



EnergyConnect (NSW-Eastern Section)

Community guide to the EIS

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About EnergyConnect

What is the project and why is it needed?

EnergyConnect is one of the nation's largest electricity infrastructure projects. It will deliver the infrastructure required to support Australia's transition to a clean energy future and includes a new 900 km electricity transmission line, known as an interconnector.

The interconnector is being built between Wagga Wagga in New South Wales and Robertstown in South Australia, with a connection to Red Cliffs in Victoria, connecting the power grids of the three states.

EnergyConnect will also lower power bills for homes and businesses and create 1,500 jobs, primarily across regional NSW.

How is the project being delivered?

The NSW Minister for Planning has declared EnergyConnect *Critical State Significant Infrastructure*.

Transgrid is delivering the NSW section of EnergyConnect in two stages:

- NSW-Western Section from the NSW/SA border to Buronga through to the NSW/Victoria border
- NSW-Eastern Section from Buronga to Wagga Wagga.

The NSW Government has approved the NSW-Western Section. You can register with the [NSW Government's Major Projects Portal](#) to receive updates.



This document is a community guide to the EnergyConnect (NSW-Eastern Section) Environmental Impact Statement (EIS). The EIS assesses environmental issues, including landscape character, visual amenity, economic impact, traffic, and cultural heritage. The EIS also identifies strategies to avoid, mitigate, and manage potential impacts.

To view the EIS, please visit the [Department of Planning and Environment \(DPE\) website](#).

What is an Environmental Impact Statement?

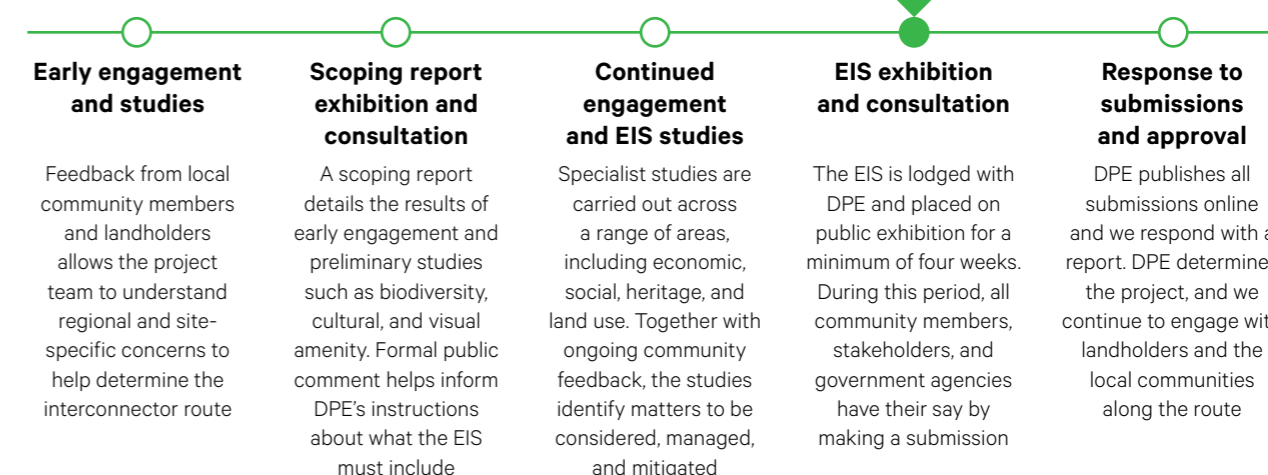
Under the *Environment, Planning and Assessment Act 1979* (NSW), *Critical State Significant Infrastructure* must go through a comprehensive assessment process, which includes the development of an Environmental Impact Statement (EIS).

An EIS is a document that provides information on a project to help the Minister for Planning decide whether that project should be approved.

An EIS:

- summarises the technical studies carried out to determine the potential impacts of a project including economic, social and environmental considerations
- sets out proposed management measures to avoid or minimise those impacts
- summarises the stakeholder and community engagement undertaken and the engagement results.

EIS timeline



Engagement activities

- | Building project awareness | Providing accessible information | Implementing consultation activities |
|--|--|--|
| <ul style="list-style-type: none"> • 97 print advertisements across 10 media publications with an estimated readership of 153,200+ • 72 social media posts across 25 local community pages with 63,500+ followers • 2,700 flyers, poster displays, and other materials displayed at prominent locations | <ul style="list-style-type: none"> • 11 guides and fact sheets developed for EnergyConnect • 124 community calls and emails responded to via the project phone line and email address • 400+ recipients to a monthly e-newsletter • 9,500+ visits to the project webpage | <ul style="list-style-type: none"> • 29 community information sessions both online and at 15 locations along the route • 643 property-specific meetings with landholders and property managers • 9,500+ views of the online interactive map, with 319 comments provided |

NSW-Eastern Section Buronga to Four Corners

Route refinement

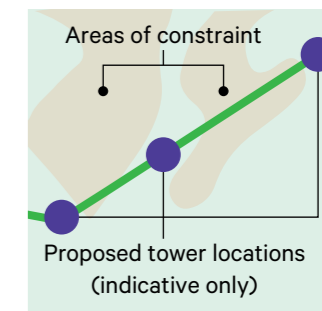
A broad study area was initially identified between Buronga and Wagga Wagga. This study area has gradually been refined to reflect extensive feedback from local community members and landholders, specialist studies, and detailed engineering design work. To finalise the interconnector route, we worked with landholders to identify an 80 m easement corridor.

Parallel existing infrastructure

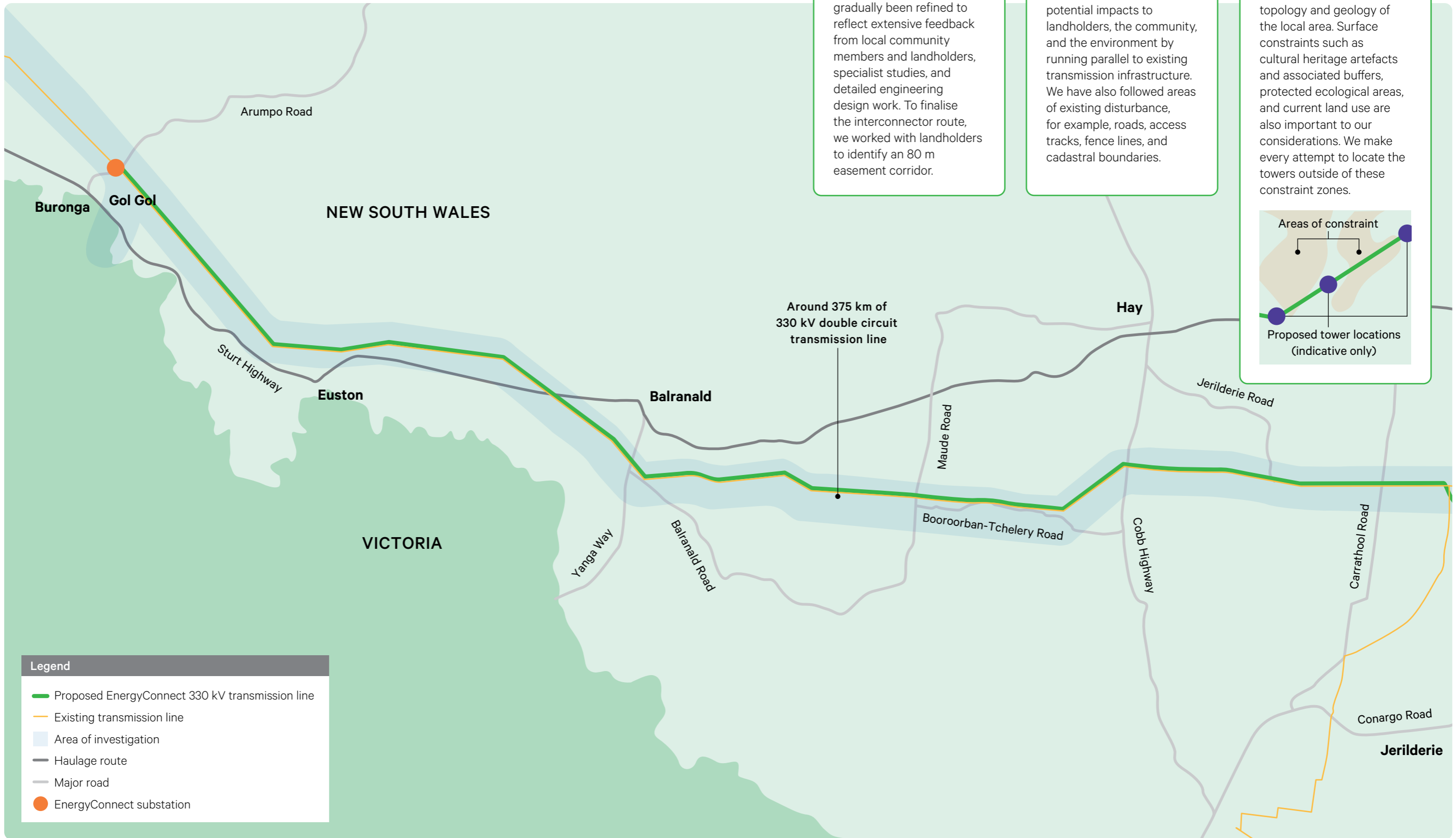
In locating the proposed transmission route, we have tried to minimise potential impacts to landholders, the community, and the environment by running parallel to existing transmission infrastructure. We have also followed areas of existing disturbance, for example, roads, access tracks, fence lines, and cadastral boundaries.

Locating individual towers

We consider several factors in locating the individual towers. This includes the topology and geology of the local area. Surface constraints such as cultural heritage artefacts and associated buffers, protected ecological areas, and current land use are also important to our considerations. We make every attempt to locate the towers outside of these constraint zones.



Around 375 km of
330 kV double circuit
transmission line



Legend

- Proposed EnergyConnect 330 kV transmission line
- Existing transmission line
- Area of investigation
- Haulage route
- Major road
- EnergyConnect substation

NSW-Eastern Section Four Corners to Wagga Wagga

Haulage routes

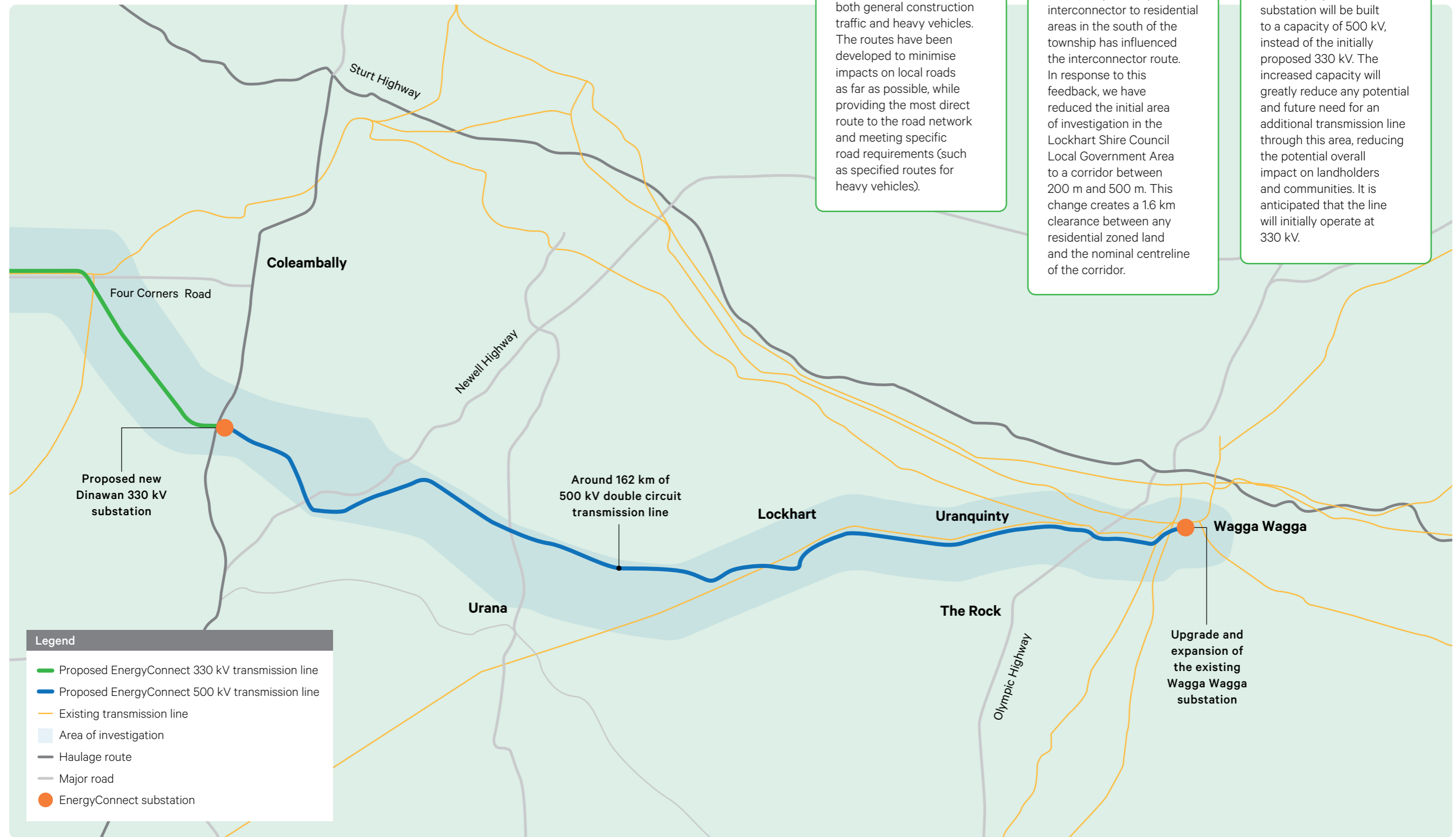
Construction vehicle movements will occur along the length of the corridor. Public roads will be used by both general construction traffic and heavy vehicles. The routes have been developed to minimise impacts on local roads as far as possible, while providing the most direct route to the road network and meeting specific road requirements (such as specified routes for heavy vehicles).

The route around Lockhart

Feedback from the Lockhart community about the proximity of the interconnector to residential areas in the south of the township has influenced the interconnector route. In response to this feedback, we have reduced the initial area of investigation in the Lockhart Shire Council Local Government Area to a corridor between 200 m and 500 m. This change creates a 1.6 km clearance between any residential zoned land and the nominal centreline of the corridor.

Future-proofing the network

The transmission line between Wagga Wagga and the proposed Dinawan substation will be built to a capacity of 500 kV, instead of the initially proposed 330 kV. The increased capacity will greatly reduce any potential and future need for an additional transmission line through this area, reducing the potential overall impact on landholders and communities. It is anticipated that the line will initially operate at 330 kV.



Construction

Subject to NSW Government and Commonwealth planning and environmental approvals, construction of EnergyConnect will commence in late 2022 and will be completed in three phases:

- 1 **enabling works phase** – from late 2022
- 2 **main construction phase** – from late 2022 to mid 2024
- 3 **commissioning, demobilisation, and remediation phase** – from mid 2024 to early 2025.

Construction work would be carried out seven days per week between 7 am and 7 pm.

Enabling works phase

To support the delivery of EnergyConnect, some activities are expected to commence earlier as part of a staged construction approach. Enabling works are low-impact, pre-construction activities that will enable the main construction activities to commence shortly after. Enabling works include:

- biodiversity and heritage investigations
- installing monitoring equipment and environmental controls
- clearing vegetation
- connecting services and relocating utilities
- establishing access tracks.

Additional information about enabling works can be found in section 6.6.1 of the EIS.

Main construction phase

Following the enabling works phase, the main construction activities will commence. The main construction is anticipated to take around 18 months, with construction at each transmission line structure being intermittent. The infrastructure to be constructed in this phase include:

- transmission line infrastructure
- upgrade and expansion of the existing Wagga Wagga substation
- construction of the Dinawan 330 kV substation and associated works.

Additional information about the main construction activities can be found in section 6.6.2 of the EIS.

Transmission line infrastructure

The NSW-Eastern Section proposal includes around 540km of transmission line:

- about 375 km of new 330 kV double circuit transmission line and associated infrastructure between the existing Buronga substation and the proposed Dinawan substation
- about 162 km of new 500 kV double circuit transmission line and associated infrastructure between the proposed Dinawan substation and the existing substation at Wagga Wagga.

The transmission line would be supported on a series of guyed or self-supporting towers typically spaced between 400 m and 600 m apart. The towers would range in height from 40 m to 65 m, depending on local conditions.

Guyed towers

Guyed towers are structures with a central steel column supported by four steel cables (guy wires). The guy wires are anchored to the ground providing the structure strength and stability.

Guyed tower heights will range from 40 to 60 m, with the guyed wires extending up to approximately 35 m from the base of the structure, creating an overall square footprint of around 50 x 50 m. The actual construction footprint is significantly smaller with less disturbance to the land and environment.

Self-supporting towers

Self-supporting towers are supported by four legs, each with individual foundations.

Self-supporting tower heights will range from 40 to 65 m with a square footprint of up to 26 x 26 m.

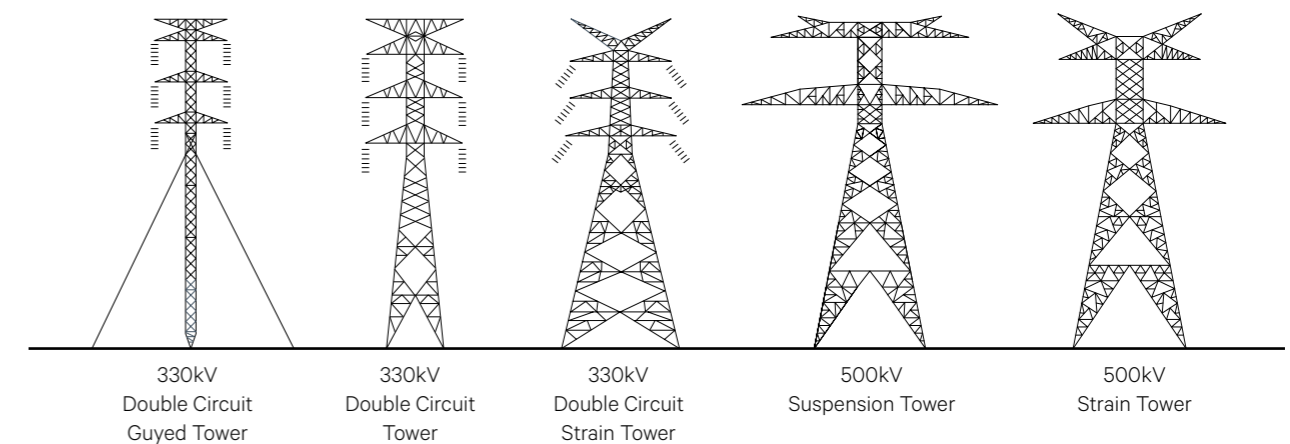
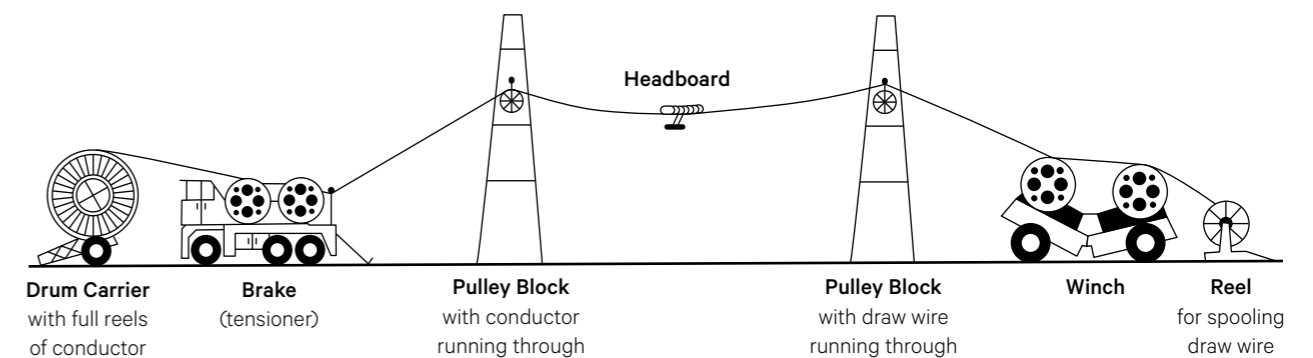


Figure is not to scale. Typical widths only, may vary on a case-by-case basis.

Construction process

Generally, the main activities associated with the construction of the transmission lines include:

- excavation works at each tower site, for the installation of tower foundations
- tower assembly, typically done by assembling the tower in sections on the ground and hoisting or lifting successive sections into place using cranes
- stringing the transmission line, by either a ground-pulled draw wire (with brake/winch sites) or a line stringing drone.



Note: Schematic illustration only. The location of brake and winch components could be up to around 10 km apart (up to around 20 towers, not consecutive towers).

Substations

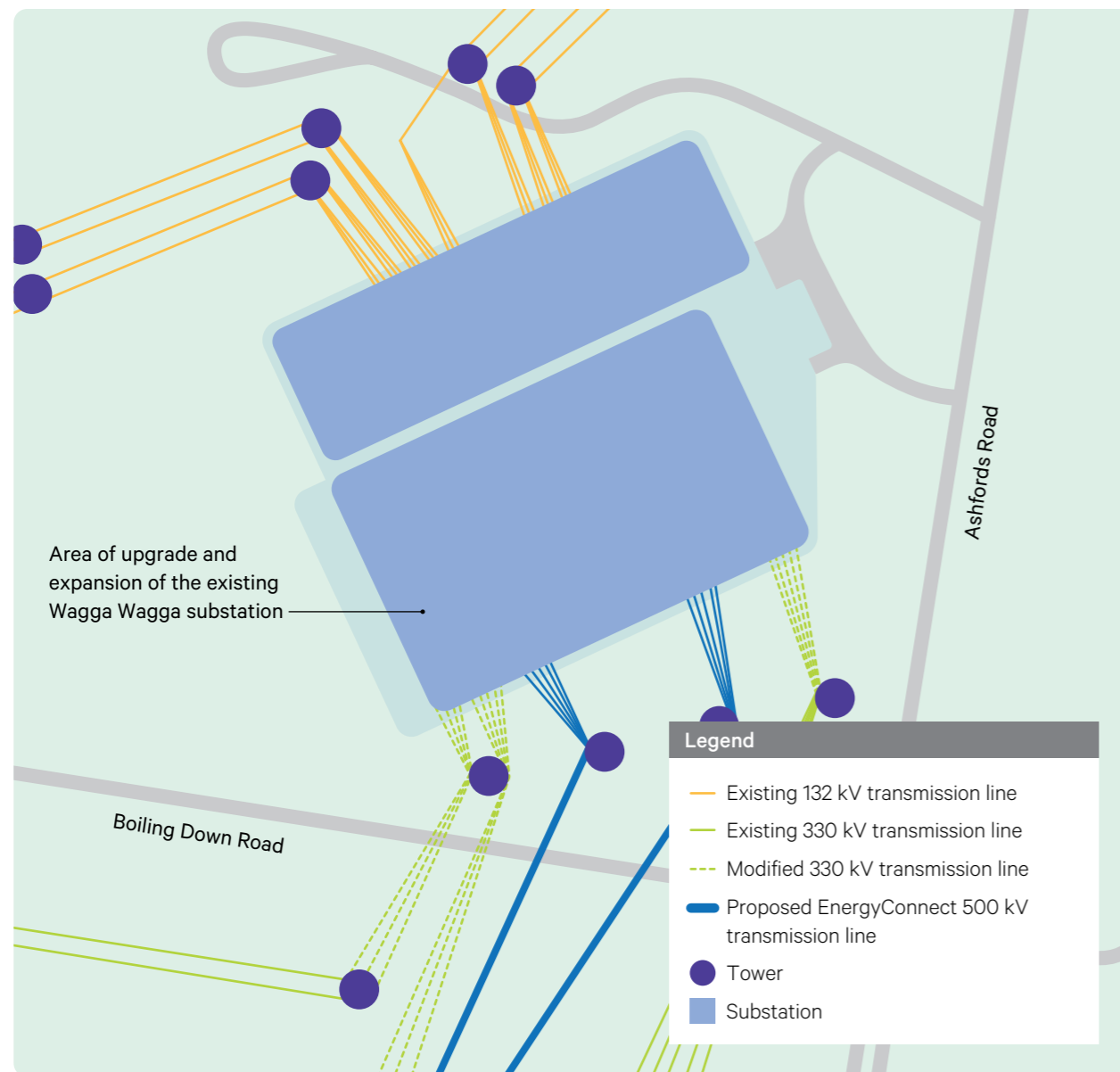
EnergyConnect will require the upgrade and expansion of Transgrid's existing Wagga Wagga substation on Ashfords Road and the construction of one new substation, known as Dinawan.

Wagga Wagga

At Wagga Wagga, an upgrade and expansion to the existing substation are required to connect the new transmission line to the network.

Works will include installing new line bays, relocating and upgrading existing bays and associated electrical and civil works such as drainage and earthworks.

Wagga Wagga substation



Dinawan

A new substation is needed to meet transmission network and systems safety requirements, and allow greater connectivity in the region.

A location between Buronga and Wagga Wagga, approximately 30 km south of Coleambally, was selected to allow sufficient space for future expansion and renewables connections while considering existing land uses and environmental factors.

The new substation will be known as the Dinawan substation. Dinawan is the local Wiradjuri word for emu.

Dinawan substation



Temporary and ancillary infrastructure

Three communication huts containing signal boosting equipment will be built along the alignment. Access roads will also be built or upgraded as required. Other ancillary works necessary to construct the transmission line and substation can include laydown and staging areas, concrete batching plants, brake/winch sites, and site offices.

Commissioning, demobilisation, and remediation phase

Commissioning is the process of integrating the new infrastructure into the existing electricity network and making it operational. Demobilisation is removing all remaining construction materials and equipment from sites and rehabilitating the project areas in accordance with project commitments.

Additional information about commissioning, demobilisation, and remediation activities can be found in section 6.6.3 of the EIS.

Environmental Impact Statement (EIS)

The EIS is informed by several studies on specific environmental considerations for the proposal. These studies identify potential impacts to the environment and communities and propose management measures to avoid or minimise these impacts.

Environmental aspects for the project and key outcomes of the assessments are outlined below.

Biodiversity

Ecological surveys were extensively conducted across the proposal area. These surveys identified a range of existing flora and fauna within the study area, including various threatened flora and fauna like the endemic Plains Wanderer.

Measures to minimise potential impacts include preparing a biodiversity offset strategy as well as infrastructure-specific measures such as locating transmission line towers outside high-value biodiversity areas and locating construction laydown areas or work sites within already disturbed areas.

Additional information about biodiversity can be found in Chapter 9 of the EIS.

Heritage

Detailed consultation and field surveys led to the identification of Aboriginal and non-Aboriginal heritage items and sites. In addition to previously recorded sites, the field surveys uncovered 91 previously unrecorded Aboriginal sites, three new potential non-Aboriginal historical heritage items and two new non-Aboriginal historical archaeological sites. No items of World, National, Commonwealth or State Heritage significance were identified as being impacted by the proposal.

Management measures to protect items and sites have been developed. These include the proposed route aiming to protect, conserve, and manage the significance of Aboriginal objects and culture and non-Aboriginal heritage.

Additional information about Aboriginal heritage can be found in Chapter 10 of the EIS, with historic heritage in Chapter 11.

Land use and property

Existing land uses were mapped, and the environment analysed, showing more than 93 per cent of land in the study area is mainly used for agricultural purposes including sheep and cattle grazing, and dryland cropping.

Measures to minimise impacts to current land use include consulting landholders on the timing and location of construction works to minimise impacts to their operations.

Additional information about land use and property can be found in Chapter 12 of the EIS.

Landscape character and visual amenity

Local surveys identified there would be typically low to moderate landscape and visual impacts across all areas during construction and operation.

A relatively small number of visual impacts are anticipated on private residential properties, however no adverse impacts on significant vistas was identified.

Potential impacts to private properties near the transmission lines would be reduced by maximising the spacing of transmission line structures. Potential screening may also be developed in consultation with affected landowners in an effort to reduce disruption to views.

Additional information about landscape character and visual amenity can be found in Chapter 13 of the EIS.

Social

Targeted consultation was conducted across the local area to understand how the proposal would affect communities including their way of life, health and wellbeing, and access to services and infrastructure. The consultation identified generally minor to moderate impacts across all areas during construction and operation.

Measures to manage and reduce potential impacts include ongoing consultation with stakeholders such as landholders, Local Government and emergency services, and seeking local suppliers and staff for the project.

Additional information about social impacts can be found in Chapter 14 of the EIS.

Economic

Increased economic activity for the regional economy was identified through expenditure on goods, services and local employment. The proposal would provide around 500 full-time equivalent construction jobs, of which 20 per cent would be sourced locally in the study area. Non-labour expenditure of around \$106 m in the region during the first year of construction would create around 571 direct and indirect jobs and create \$159 m in gross business turnover.

Employment and business opportunities would be maximised through local procurement where possible and collaboration with local Councils and chambers of commerce.

Additional information about economic impacts can be found in Chapter 15 of the EIS.

Hydrology, flooding and water quality

The hydrology and flooding study included the catchment areas of the Murrumbidgee River and the Lower Murray River. Assessments were conducted on flooding impacts; water quality, supply and resources; and geomorphology – the form, shape, size and structure of watercourses.

Construction of the proposal would have a negligible impact on flood behavior with a short-term and manageable effect on water demands. Practicable measures to minimise potential flood risks at construction areas would be implemented. In addition, a water quality monitoring program will be established, and a soil and water plan implemented to minimise ground disturbance.

Additional information about hydrology, flooding and water quality can be found in Chapter 16 of the EIS.

Air quality

The main existing emissions in the proposal study area were wind-blown dust from exposed land, agricultural activities and from vehicles using the local road network.

Proposed management measures to reduce impacts include using water sprays to suppress dust, minimising traffic volumes, and implementing emission management measures at compounds and accommodation sites.

Three ambient air quality monitoring stations at Buronga, Hay and Wagga Wagga would record air quality data during construction and operation.

Additional information about air quality can be found in Chapter 17 of the EIS.

Noise and vibration

Extensive noise and vibration assessments were undertaken across the proposal study area to understand how construction and operation may affect communities, including at night.

Measures to manage potential noise and vibration impacts include minimising the number of items operating at one time; installing screens, barriers or other noise source controls near noise sources; scheduling construction activities to avoid out-of-hours work, where feasible and reasonable; and consulting with those potentially affected about upcoming activities.

Additional information about noise and vibration can be found in Chapter 18 of the EIS.

Traffic and access

The existing road network across the proposal study area consists of national, state, regional and local roads. During construction, local roads would continue to operate within capacity with negligible to no change in performance, and across the existing road network there would be an overall low increase in peak hourly traffic.

Measures to manage potential impacts include distributing heavy vehicle traffic movements throughout the day to minimise their impact on town centres' peak traffic activities and notifying communities of any major works that may disrupt local road networks.

Additional information about traffic and access can be found in Chapter 19 of the EIS.

Additional factors detailed in the EIS include:

- Hazards and risks (Chapter 20)
- Soils, contamination and groundwater (Chapter 21)
- Waste management and resource use (Chapter 22)
- Cumulative impacts (Chapter 23).

How to make a submission

Making a submission is an important part of the EIS process and we encourage everyone to have their say. The Department of Planning and Environment (DPE) must receive your submission before the close of the exhibition period and you need to include:

- 1 your name and address
- 2 the application name: EnergyConnect (NSW-Eastern Section)
- 3 the application number: SSI-9172452
- 4 a brief statement on whether you support or object to the proposal
- 5 the reasons why you support or object to the proposal.

It is DPE policy to place copies of submissions on its website. If you do not want your personal information made public, please state this clearly at the top of your submission.

Mark your submission for the attention of Director – Energy Assessments and submit it in one of these ways:

DPE Major Projects Planning Portal

Post

Major Projects Assessment Department of Planning and Environment
 Locked Bag 5022
 Parramatta NSW 2124

Disclosure

Anyone lodging submissions must declare reportable political donations (including donations of \$1,000 or more) made in the previous two years. For more details, and a disclosure form, [visit the DPE donations page](#).

Privacy

Under section 1152(5) of the *Environmental Planning and Assessment Act 1979* (NSW), the Director-General may provide copies of submissions received during the exhibition period, or a summary of the submissions, to Transgrid. All submissions and information obtained during the public exhibition period will be used in accordance with the *Privacy Act 1988* (Cth). All submissions received will be regarded as public documents and any information contained in them can be published in subsequent assessment documents.

Copies of the submissions received on the project may be issued to interested parties. If the author of a submission does not wish the information to be distributed, this needs to be clearly stated in the submission.

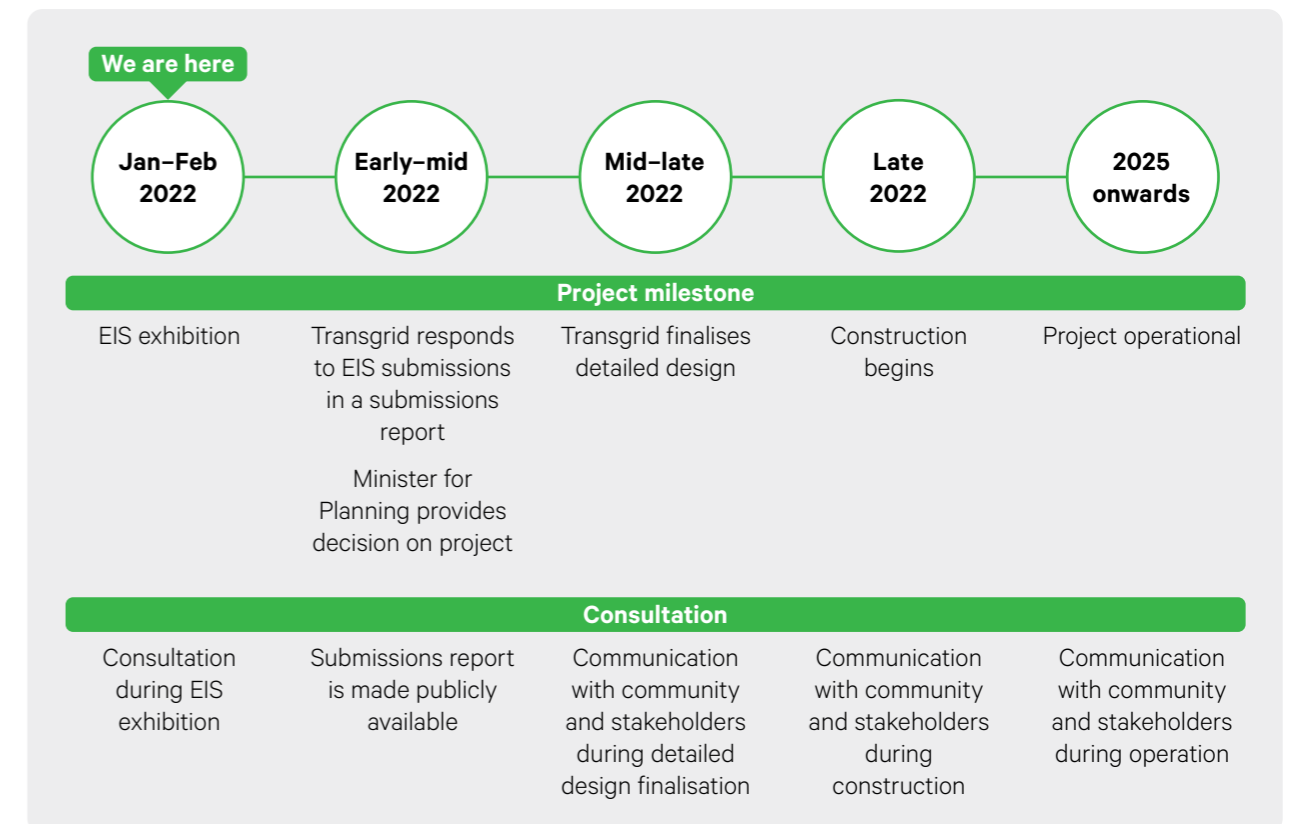
Before making your submission, [read the DPE Privacy Statement](#) or call 1300 305 695 for a copy.

Next steps

Following the EIS exhibition, feedback will be summarised in a submissions report, which will be made publicly available. Transgrid will consider all feedback and provide a response.

The Minister for Planning will then make a decision about whether to approve the proposal.

Construction of EnergyConnect would commence in late 2022, subject to NSW Government and Commonwealth planning approvals.



Connect with us

Transgrid is committed to working with landholders and communities through all stages of EnergyConnect. Please connect with us if you need any information.



Find out more at
Telephone: 1800 49 06 66 (free call)
Email: pec@transgrid.com.au
transgrid.com.au/energyconnect