



Energy & Water
Ombudsman NSW

New energy transmission infrastructure



Australia aims to achieve net zero carbon emissions by 2050. In NSW three of the four coal-fired power stations are retiring in the next 10 years, so the NSW Government is coordinating our electricity system to transition towards renewable energy, generated through sources such as wind and solar.

What is transmission infrastructure?

Transmission infrastructure transports high-voltage electricity over long distances like a highway system for electricity. It includes transmission towers, electricity lines or wires, and energy hubs or substations. It connects electricity generators like power stations to the poles and wires that make up the distribution network that transports electricity on to consumers.

Why does NSW need new transmission?

New transmission lines need to be built to connect renewable generators to the existing electricity network. Existing transmission will be extended to reach areas where solar and wind farms will be built, and in some areas upgraded to enable more electricity to be transported.

How are the transmission routes decided?

Major transmission projects go through an extensive a process to consider the need, potential impacts and cost of the infrastructure. Due to the large distances the electricity needs to travel, the planned transmission routes can cross highways, public land and private land. If transmission lines cross privately-owned land, the transmission developer will need to obtain an easement or a "right of way" from the landholder to allow them to build, operate and maintain the infrastructure.

The role of the Energy & Water Ombudsman NSW (EWON)

We offer a free and independent service – we're not a consumer advocate, nor do we represent government or industry.

EWON can take complaints or enquiries from directly impacted landholders and community members dissatisfied with how their complaints are handled by renewable energy infrastructure developers. We also engage with community members and stakeholders to provide independent advice and assistance at community events and meetings.



EWON cannot stop or delay transmission or renewable energy projects. We work to ensure the correct processes have been followed and work with stakeholders to suggest and influence improvements in the sector.

Who can contact us?

If you are a landholder or community member with questions, concerns or a complaint about energy transmission infrastructure being developed near you, contact the relevant developer first. If you are not satisfied with how your complaint has been handled, contact us.

If we can't help, we'll connect you with the right people to assist you. We work closely with government, community and industry organisations to make sure you can access the right service.

Steps involved in planning the transmission routes



Step 1: Route planning

- The NSW Government entity EnergyCo is responsible for coordinating the development of transmission infrastructure in the Renewable Energy Zones (REZs).
- Transgrid are responsible for planning and constructing transmission infrastructure in NSW outside the REZs.
- Route options are evaluated based on impacts to cost, environment, land use, community, technical and time constraints. Transmission route planning is complete for three of the five REZs. See EnergyCo's interactive map at caportal.com.au/energyco/rez



Step 2: Route refinement

The transmission infrastructure planner engages with landholders and other stakeholders to refine the corridor and route of the transmission infrastructure. This involves several rounds of public consultation and opportunities to make submissions. Once finalised, the land for the transmission easement is acquired by negotiating with landholders.

- Generally, landholders can continue to use their land around the easement with some restrictions to ensure public safety and maintenance of the transmission network.
- Landholders are paid when the transmission easement is acquired and may be eligible for additional payments under the Strategic Benefits Payment Scheme for hosting transmission infrastructure.



Step 3: Pre-construction approvals

The NSW Department of Planning, Housing and Infrastructure conducts the assessment for major transmission infrastructure projects prior to approval. This process involves detailed consideration of environmental, social and economic impacts including:

- a project Environmental Impact Statement (EIS) prepared by the transmission infrastructure planner. The NSW Major Projects Planning Portal exhibits the EIS for a minimum of 28 days for **community members to make submissions**.
- a Response to Submissions report prepared by the transmission infrastructure planner to respond to the issues raised during consultation and explain any amendments or non-amendments to the project.
- an assessment by NSW Planning Department or the Independent Planning Commission of the final application which considers a wide range of impacts and sets out any conditions of approval. Additional approval from the Federal Environment Minister may be required if the project affects matters of national environmental significance.



Step 4: Construction

- During construction, easements are around 200m wide then reduce to a minimum of 60m wide for each transmission line once operational. Access roads to transmission infrastructure may also require easements.
- Transmission lines will usually be 500kV or 330kV lines and either single or double circuit on steel lattice towers. Towers are usually between 30 to 80m high and spaced between 400 to 600m apart.



Step 5: Operation and maintenance

The transmission infrastructure planner will negotiate a landholder agreement to set out the responsibilities of both the landholder and the transmission infrastructure planner. It will include details about access across private land - timing and notice periods, biosecurity measures and maintenance practices such as vegetation management.



For more detailed information about transmission infrastructure, visit ewon.com.au/renewable-energy-infrastructure

Make a complaint or enquiry

Freecall 1800 246 545*
Mon – Fri, 9am to 5pm

Online ewon.com.au

Freepost Reply Paid 86550
Sydney South NSW 1234

Interpreter 131 450

TTY/Voice 133 677

In person[^] Level 11, 133 Castlereagh St,
Sydney, NSW 2000

* If you are calling from a mobile phone, let us know and we will call you back.

[^] Tuesdays, Wednesdays, and Thursdays, 10am to 4pm. Call 1800 246 545 to make an appointment. We cannot guarantee staff availability without an appointment.