EnergyCo

NSW GOVERNMENT

Biodiversity

Hunter Transmission Project

Environmental Impact Statement | Fact Sheet | September 2025

The Hunter Transmission Project (the project) is a key part of securing NSW's energy future. It will deliver a new 110-kilometre overhead 500 kilovolt (kV) transmission line from Bayswater (near Muswellbrook) to Olney (near Eraring), connecting into the State's 500 kV network.

Threatened flora survey in Corrabare State Forest

This link will unlock renewable generation from the Central-West Orana and New England Renewable Energy Zones, allowing it to flow into the electricity grid where and when it is needed. By strengthening this part of the network, the project will help keep power affordable and ensure reliable supply as coal-fired power stations retire.

What is an environmental impact statement?

The environmental impact statement (EIS) is a detailed report EnergyCo must prepare so government can assess whether the Hunter Transmission Project should proceed. As critical State significant infrastructure, NSW law requires an EIS to assess potential effects on the environment, communities, and the economy — and explain how negative impacts will be avoided, reduced, or managed, and how benefits will be maximised. The EIS is placed on public exhibition so the community, government agencies, and other stakeholders can review the findings, ask questions and provide feedback. This process ensures transparency, considers all views and helps the government decide whether the project should proceed. Final approval rests with the NSW Minister for Planning and Public Spaces and the Australian Minister for the Environment and Water.

Woodland in Corrabare State Forest

Existing transmission line

Why biodiversity matters for this project

Biodiversity is the variety of all living things — plants, animals, fungi and microorganisms — and the ecosystems they form. It underpins healthy environments, resilient communities and sustainable economies.

The Hunter Transmission Project may affect biodiversity and natural habitats.

EnergyCo is taking steps to avoid, reduce and manage these impacts, and will use two key tools to guide conservation efforts in the Hunter region:

- **Conservation Investment Strategy (CIS):** will set the conservation priorities for the Hunter–Central Coast Renewable Energy Zone.
- **Strategic Offsets Delivery Agreement (SODA):** will deliver the environmental offsets needed to balance the project's impacts.

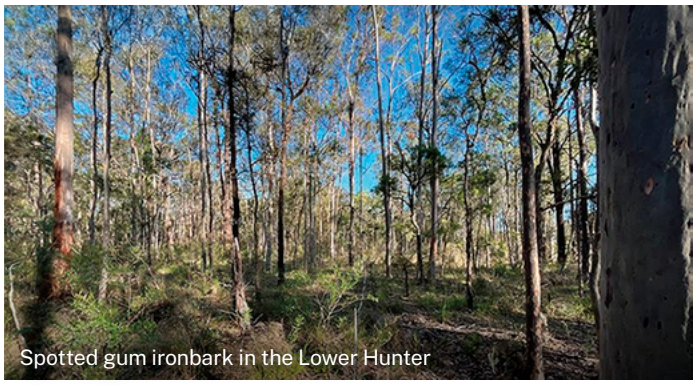
How biodiversity has been assessed

The biodiversity assessment was carried out in line with NSW and Australian legislation, the Biodiversity Assessment Method (BAM) 2020, and best-practice guidelines, including the use of remote assessment guidelines where appropriate.

The assessment included:

- **Reviewing existing data and reports on vegetation and threatened species**
- **Field surveys in multiple seasons to verify habitats and species presence**
- **Mapping vegetation communities and threatened species habitat**
- **Assessing aquatic habitats for threatened aquatic species**
- **Predicting direct, indirect, prescribed, and serious and irreversible impacts**
- **Identifying mitigation and offset measures**

Some areas could not be directly surveyed due to seasonal conditions or access limitations. In these cases, the presence of threatened species was assumed or remote assessment tools were applied. This conservative approach ensures potential impacts are not underestimated.



Spotted gum ironbark in the Lower Hunter

Ridgetop in the Pokolbin State Forest overlooking the forested plateau

Protecting threatened species and habitats

The biodiversity study looked at the project footprint (where construction and operation will occur), plus a surrounding buffer area to understand potential broader impacts.

Studies show this area includes:

- Three threatened ecological communities (types of endangered bushland):
  - Central Hunter Valley eucalypt forest and woodland
  - River-flat eucalypt forest on coastal floodplains
  - Warkworth Sands Woodland of the Hunter Valley
- A range of native plants and animals, including threatened and migratory species.

The assessment found the project will have some unavoidable impacts. To address this, EnergyCo will put in place conservation measures and offsets — protecting and managing other important areas to balance these impacts and help safeguard local biodiversity.

Designing the project to protect biodiversity

When planning the project route, EnergyCo worked to avoid important natural areas wherever possible.

These included:

- Watagans and Werakata National Parks
- Warrawolong Flora Reserve
- existing conservation and biodiversity offset sites
- healthy patches of Central Hunter Valley Eucalypt Forest and Warkworth Sands Woodland ecological communities.

These areas are home to rare wildlife, including the Regent Honeyeater and Swift Parrot.

After choosing the general route, the design of the transmission line was adjusted several times, using information from on-site ecological surveys and local site conditions.

These refinements reduced the amount of vegetation to be cleared by over 200 hectares compared to the first design and avoided more than 100 hectares of valuable ecological communities and key habitats for species at risk of serious and irreversible impact.

The final route selected and assessed in the EIS represents the option with the least impact on high-value biodiversity areas while still meeting the project's operational and safety requirements.

Key findings of the biodiversity assessment

The biodiversity assessment identified the likely impacts of the Hunter Transmission Project during both construction and operation, based on field surveys, desktop analysis, and ecological modelling.

During construction

- Around **762 hectares** of native vegetation will be directly affected:
  - **546 hectares** will be fully cleared
  - **216 hectares** will be partially cleared.

This vegetation covers **34 types of plant communities**, around 40% of which are already in a disturbed condition.

- Endangered ecological communities:
  - about **207 hectares** are part of seven ecological communities listed as endangered under the *NSW Biodiversity Conservation Act 2016*
  - three of these communities, totalling about 158 hectares, are also listed as critically endangered under Australia's *Environment Protection and Biodiversity Conservation Act 1999*
  - two of the communities that will be directly affected are considered at risk of serious and irreversible impact:
- **4.22 hectares** of Hunter Floodplain Red Gum Woodland in the NSW North Coast and Sydney Basin bioregions
- **12.37 hectares** of Warkworth Sands Woodland in the Sydney Basin bioregion
- The largest single area of impact is to the **Central Hunter Grey Box–Ironbark Woodland** in the NSW North Coast and Sydney Basin bioregions, where about **141.38 hectares** of thinned, poor-quality or planted native vegetation will be cleared.
- Some of these communities are considered particularly sensitive because they provide important habitat for rare and declining wildlife species.

Wet forest in Corrabare State Forest

Example of the Hunter Valley floor


Photo credit: Allan Richardson

Long-nosed potoroo in the Olney State Forest

Plants and animals affected during construction

Building the project could directly affect:

- **38 threatened plant species**, including:
  - 22 species listed under both NSW and Australian legislation
  - 14 species listed under NSW legislation only
  - 2 species listed under Australian legislation only
  - Of these, 8 are considered at risk of serious and irreversible impact
- **28 threatened animal species**, including:
  - 15 species listed under both NSW and Australian legislation
  - 13 species listed under NSW legislation only
  - Of these, 6 are considered at risk of serious and irreversible impact

Not all of these species have been recorded during surveys. In some cases, their presence has been assumed because suitable habitat exists in the project area. About 16% of the disturbance area could not be surveyed at the right seasonal window, so a precautionary approach was taken to avoid underestimating potential impacts.

EnergyCo will manage these risks by avoiding and reducing impacts where possible, and offsetting unavoidable impacts through detailed management and conservation plans.

Other possible impacts during construction

Work could also have effects on vegetation and wildlife outside the direct disturbance area, including:

- disturbance to nearby habitats such as:
  - caves that may be used by microbats or the Sooty Owl for breeding
  - areas where Brush-tailed Rock Wallabies are known to live
  - aquatic or gully habitats that may support rare frog species
  - areas near known locations of the Hunter Valley delma
- reduced quality of nearby habitat due to edge effects, noise, dust or light
- spread of weeds, pests and diseases from work sites
- loss of food, shelter or shade for wildlife
- loss of breeding sites
- damage to sensitive plants through trampling
- increased risk of fire
- risk of birds or animals colliding with the transmission lines or being affected by electric and magnetic fields
- reduced connections between habitats, and impacts on key habitat features such as hollow-bearing trees and natural water flows.


Outcrops and slopes leading into gullies in Corrabare State Forest

Key definitions

Biodiversity values: As defined in the NSW Biodiversity Conservation Act 2016, these include vegetation integrity (condition of vegetation compared to natural state) and habitat suitability (degree to which habitat meets the needs of threatened species).

Direct impacts: Areas permanently or temporarily cleared for construction, operation, or maintenance.

Indirect impacts: Effects on plants, animals and habitats from causes such as noise, dust, light or weed spread that occur outside the disturbance area.

Prescribed impacts: Additional impacts such as fragmentation of habitat or disruption to fauna movement.

Indicative disturbance area: The estimated area of land that may need to be cleared based on current design and construction methodology.

During operation

Once the project is built, the main work potentially affecting biodiversity would be occasional vegetation management to maintain a safe distance between plants and the transmission lines, and to maintain asset protection zones.

This means trimming or removing plants that grow too close to the infrastructure.

There may also be some indirect effects, such as:

- breaking up habitat areas and making it harder for animals to move between them
- a small risk of birds or other animals colliding with the transmission lines
- possible impacts from electric and magnetic fields near new infrastructure.

Because the work during operation is much smaller in scale than during construction, these effects are expected to be limited and not significant.

Measures to reduce biodiversity impacts

The project will include a range of actions to protect plants, animals and important habitats:

- **Keep improving the design so it avoids the most valuable natural areas wherever possible**
- **Check for wildlife before any clearing starts, and move animals to safety**
- **Keep and move important habitat features, such as trees with hollows used by certain birds and animals**
- **Restore riverside vegetation to protect water quality and aquatic life**
- **Add bird diverters to transmission lines within one kilometre of wetlands or rivers to help prevent bird collisions**
- **Create exclusion zones where no vegetation can be cleared and use strict controls in sensitive areas.**

Biodiversity offsets

Biodiversity offsets are compensatory measures that address these remaining impacts. They work by protecting and improving similar habitats in other places so that overall biodiversity values in a biodiversity region are maintained or improved.

For the Hunter Transmission Project, offsets will be needed for impacts to:

- Native vegetation and important plant communities
- Endangered plants and animals
- Species and habitats at high risk of serious decline.

It's estimated the project will need to secure:

17,109
ecosystem credits (direct impacts)

209,996
species credits (direct impacts)

7,670
additional species credits (indirect/ prescribed impacts)

These "credits" are a way of measuring the amount of conservation work needed to offset the remaining impacts of the project.


Pokolbin State Forest

How EnergyCo will deliver the offsets

EnergyCo plans to meet these requirements through an agreement with the NSW Government called a Strategic Offsets Delivery Agreement (SODA). A SODA is part of the NSW Biodiversity Offsets Scheme, defined under the *Biodiversity Conservation Act 2016*.

Instead of EnergyCo buying and managing conservation land itself, it provides funding to the NSW Government to secure biodiversity credits or carry out conservation work in places that are a priority for the region.

To make sure the work is focused on the most important areas, EnergyCo will help develop a Conservation Investment Strategy (CIS) for the Hunter region.

This plan will set out the key conservation priorities. The SODA will then fund projects to protect and improve those areas, helping to balance the environmental impacts of the Hunter Transmission Project.


Ridgetop in the Pokolbin State Forest overlooking the forested plateau

Stay informed and have your say

The Hunter Transmission Project EIS is on public exhibition from 27 August to 24 September 2025. You can:

- Read the full EIS, including **Chapter 12** and Technical Report 1 for the biodiversity assessment, mitigation measures, and management plans, on the NSW Planning Portal.
- Contact the project team at any time, including during the public exhibition period:
  - **Email:** htp@energyco.nsw.gov.au
  - **Call:** 1800 645 972 (9am-5pm, Monday-Friday)
  - **Visit:** energyco.nsw.gov.au/htp

Make a submission

You can provide feedback on the Hunter Transmission Project Environmental Impact Statement (EIS) during the exhibition period.

By post

Send to: Director–Energy Assessments, Department of Planning, Housing and Infrastructure, Locked Bag 5022, Parramatta NSW 2124

Your submission should include:

- Your name and address (can request to be withheld)
- Application name: Hunter Transmission Project
- Application number: SSI-70610456
- A short statement on whether you support, object, or want to comment on the proposal
- Reasons or supporting information for your views

Pokolbin State Forest

Online

Visit the NSW Planning Portal at planningportal.nsw.gov.au/major-projects/have-your-say → search 'Hunter Transmission Project' → click 'Make a submission'

For more details, visit the NSW Planning Portal at planningportal.nsw.gov.au/major-projects/have-your-say

Contact us

EnergyCo is the NSW Government statutory authority responsible for delivering the HTP as a critical part of transitioning to a cleaner future under the Electricity Infrastructure Roadmap.

htp@energyco.nsw.gov.au

1800 645 972 (9am to 5pm, Monday to Friday)

energyco.nsw.gov.au/htp

Scan the QR code for more information.

If you need help understanding this information, please contact the Translating and Interpreting Service on **131 450** and ask them to call us on **1800 645 972**.