Your questions answered

HumeLink



We have compiled a list of your most frequently asked questions below.

Contents

1.	About the project	2
	What is HumeLink?	2
	Why is Transgrid building HumeLink?	2
2	Community engagement	2
	Who can I contact if I have a question about HumeLink?	2
	Is the interactive map for landholders still open and available?	3
	How is Transgrid engaging with Aboriginal community members as part of the corridor assessment?	3
3.	Planning the project corridor	4
	How does Transgrid narrow the study area?	4
	Why does the corridor for HumeLink avoid national parks and other public land?	4
4	The electricity network	5
	What is the difference between a single and double circuit transmission tower?	5
	What is the helicopter exclusion zone and what are the regulations around flying of drones around the existing and new transmission lines?	5
	What sort of irrigation systems are allowed within the easement?	6
	How does Transgrid consider Electric and Magnetic Fields (EMF)?	6
	Has Transgrid thought about bushfire risk?	6
5	Easement and property information	7
	When will I know the exact locations of the towers and easement?	7
	How does the acquisition process work? When will I be compensated? How much will I be paid?	7
	How will you access the easement on my property during construction or operations?	8
	Who owns and operates the transmission line?	8



1. About the project

What is HumeLink?

HumeLink is a new 500kV transmission line which will connect Wagga Wagga, Bannaby and Maragle. It will reinforce the backbone of the east coast's energy transmission network, delivering a cheaper, more reliable and more sustainable grid. HumeLink is a once in a generation investment in Australia's energy future, increasing the amount of renewable energy that can be delivered to consumers and helping to facilitate the transition to a low carbon future.

Why is Transgrid building HumeLink?

When complete, HumeLink will increase the amount of renewable energy that can be delivered to consumers across the National Electricity Market, helping to facilitate the transition to a low carbon future. Right now there are more than 12 renewable energy projects, representing 1400MW of capacity, that plan to connect to the southern transmission network alone.

HumeLink will provide capacity for 2570MW of additional renewable generation to connect to the network, delivering clean energy that will help to lower carbon emissions. The energy transmission network needs to expand its capacity to be able to manage the needs of new and future renewable energy projects.

HumeLink will deliver almost half a billion dollars in net benefits. While the project costs may lead to a small short term increase in the transmission portion of consumer bills, the increases will be minimal when compared to the long-term benefits that an increase in the capacity of the transmission network will deliver. These benefits include increased competition in the wholesale energy market putting downward pressure on household electricity bills by enabling the connection of more low cost, low carbon generation to the grid while maintaining a secure and reliable system.

The project has been identified as a priority by the Australian Energy Market Operator (AEMO) and the Federal and NSW Governments. That's why it is a priority for Transgrid and we are currently working through the regulatory process and engaging with landowners and local communities, to plan and deliver the project.

2. Community engagement

Who can I contact if I have a question about HumeLink?

Telephone: Toll-free phone number: 1800 317 367

Email: humelink@transgrid.com.au

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



Is the interactive map for landholders still open and available?

Yes the interactive map is open and available, and can be accessed <u>here</u>. The interactive map is available for everyone to provide feedback on the project. You can make your comments public or you can select private so that only the project team can consider the feedback as part of the project planning process. The interactive map can be used even when the internet isn't available. For more information on how to use this feature please get in touch with the project team.

How is Transgrid engaging with Aboriginal community members as part of the corridor assessment?

Engagement and participation by Indigenous communities is critical to identify cultural values relevant to the HumeLink project. It is also critical that we plan and develop actions based on input from the Indigenous community around their skills and needs, and to then consider what we have to offer and learn.

Fostering and building these relationships are key. Crucially, engagement, involvement, and feedback will be used to help refine the route, minimise project impacts, and maximise cultural and social benefits for the local communities.

We are working closely with the Brungle/Tumut, Wagga Wagga, Onerwal, Pejar and Wagonga Local Aboriginal Land Councils (LALC) to identify key stakeholders and identify Traditional Owner Groups and knowledge holders in the community. We are now focused on establishing and building relationships and identifying relevant and meaningful participation opportunities on the HumeLink project.

Transgrid's Yura Ngura Indigenous Advisory team's focus is to increase understanding, recognise Indigenous cultures, histories, knowledge and rights. This focus enables us to identify relevant and meaningful participation opportunities on the HumeLink project. Activities to date include:

- > Preparing a HumeLink Aboriginal and Torres Strait Islander Engagement and Participation Plan
- > Identifying Indigenous stakeholders along the HumeLink corridor
- Presenting project information to Indigenous Agencies, NSW ALC, National Indigenous Australians Agency, Aboriginal Affairs, Riverina Murray Regional Alliance
- > Engaging Tumut Elders to host a Smoking Ceremony on country to assist with and facilitate access to private property
- Identification and registration of Registered Aboriginal Parties (RAPS) in collaboration with Navin Officer Heritage Consultants
- Exploring appropriate Indigenous community members to represent on the Community Consultative Group
- > Reviewing technical reports, seeking and providing input into methodologies for works in the Indigenous activities to support EIS and field works
- > Presenting survey methodology and facilitating feedback sessions with LALC and RAPS
- Facilitating inductions and tool box with RAPs for field Surveys, providing support and rostering RAPs in the LALC boundaries
- > Presenting Indigenous consultation to Heritage NSW.



3. Planning the project corridor

How does Transgrid narrow the study area?

This is a complex process with a range of factors considered as we continue to assess and refine the study corridor. These factors include environmental and cultural heritage considerations, minimising proximity to residences, feedback from landowners and stakeholders, constructability and construction costs. Importantly, this information is considered holistically as a change in one area can result in consequences elsewhere.

Corridor refinement is an ongoing process as we progress to a preferred route, with refinements made as more information is collected. Across the project's footprint we have investigated broad areas up to 5km wide and then slowly narrowed the study corridor based on constraints mapping, ongoing technical assessments and feedback gathered during consultation.

Transgrid applies the following guiding principles to a route selection process:

- keep the transmission line as straight as possible
- select the shortest possible route between two substations where possible
- parallel existing transmission easements or use public land where possible.

In conjunction with these principles, HumeLink has identified constraints and opportunities including: (a) social considerations such as avoiding townships and built up areas, airports, community services and cultural heritage

(b) environmental factors, including minimising impacts on flora and fauna and considering soils, hydrology and air quality; and

(c) land use considerations, including existing or planned use for agriculture, tourism and industry.

Throughout the project planning process, Transgrid continues to map constraints and opportunities as more detailed information is gathered by consulting with landowners, community members and Traditional Owner groups. Field investigations, feasibility studies and technical assessments further contribute to assessment and gradual narrowing of the study corridor. Transgrid is progressively working towards narrowing the preferred corridor to 200 metres.

Why does the corridor for HumeLink avoid national parks and other public land?

We consider a range of factors in the process to identify the preferred alignment for HumeLink, including environmental and agricultural impacts, technical considerations, constructability, proximity to residences, social impact, landowner and community feedback and cost – this includes looking at public land. We complete a range of assessments and consider landowner and community feedback to ensure the final alignment best considers all of these factors.

Transgrid considers the advantages and disadvantages to utilising public land. Advantages overall include reducing impact on landowners.

Disadvantages of installing transmission lines in national parks include:

- impacts on biodiversity, heritage sites, areas with Aboriginal significance and recreational space



- more outages due to bushfires and damage caused by fallen trees, and increased associated maintenance costs
- greater impacts on aerial firefighting operations
- challenging terrain from a construction and operational perspective
- environmental impacts with increased clearing required across the easement and for access paths
- higher biodiversity costs.

The Department of Planning, Industry and Environment (DPIE) also requires projects to avoid, minimise or offset environmental impacts and Transgrid is required to demonstrate that no other feasible options were available as part of the environmental planning approvals that best meet this criteria.

Building a transmission line through Forestry Corporation land has the benefit of utilising existing access tracks and reducing impact on privately owned property. However, there are other potential impacts on State Forests that need to be considered. State Forests play an important role in the local economy including jobs, and the loss of productive plantation land from the required clearing of land for an easement and access purposes would impact forestry operations, as well as downstream businesses and suppliers.

While the use of public land is not been considered as a preferred option for the above reasons, we have heard from the community that there is still a strong preference to still prioritise public land over the use of private land. We have and continue to explore a number of alternative routes suggested by landowners, and will provide information back to the community on the feasibility of these options.

4. The electricity network

What is the difference between a single and double circuit transmission tower?

One key benefit of moving to a double-circuit configuration for the entire HumeLink alignment is that it reduces the project's overall footprint, minimising impacts and reducing the total number of landowners impacted by the project.

The main difference between single and double circuit transmission towers is the number of circuits that can be supported on the structure. Each circuit has three phases, and each phase has up to four conductors (wires). For HumeLink, the double circuit will be able to support six phases with four conductors per phase (24 conductors in total).

The double circuit towers are taller, while the overall footprint is smaller. A double circuit 500kV transmission line requires a narrower easement than a single circuit line, reducing the easement width from 80m to 70m-wide.

What is the helicopter exclusion zone and what are the regulations around flying of drones around the existing and new transmission lines?

Transgrid's policy is that manned aircraft, balloon or drone may not be flown within 60 metres of any transmission line structure, guy wire or conductor (transmission wire). This is set out on page 8 of Transgrid's <u>Easement Guidelines</u>.



What sort of irrigation systems are allowed within the easement?

Farming activities such as grazing and cropping can continue under transmission lines and within the easement area subject to height restrictions. Planting or cultivation of trees and shrubs can also continue provided the mature plant is less than four metres in height. Machinery and heavy equipment up to 4.3m high can be used within the easement area.

There are however some limitations to activities such as irrigation, aerial spraying and fuel storage.

Machinery, including irrigation, must remain outside the exclusion zone, but this does not apply to cropping and grazing. Transgrid's fencing guidelines must be complied with. For more detailed information please contact our HumeLink community engagement team.

How does Transgrid consider Electric and Magnetic Fields (EMF)?

Transgrid takes a precautionary approach to the management of electric and magnetic fields (EMF), and considers EMF closely when designing projects such as HumeLink. A higher voltage does not necessarily mean a higher magnetic field. For example, low voltage power lines can have higher magnetic fields than high voltage transmission lines.

For double circuit lines it is possible to arrange the phases to maximise the field cancellation which will reduce electric and magnetic fields away from the transmission line. Parallel transmission lines may have increased fields between the two transmission lines, but will not have a significant impact away from the transmission lines. This means that outside of the new easement the EMFs are likely to be similar to existing background levels.

EMF modelling will be included in the project's Environmental Impact Statement (EIS). The modelling will indicate the degree of EMF at various distances, with all levels to be within the guidance set by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

Internationally, there have been almost 3,000 peer-reviewed studies carried out in relation to EMF. Global authorities, including the World Health Organisation, the US National Institute of Environmental and Health Sciences and the UK National Radiological Protection Board, continually evaluate EMF research. They continue to advise that there is no scientific evidence that exposure to EMF around homes and transmission networks affects human and animal health.

Has Transgrid thought about bushfire risk?

As part of the corridor selection process for HumeLink, Transgrid has assessed lightning and bushfire risks. These assessments considered inputs such as slope and aspect, vegetation (including type and fuel load) and weather.

Under the requirements of the NSW Electricity Supply Act and Electricity Supply (Safety and Network Management) Regulation, Transgrid is required to design, construct, operate and decommission its electricity network in a manner which supports the:

- safety of members of the public
- safety of persons working on its network;
- protection of property;



- management of safety risks arising from the protection of the environment; and
- management of safety risks arising from the loss of electricity supply.

We have undertaken a Formal Safety Assessment specifically focused on bushfire risk to identify foreseeable threats posed by our assets and activities that could cause a bushfire, as well as the risk to our assets from bushfire. The assessment also identified specific controls required to ensure the risk of bushfire to the community and to Transgrid assets is as low as practicably possible.

National parks and other heavily timbered areas are typically avoided due to the increased risk of outages due to bushfires or damage caused by fallen trees, as prolonged outages can have significant consequences for the community and electricity consumers.

5. Easement and property information

When will I know the exact locations of the towers and easement?

Within the study corridor area there are a range of options where the final easement could go and where the towers could be positioned. The design and location of the towers will be finalised during the project's detailed design phase, however there are still a number of steps required before reaching this point.

Once the current consultation is complete and the final preferred 200m corridor is determined, we will meet with landowners to start the discussions about potential easements. At this time, we will also start talking to landowners about the proposed tower locations, receive feedback and provide information about the process and considerations that need to be factored into the positioning the towers.

Transgrid will follow the Land Acquisition (Just Terms Compensation) Act 1991 when negotiating with landowners, with the process to start in the first half of- 2022. At the end of this process, the easement will be confirmed.

While this process is underway, the project will undergo a robust environmental and planning assessment and approval process, which includes the preparation of an Environmental Impact Statement (EIS).

After the project has been granted environmental and planning approval, the project's detailed design phase will commence. A final alignment for the transmission line, including the location of the towers, within the easement will be confirmed during this phase which is due to commence in 2023 and be completed in 2024.

How does the acquisition process work? When will I be compensated? How much will I be paid?

Easement compensation is set out under the NSW Land Acquisition (Just Terms Compensation) Act 1991 and is a one-off payment based on a negotiation with a landowner which is informed by a valuation report completed by a qualified valuer. It is a staged process which follows the following steps:

- Easement negotiations start with Transgrid seeking an option agreement based on a 200m-wide corridor. This will include an initial offer based on an assessment by a qualified valuer. We expect this to start in mid-2022.
- Negotiations continue with the aim of reaching obtaining an easement by agreement. Under the Act, Transgrid must pay landowners' reasonable costs associated with negotiating an easement. This could include fees such as legal, accounting, independent valuers, mortgagee's consent, and



NSW Land Registry fees. Landowners may be required to provide documentary evidence to support their claims.

- Once agreement is reached the Option Agreement will be executed. The option is typically for a period of 2 years.
- At this point landowners will be asked to complete a property acquisition form for payment of compensation. The option fee will be paid approximately 30 days after submission of these forms. Depending on the length of the negotiations this could occur as early as 2022, with the possibility of extending for a further year.
- The finalisation of the easement agreement is subject to project planning approval and the completion of detailed design. At this stage the final 70m wide easement will be known and the agreements finalised. This is expected to occur in 2023.
- The agreed compensation amount is paid at the start of construction for most landowners, which is currently due to commence in 2024. The exception to this timing is for landowners who have a structure within the corridor, with the payment brought forward to allow adequate time for relocation.

Many factors are considered when assessing compensation, so the amount paid to each landowner will vary. While we compensate landowners where an easement will be required with a monetary amount which reflects the overall impact, Transgrid's compensation process is determined by the impacts on the specific property.

In the majority of properties impacted by our projects Transgrid is able to reach a negotiated agreement with the landowner.

How will you access the easement on my property during construction or operations?

Transgrid will work closely with landowners throughout 2022 to develop property-specific Property Management Plans (PMP). These plans outline the landowner's specific requirements for notice and access, agreed operating hours, stock relocation, service relocation, dust and noise management, weed and pest management, fencing (temporary and otherwise) and site rehabilitation. Transgrid and its contractors, including the Main Works Contractor, will need to comply with the PMP requirements for each landholding during the project's construction phase.

Once operational, access required for maintenance will follow agreed conditions of entry, with permission for access sought from landowners in advance of any visit or required maintenance except in emergency scenarios.

Who owns and operates the transmission line?

The NSW Government owns the high voltage transmission network assets, and Transgrid operates and manages the network in NSW and the ACT. In 2015, the NSW Government granted Transgrid a 99-year lease over the NSW transmission network.