests - demonstrating the need to retain both young and old forests.

Protecting naturally regrown vegetation can be cheaper and less laboursome than planting new trees. These findings lend support to policies that aim to protect biodiversity by incentivising landowners to retain regrowth vegetation.

Inadequacies of the existing land management framework at protecting biodiversity

The existing land management framework was introduced in 2017, following the repeal of the *Native Vegetation Act 2003* in 2016. The change in legislation was associated with a threefold increase in annual land clearing rates over the past decade. Core issues with the land management (native vegetation) codes include:

- The codes allow for self-assessment prior to land clearing, which relies on user interpretation rather than an independent assessment via an appropriately qualified person.
- The 'INS' codes do not have an objective to maintain/improve ecological integrity
- Up to 20% of non-INS native vegetation can be cleared across a treatment area
- There are low levels of auditing and verification of compliance with the 'INS' standards

Key vegetation findings in the 2024 NSW State of the Environment Report

The NSW state of the environment report uses five indicators to assess:

- The extent, condition and clearing of native vegetation in NSW,
- The capacity of the land to support biodiversity and habitat, and
- How many native plants are considered threatened.

The environmental status and environmental trend of vegetation in NSW is based on long-term data. The indicators assessed are: extent of native vegetation, clearing of native vegetation, habitat condition, ecological carrying capacity and number of threatened species listed. The environmental status of all five plant indicators was considered poor and getting worse⁹.

Conflict of 'INS' clearing codes with biodiversity restoration principles

The purpose of the *Land Management (Native Vegetation) Code 2018* is to authorise clearing of native vegetation on regulated land. Local Land Services has a remit to service rural landholders and promotes management of 'INS' as a way to maintain 'open areas that provide the highest

⁸ Thomas, H *et al.* 2025, '[The value of regrowth forests and woodlands for threatened fauna species](#)', *Biological Conservation*, vol. 307.

⁹ Environment Protection Authority 2025, [NSW State of the Environment 2024](#)

economic return'¹⁰. Several studies have been undertaken to understand how to manage 'INS' to promote biodiversity outcomes. However, the way the codes are formulated conflict with ecological science, as detailed in Table 2.

Table 2. Examples of how the existing INS codes do not protect biodiversity, as demonstrated through conflicts with recommended ecological management principles.

Recommendation for INS management	Conflict with allowances under the native vegetation codes
CSIRO 2009 on 'best-practice management of INS within the south-eastern Cobar Peneplain'¹¹: • Plan to achieve or maintain a mosaic-like mixture of vegetation states at the scale of individual properties. • To maintain bird community diversity at the property scale, aim to achieve landscape with somewhere between 33% and 67% of the total area occupied of various types of scrub. • To maintain a diversity of native birds at the regional scale, make sure that some landscapes are dominated (>50%) by scrub vegetation states while others are dominated by agricultural vegetation states	Code 2.1 and 2.2 both allow for up to 90% of 'INS' to be cleared. Only 20 plants of 'INS' need to be retained per hectare – there is no requirement to keep different densities of vegetation.
Woody Weeds and Biodiversity Project 2001¹²: • The establishment and maintenance of a mosaic of woody shrub densities within the mix of broader vegetation, soil and landform types is likely to best achieve a balance between biodiversity outcomes • Management goals need to be established at local and regional scales, utilising site specific information gained from on-ground inspections. On-ground monitoring relevant to these goals is crucial in assessing the success of management strategies.	There is no site inspections nor consideration of site-specific vegetation needs and composition required by the codes. Code 2.1 lets landholders clear land following a self-assessment and notification to Local Land Services. Code 2.2 allows landholders to clear after being issued a code-compliant certificate – a site inspection may be conducted at the discretion of Local Land Service.
Wentworth Group on Accounting for Nature in regional environments 2015¹³: • Poplar box in Central West NSW has three recognisable forms: dense scrub, open scrubland and open woodland. Each form provides habitat for a unique suite of native birds. To maintain habitat for bird species, To maintain habitat for bird species, each form should exist in equal amounts across the landscape: i.e. a ratio of one-third dense scrub, one-third open scrubland and one-third open woodland	Code 2.1 and 2.2 both allow for up to 90% of 'INS' to be cleared. This means only 10% of the original density of 'INS' will be maintained, which is lower than the recommended thirds rule. Only 20 plants of 'INS' need to be retained per hectare – there is no requirement to keep different densities of vegetation.
NSW Office of Environment and Heritage research 2014¹⁴: • No standard management approach should be applied to the removal of encroaching shrubs because shrub effects on ecosystems are strongly dependent on the scale, species and environment. • The provision of ecosystem goods and services by shrublands requires a mixture of different states.	The codes generically apply to all landholders and do not consider biodiversity values across the landscape. Landholders are not required to retain different vegetation states/densities across their property.

¹⁰ Local Land Services 2021, [Managing Invasive Native Scrub in NSW](#) via Youtube

¹¹ CSIRO 2009, Managing Invasive Native Scrublands for Improved Biodiversity Outcomes in Agricultural Landscapes

¹² Ayers, *et al.* 2001, 'Woody weeds, biodiversity and landscape function in Western New South Wales'.

¹³ Wentworth Group of Concerned Scientists 2014, [Accounting for Nature working paper series](#)

¹⁴ Elderidge, D & Soliveres, S 2014, 'Are shrubs really a sign of declining ecosystem function? Disentangling the myths and truths of woody encroachment in Australia', *Australian Journal of Botany*, vol. 62, pp. 594-608

Threatened species in the West and Central West Local Land Services areas

There are 343 animal species listed as threatened under the NSW *Biodiversity Conservation Act 2016*. Of these, at least 82 (24%) occur in the central west and 108 (31%) occur in western NSW LLS area. Further information is required to understand the role that regrowth vegetation (LLS) plays in providing vital habitat to these animals, particularly where 'INS' species have been identified as a core habitat for a species. See expert report authored by Professor Watson for insights on the role the 'INS' plays for wildlife.

Case study: Unquantified value of 'INS' to koalas

River red gums and coolabah are simultaneously listed as the primary food tree species for koalas in western NSW and the central west, and as 'invasive native species'. Similarly, bumble box and black box are simultaneously listed as secondary koala food trees and 'INS' in the region.

In 2019, during a period of severe drought, [a landholder sighted two koalas on their property about 40km out of Bourke](#), while out mustering. It was the first time the species had been spotted in the area in over 30 years.

There is limited information available on the value that 'INS' provides to koalas across the landscape.

The rediscovery of the species in the area indicates how difficult it is to monitor biodiversity, even iconic species, and why a precautionary approach should be taken to ensure appropriate measures are followed to protect habitats that contain known vegetation important to threatened species.

The koala is classified as threatened under both state and federal legislation. A dedicated effort is being undertaken to understand koala populations and to protect and restore their habitat under the NSW koala strategy. Habitat destruction, modification and fragmentation is one of the major threats to koalas; land clearing results in habitat fragmentation that forces koalas to move further to obtain the resources they need, increasing their energy expenditure and exposing them to greater risks.

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Koalas found at Bourke

For the first time in over 30 years, a koala has been spotted near Bourke. NSW National Parks and Wildlife Service Ranger Chris Ghiradello said it was a fantastic find and it's believed there are at least two koalas which have taken up residence on a landholder's property.

Read more in the printed edition of the Western Herald.



Grounds for refusal

The above evidence demonstrates that the current land management framework via which the proposed project would accelerate 'INS' clearing under does not protect biodiversity values.

Therefore, we recommend the project be refused on the following grounds:

- INS harvesting under the local veg codes does not align with best practice ecological principles thus likely to result in significant and unacceptable impacts on biological diversity.
- That the proposed conditions of approval rely on the *Local Land Services* Act for regulation of clearing which cannot satisfactorily reduce the levels of impact on the environment
- The departmental report has not assessed biodiversity impacts created along the value chain.
- The departmental report has incorrectly stated that the project would not result in offsite impacts to other native vegetation when INS laws permit clearing of up to 20% of non-INS species.

Conflicts with relevant government policies and legislation

Table 3. Policies and laws that the proposed project conflicts with

Policy or Law	Comment
<i>Labor party policy on biomass burning</i>	As per their policy platform: ‘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 electricity¹⁵.’ The proposed SSD is a direct contravention of the Labor Government’s current policies.
<i>Natural capital plan</i>	New South Wales is leading the nation as the first state to release a plan for natural capital¹⁶. Natural capital refers to the value of the environmental assets on private land and the services they provide. The plan recognises landholders’ ability to support ecosystem services and places an economic value on the public good they provide. The plan is part of a system to incentivise the protection/retention of environmental values on private land. New funding for the program was allocated on the 13 August 2025¹⁷. This includes funding for regional natural capital advisors who can help landholders understand the opportunities available to them to take advantage of financial incentives – for example, accessing carbon markets by reducing emissions or increasing carbon sequestration. ‘INS’ is shown to store twice as much carbon as un-colonised pastures (see Table 4) Creating markets that accelerate agricultural clearing for ‘INS’ is in opposition to the purpose of natural capital markets.
<i>Key threatening processes – clearing of native vegetation</i>	Clearing of native vegetation is recognised as a key threatening process under the <i>Threatened Species Conservation Act 1995</i>¹⁸. Clearing affects a wide variety of vertebrates and invertebrates, cause the loss of biological diversity, fragment populations and reduce their ability to adapt to change. Based on the relatively low rates of ‘INS’ clearing currently occurring (i.e. ~6,000 hectares removed in 2023) compared to the volumes required by the proposed SSD (i.e. ~20,000 hectares), the project would likely accelerate land clearing in central west and western NSW,
<i>Key threatening processes – removal of dead wood and dead trees</i>	Removal of dead wood and dead trees is listed as a key threatening process under the <i>Threatened Species Conservation Act 1995</i>¹⁹. The ‘removal of dead wood and dead trees’ includes the removal of forest and woodland waste after timber harvesting and removing fallen branches and litter from the landscape. Such structures provided essential habitat for a wide variety of native animals and invertebrates. Removal impacts the environment through: loss of habitat, disruption of ecosystem process and soil erosion. The proposed market for ‘INS’ creates a risk that the maximum amount of woody vegetation/debris is harvested from the landscape, without leaving appropriate amounts of dead wood/trees for biodiversity.

¹⁵ [2024 NSW Labor Platform](#)

¹⁶ NSW Government 2022, [NSW Natural Capital Statement of Intent](#)

¹⁷ Ministerial media release 2025, [\\$3 million to help NSW landholders grow natural capital opportunities](#), 13 August

¹⁸ NSW Government key threatening processes: [Clearing of native vegetation](#)

¹⁹ NSW Government key threatening processes: [Removal of dead wood and dead trees](#)

NSW Waste Avoidance and Resource Recovery Act 2001 & higher order use

In 'Appendix M – Feedstock supply and characterisation study' the proponent acknowledges that the objectives of the *Waste Avoidance and Resource Recovery Act 2001* are:

- (a) to encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of ecologically sustainable development;
- (b) to ensure that resource management options are considered against a hierarchy of the following order
 - (i) avoidance and reduction of waste,
 - (ii) re-use of waste,
 - (iii) recycling, processing or reprocessing waste,
 - (iv) recovery of energy,
 - (v) disposal,
- (c) to provide for the continual reduction in waste generation
- (d) to minimise the consumption of natural resources and the final disposal of waste by encouraging the avoidance of waste and the reuse and recycling of waste,
- (e) to ensure that industry shares with the community the responsibility for reducing and dealing with waste,
- (f) to ensure the efficient funding of waste and resource management planning, programs and service delivery,
- (g) to achieve integrated waste and resource management planning, programs and service delivery on a Statewide basis, and
- (h) to assist in the achievement of the objectives of the Protection of the Environment Operations Act 1997.

As demonstrated by the biomass demands of the project above, the project would accelerate the creation of 'INS' 'waste' beyond normal levels. This is in contravention of the objectives (a) and (b) of the *Act* to reduce environmental harm and, avoid and reduce the production of waste.

As part of the eligibility requirements for 'waste' fuel, the Department state in their report that 'it must be demonstrated that there are no practical, higher order reuse opportunities for the waste'.

The proponent's 'Independent market study of eligible waste fuels' only identifies two uses for 'INS: controlled burning and firewood. Environmental uses should be factored into the consideration of higher order uses. As outlined in Table 3 cleared 'INS' biomass has habitat value when left in the landscape and the removal of dead wood and dead trees is recognised as a key threatening process to biodiversity. 'INS' also has carbon and biodiversity values when not cleared.

2) The project would create significant climate impacts

Greenhouse gas emissions and the impacts of climate change are required to be considered in assessing SSD applications under the EP&A Act because of:

Section 4.15(b), which requires the consideration of the likely impacts of the development, including environmental impacts on both the natural and built environment and social and economic impacts in the locality. We note that environmental impact includes climate change impacts. The IPC is required to consider a project's contribution to climate change and the impacts of climate change globally and in the locality of the project, which includes environment, social and economic impacts (*Denman Aberdeen Muswellbrook Scone Healthy Environment Group Inc v MACH Energy Australia Pty Ltd* [2025] NSWCA 163 at [107] to [109] (Ward CJ) and [234] to [238] (Adamson J)).

Section 4.15(e), which requires consideration of the public interest has been held to include ecologically sustainable development and climate change where relevant to the development being assessed.

NCC commissioned independent expert witnesses to provide advice on the climate impacts of the project and we refer the commission to their reports attached to this submission.

The project would generate over one million tonnes of carbon dioxide emissions from its smokestacks, from the diesel trucks and bulldozers used to clear land and transport trees, and by interrupting the sequestration of carbon in soils and living vegetation.

We note that the proponent and the Planning Assessment have failed to consider almost all of the greenhouse gas emissions caused by the project for two reasons:

The proponent does not include in its calculations over one-million tonnes per annum of scope 1 CO₂ per year emitted at the project's smokestacks, citing an assumption under reporting guidelines that emissions are netted out by land-sector sequestration. In addition, the approximately 500,000 tonnes of land sector emissions caused by the clearing of vegetation are not considered in project documents because these are off-site. Please refer to the expert report by Barraband Consulting for full details.

Nevertheless, these emissions will cause global warming, environmental impacts locally and globally, and will affect NSW's ability to meet its targets in the Climate Change (Net Zero Future) Act 2023 (NSW) (Net Zero Act). Therefore, we consider that these emissions should be considered in full by the Independent Planning Commission.

Also, because the project is likely to cause an increase in the rate of clearing of native vegetation, it is not valid to assume that emissions created will be re-sequestered. The proponent's video evidence submitted to the IPC shows woodland being permanently cleared for pasture. This is not a closed carbon loop, it's a one-way conveyor belt of native vegetation into the atmosphere. As discussed in the following section, studies have shown that 'INS' stores twice as much carbon as un-colonised pasture.

Dense ‘INS’ holds more carbon than grasslands

White cypress pine is classified as an ‘Invasive Native Species’. Researchers from the University of New England and NSW Department of Natural Resources measured the carbon storage in sites with dense white cypress pine regrowth, thinned cypress regrowth and pastures (not yet recolonised by white cypress) on private lands in the north western slopes of NSW²⁰.

The results showed that dense (~7,740 stems/ha) and thinned cypress woodlands (~494 stems / ha) had similar carbon storage value, when coarse woody debris (‘INS’ biomass) was left in the landscape (see table 4). If woody debris is discounted, the results show that dense cypress woodlands store twice as much carbon as both thinned cypress woodlands and pastures.

We note – the density of cypress stems in the study plots is ~7,740 stems/ha for dense woodlands and ~494 stems/ha for thinned woodlands, and that under the Land Management Vegetation codes ‘INS’ can be reduced to 20 stems/ha, thus – carbon storage following ‘INS’ removal is more comparable to the ‘un-colonised’ values represented in the below table.

Table 4. Carbon storage under three cypress pine woodland scenarios: dense, thinned and un-colonised (i.e. pastures).

Table 4 Total carbon storage in different *C. glaucophylla* land uses. Asterisks denote estimates from Burrows et al. (2001)

	Dense	Thinned	Un-colonised
Trees (above-ground)	47.53	15.56	2.75
Trees (roots)*	1.88	3.89	0.73
Soil (0–30 cm)	56.46	57.39	51.59
Ground cover*	1.40	2.00	3.20
Litter	5.03	3.19	1.72
Coarse woody debris	0.00	43.89	0.00
Total (t ha ⁻¹)	122.31	125.92	59.56

Purpose-grown crops are speculative, increasing climate risks

Because the project doesn’t have an economic or regulatory incentive to grow its own biomass, existing native vegetation is likely to be used as a feedstock indefinitely.

While the proponent has stated it will explore the production of purpose-grown crops to feed the boilers, this would require a vast area of agricultural land (estimated at 72,000 hectares in the EIS) which currently has competing land uses and is not owned by the proponent. Growing purpose-grown crops has its own set of impacts and risks, such as bushfire risk, water consumption needs, and biodiversity risks. Until trials are complete, agreements are in place, and risks are appropriately managed, we consider that purpose-grown fuels are speculative and the risk is too high that project could run on clearing of existing native vegetation indefinitely, with high and unacceptable climate impacts.

Grounds for refusal

The above evidence demonstrates that the project should be refused as climate emissions and impacts have not been fully accounted for.

²⁰ McHenry et al. 2006, ‘Soil and vegetation responses to thinning white cypress pine (*Callitris glaucophylla*) on the north western slopes of New South Wales, Australia’, *Plant Soil*, vol. 285, pp. 245-255.

3) Energy Market benefits of the proposed SSD are overstated

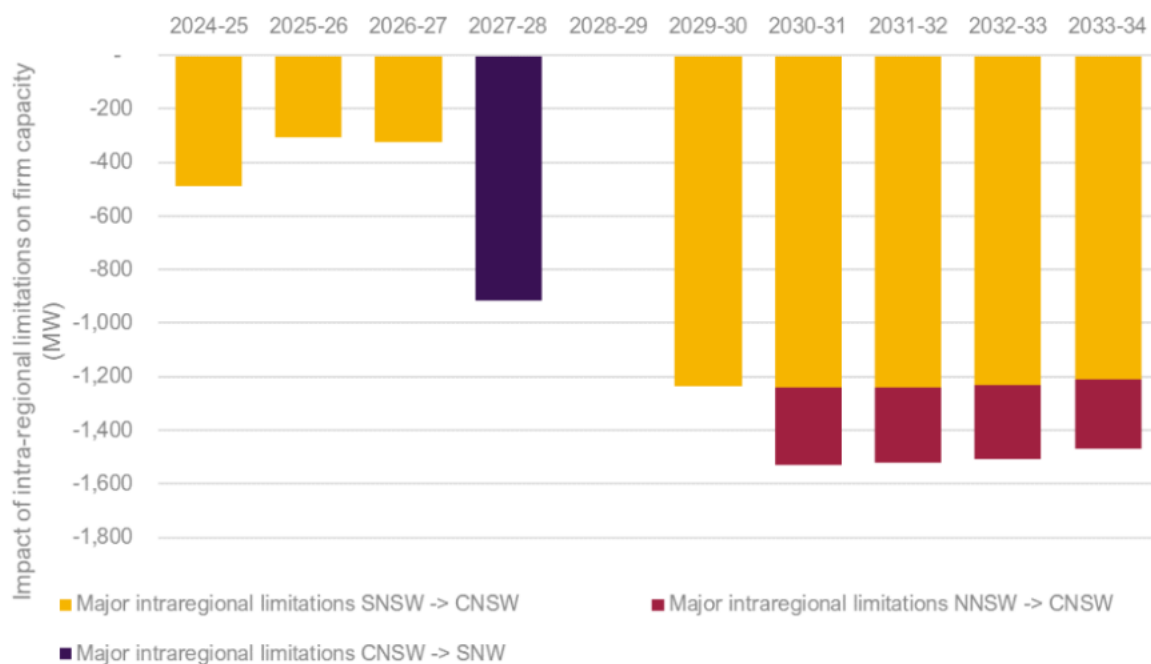
Benefits to the National Electricity Market are overstated

The EIS and Department's assessment report (Planning Assessment) claim that "baseload" electricity generation from the project will make an important contribution to reducing electricity security shortfalls, however these benefits are overstated due to a transmission bottleneck and the availability of alternative dispatchable energy sources.

Verdant commissioned Marsden Jacob to assess the benefits of the Redbank power station to the grid²¹, yet this report presented a skewed picture. The consultant correctly identified an energy security gap when Eraring is expected to close in 2027, yet incorrectly stated that Redbank would help to close this gap. This error was repeated in the EIS and the Planning Assessment.

The energy security gap is caused by a transmission bottleneck between Musswellbrook and Lake Macquarie and will ultimately be resolved by the Hunter Transmission Project. This is shown in the NSW Energy Security Target Monitor report 2024 Figure 10 as a 900 MW limitation (blue bar) on energy transfer from Central NSW to Sydney-Newcastle-Wollongong subregion:

Figure 10 Committed and Anticipated Investments sensitivity, estimated impact of transmission limits on firm capacity



The ESTM 2024 states: "In 2027-28, firm capacity is forecast to be constrained between CNSW and SNW, but this constraint is expected to alleviate in 2028-29 with the Hunter Transmission Project."²²

²¹ Marsden Jacob, [NSW Electricity Supply Gap](#), October 2023

²² AEMO Services, [NSW Energy Security Target Monitor Report 2024](#), pages 26-27

While the Hunter Transmission Project is at risk of a short further delay, in the meantime the NSW government is seeking projects on the south side of this bottleneck through a 500 MW firming tender²³

Longer term, additional dispatchable energy sources are required. However, this proposal is poorly suited to the needs of the modern energy grid because it is relatively inflexible, has high fixed operating costs, and isn't located close enough to Sydney to overcome transmission delivery constraints.

Competition for workforce would delay other, cleaner, energy projects

NSW has a strong development pipeline of clean energy projects, including dispatchable sources. Access to skilled workers is a key constraint to the delivery of these projects and hence the speed of the transition to clean energy. The Planning Assessment incorrectly cites employment as a benefit of the project. In the current context of low unemployment and a skills shortage in the energy and civil construction sectors, the demand this project would put on workers is an economic cost to the state and would hamper the clean energy transition.

²³ <https://www.nsw.gov.au/ministerial-releases/nsw-boosts-energy-security-new-firming-tender>