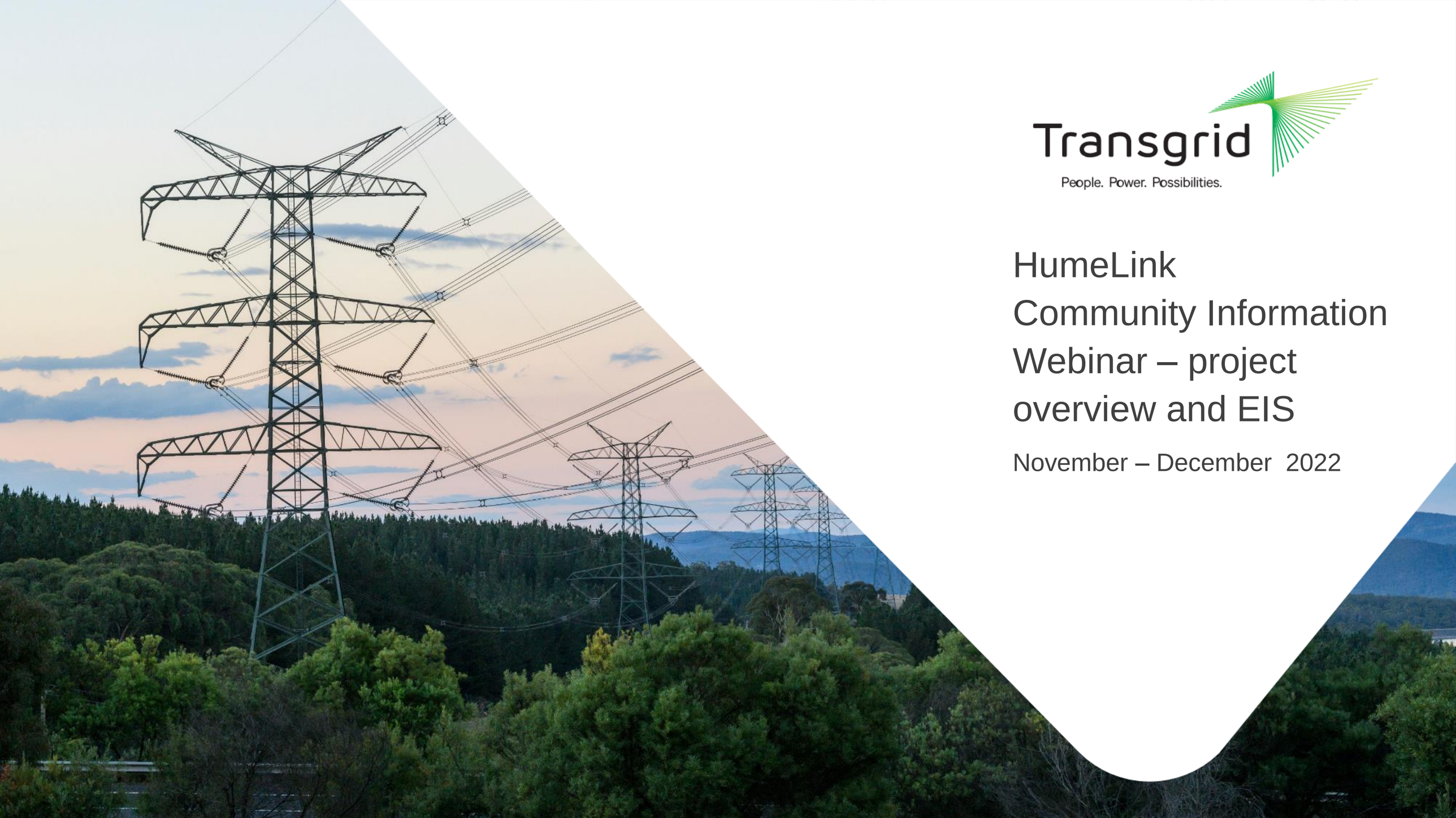


Transgrid

People. Power. Possibilities.

HumeLink Community Information Webinar – project overview and EIS

November – December 2022

Acknowledgment of Country

Transgrid acknowledges the Traditional Owners and Custodians of this great land. We recognise and acknowledge the Aboriginal and Torres Strait Islander people as the first explorers, scientists, farmers, astronomers and storytellers.

We pay respects to Elders both past and present and celebrate the diversity and successes of Aboriginal peoples and their ongoing connections to the lands and waters where we work and live.

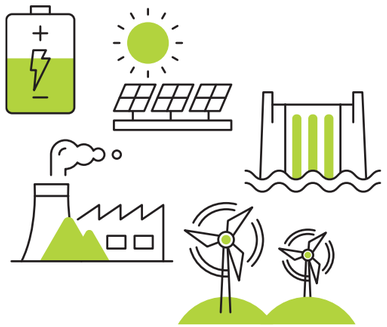
Transgrid

Agenda

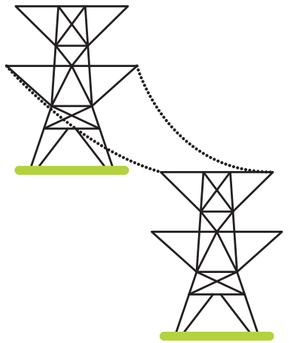
Welcome and Acknowledgment of Country
Introductions
Transgrid and NSW and ACT electricity network
HumeLink project overview
HumeLink concept design
Introduction to the Environmental Impact Statement
Questions and discussion
Close

Transgrid and our place in the market

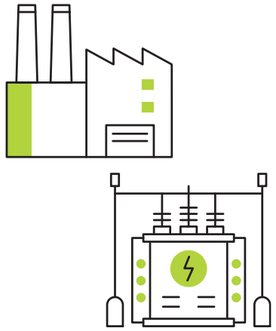
Our place in the NSW electricity market



Generators
Electricity is sourced from coal, gas, wind, hydro and solar power plants.



Transmission
Transgrid keeps you and your way of life connected by moving high voltage electricity across NSW and the ACT



Distribution and direct connect customers
Transgrid transports electricity to distributors and our direct connect customers

Retailers
Retailers purchase electricity and sell to consumers

Residential, commercial, and industrial consumers
Buy and use electricity to power their everyday

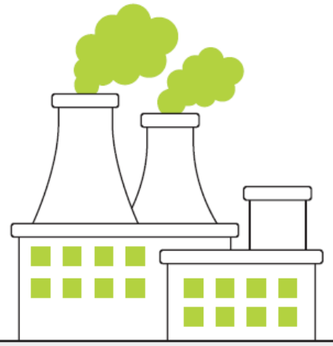
Transgrid’s network in NSW and ACT

- 13,204 km high-voltage transmission lines
- 119 substations
- More than 4,000 km of optic fibre

HumeLink project overview

HumeLink project overview: our role in Australia's transition to a cleaner future

Coal fired energy



Challenges

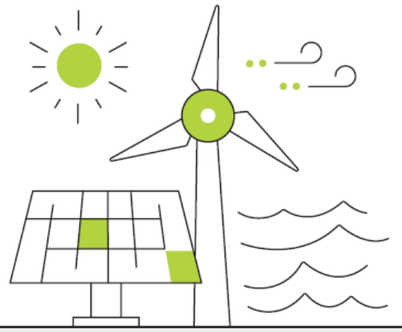
- Decreasing demand
- Capacity limits
- Cost
- Environmental impacts
- Reliability
- Connectivity

HumeLink

A new 500 kV transmission line that will connect Wagga Wagga, Bannaby and Maragle

HumeLink is vital to Australia's transition from coal fired energy to renewable energy

Renewable energy



Opportunites

- Connecting the energy to where it is needed
- Sharing energy interstate
- Unlocking the full capacity of Snowy Hydro 2.0
- Securing reliable and affordable electricity
- Supporting Australia's emission reduction targets
- Creating regional growth and employment opportunities

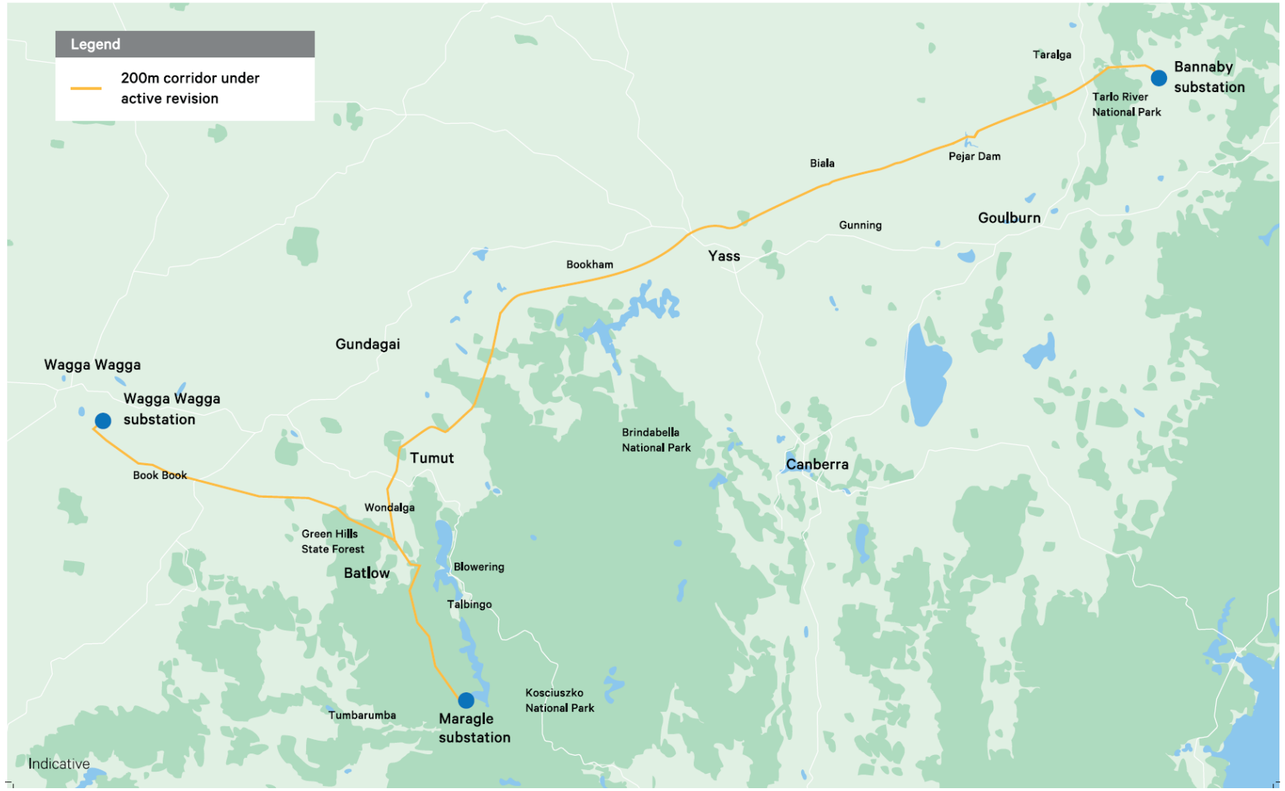
HumeLink project overview: what is HumeLink?

- HumeLink is a critical energy infrastructure project which will see a new 500 kV double circuit transmission line connecting Wagga Wagga, Bannaby and Maragle to the existing power network.

- It is one of the state's largest energy infrastructure projects, with about 360 km of proposed new transmission lines, and new or upgraded infrastructure at three locations.

- The primary purpose of HumeLink is to expand the capacity of the electricity network in southern NSW. HumeLink will also:
  - increase transfer capacity between southern NSW and major load centres within NSW (Sydney, Newcastle and Wollongong)
  - reinforce stability and reliability in the network
  - facilitate transition of the network to new generation sources.

HumeLink 200m corridor under active revision

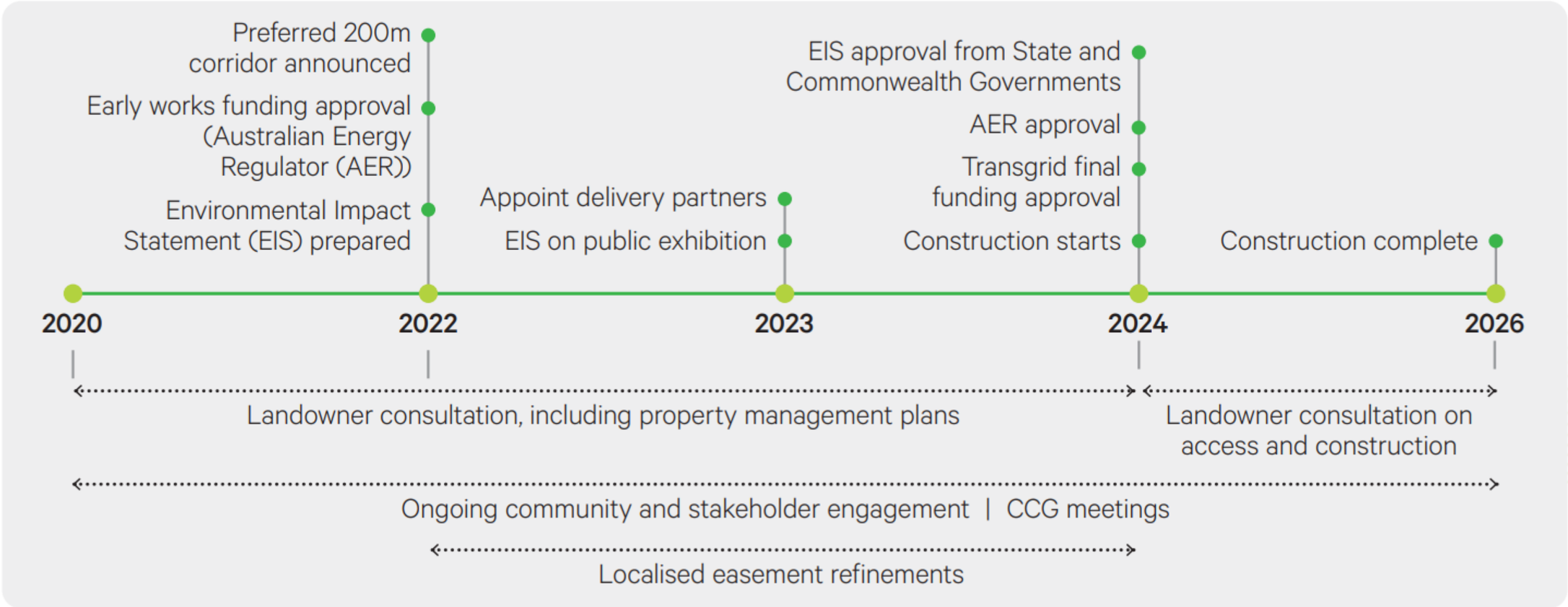


HumeLink project overview: benefits

- **Reliable power:** NSW households will have greater access to reliable and affordable electricity
- **Economic growth:** HumeLink will unlock the full capacity of the expanded Snowy Hydro Scheme and enable greater sharing of energy across the eastern states
- **Cleaner, sustainable future:** HumeLink will enable more renewable energy generation to enter the market, supporting Australia's emissions reduction targets
- **Jobs and opportunities:** the project will create more than 1000 construction jobs
- **Economic growth:** contribute to economic activity in regional NSW, generating major benefits for local communities along the route

Transgrid

HumeLink project overview: key dates



Transgrid

HumeLink concept design

Concept design: transmission lines and structures

The project includes the construction of 500 kV transmission line sections between:

- Wagga 330 kV substation and Gugaa 500 kV substation (approximately 11 km) which will be operated at 330 kV capacity
- Gugaa 500 kV substation and Wondalga (approximately 65 km)
- Wondalga and Maragle 500 kV substation (approximately 46 km)
- Wondalga and Bannaby 500 kV substation (approximately 234 km).

The transmission lines would be supported on a series of free-standing steel lattice structures that would range between around 50 m up to a maximum of 76 m in height and generally spaced between 300 to 600 m apart.

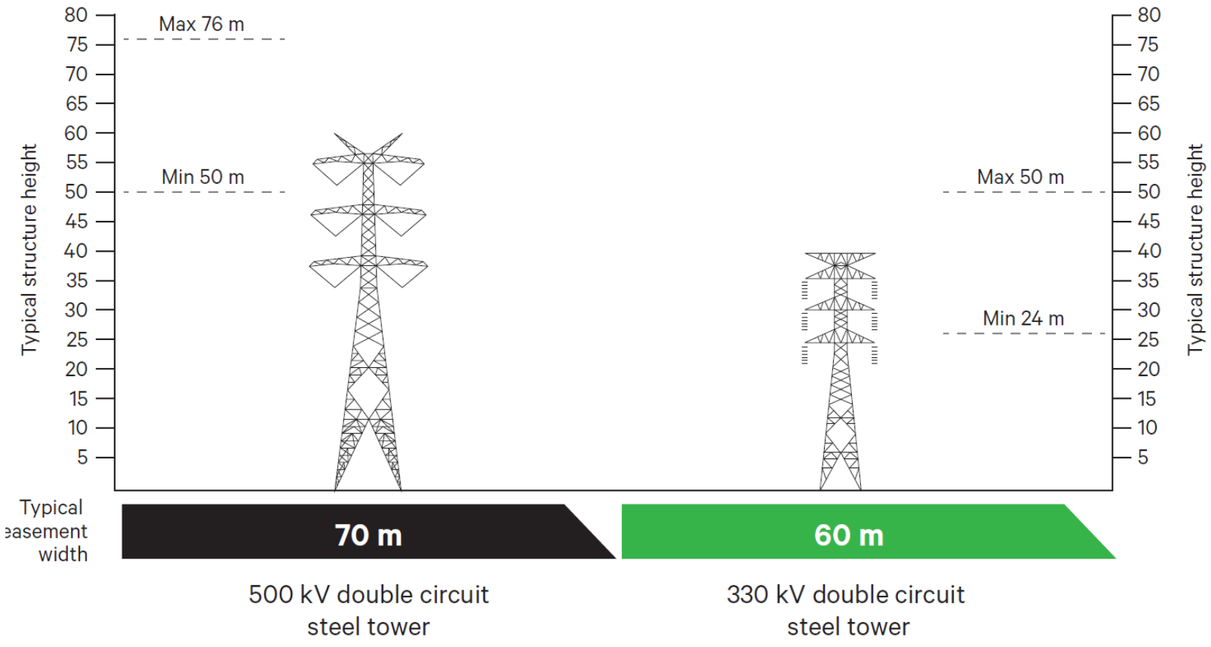


Figure not to scale.

Transgrid

Concept design: substations

Four substations are proposed to be built or upgraded as part of HumeLink.

These would include connecting the existing substations near Wagga Wagga and Bannaby, connecting to a future substation at Maragle in the Snowy Mountains, and construction of the new Gugaa substation near Wagga Wagga.

The main civil and building works involved in the substations would generally include (but not be limited to):

- Bulk earthworks and concrete foundations at the substation sites
- Drainage, access roads, oil containment tanks/dams
- Erection of steelwork and fencing
- Electrical fit-out with new substation equipment
- Testing and commissioning of the new substation equipment.

Transgrid

Introduction to the Environmental Impact Statement (EIS)

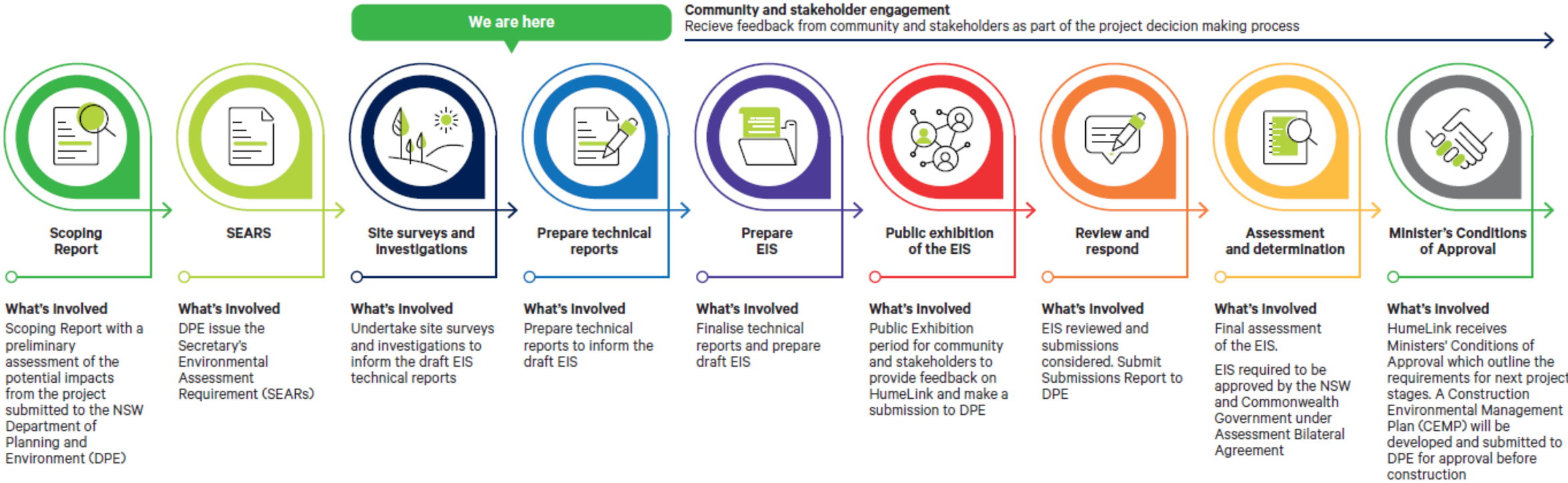
Introduction to the EIS: what is it and why is it needed?

- HumeLink has been declared Critical State Significant Infrastructure (CSSI) under the NSW *Environmental Planning and Assessment Act 1979* and is described under section 9, Schedule 5 of the State Environmental Planning Policy (Planning Systems) 2021 as part of the 'Snowy 2.0 and Transmission Project'.
- The project requires approval from the NSW Minister for Planning.
- An Environmental Impact Statement (EIS) is required to support an application to the NSW Minister for Planning.
- '*The purpose of the EIS is to assess the economic, environmental and social impacts of the project. It helps the community, councils, government agencies and the approval authority to get a better understanding of the project and its impacts so they can make informed submissions or decisions on the merits of the project'* (State Significant Infrastructure Guidelines – Preparing an Environmental Impact Statement, DPIE 2021).
- The Commonwealth Government has also determined the project is a 'controlled action' under the *Environment Protection and Biodiversity Conservation Act 1999* as it has the potential to result in significant impacts on Matters of National Environmental Significance.
- The project will be assessed under a bilateral agreement between NSW and the Commonwealth governments.
- Only one EIS will be prepared but a decision is required from both the NSW and the Commonwealth governments.

Transgrid

Introduction to the EIS: planning approval pathway

HumeLink Environmental Impact Statement Planning Pathway



Transgrid

Introduction to the EIS: technical studies


Aboriginal heritage


Agricultural land


Air quality


Aviation safety


Biodiversity


Bushfire risk


Greenhouse gas and climate change risk


Soils, geology and contamination


Economic


Electric and magnetic fields


Hydrology and flooding


Historic heritage


Landscape character and visual amenity


Land use and property


Noise and vibration


Social


Surface water and groundwater


Traffic and transport


Sustainability

Transgrid

The HumeLink engagement team would love your feedback on what EIS information you would like to receive in the upcoming engagement schedule. Please vote using the zoom poll.

Thank you

1800 31 73 67 (free call)
humelink@transgrid.com.au
transgrid.com.au/humelink

HumeLink Community
Engagement Team, PO BOX A1000,
Sydney South, NSW 1235

Transgrid