

What is HumeLink?

HumeLink is one of Australia's largest energy infrastructure projects connecting renewable energy sources to the grid, increasing availability and market competition and helping to put downward pressure on energy prices in Australia.

The project consists of 365 km of 500 kV overhead transmission lines connecting Wagga Wagga, Bannaby and Maragle, and new or upgraded infrastructure at four substations. HumeLink is critical to bringing more affordable, reliable and renewable energy to the grid and is a priority project for the Australian Energy Market Operator and the Commonwealth and NSW governments.

The construction will occur in two sections known as HumeLink East and HumeLink West.

To view HumeLink's interactive route map go to transgrid.com.au/projects-innovation/humelink#Map.

HumeLink project map

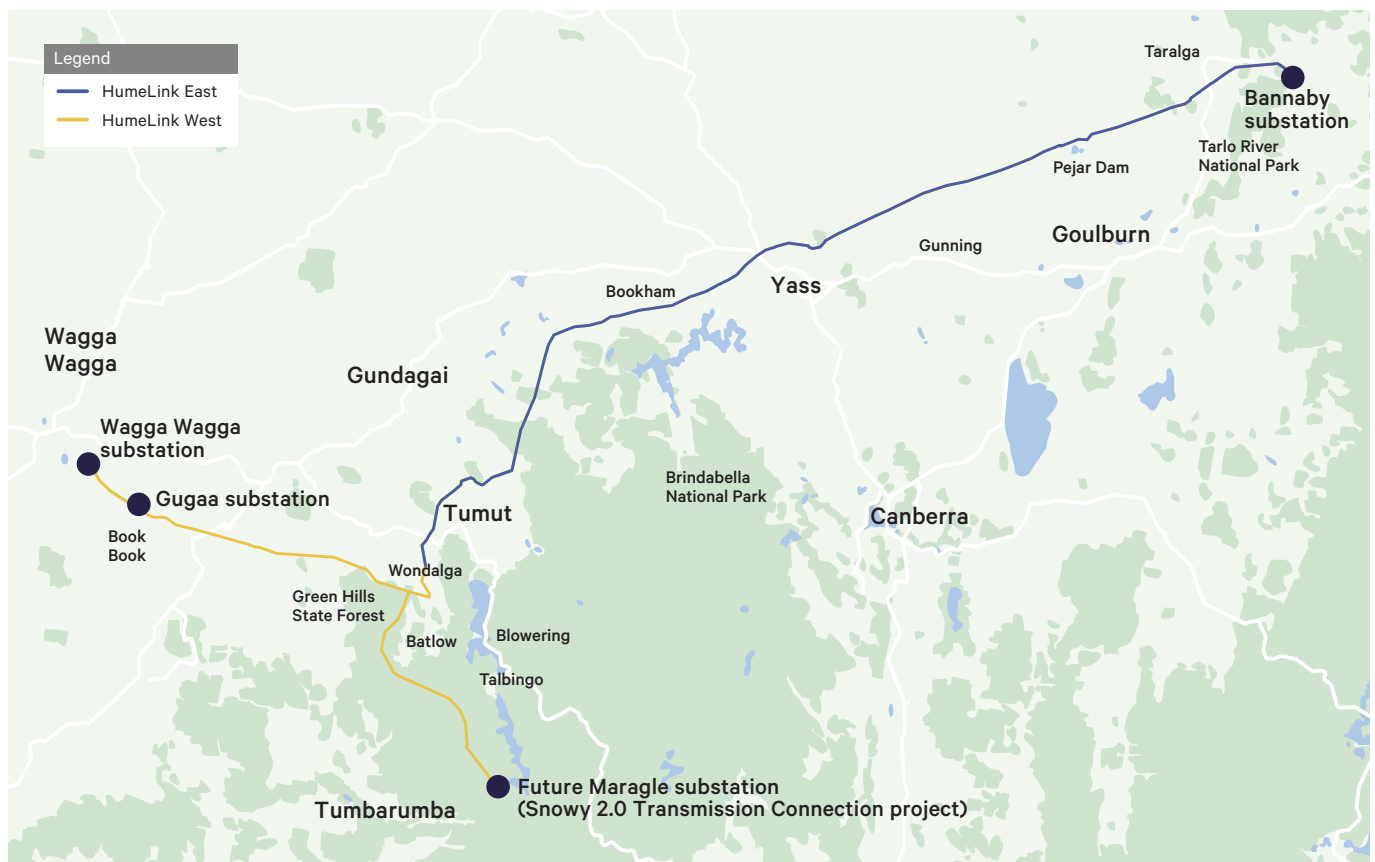


Figure 1: HumeLink East and West map.



Construction overview

HumeLink enabling works began in January 2025, following NSW and Australian Government approvals in late 2024.

Construction of the transmission towers, stringing of the transmission lines and works at the substations began in the second half of 2025 and are expected to be completed by late 2027, in readiness for HumeLink to become operational.

Enabling works have included establishing transmission line corridor access points, access tracks, water supply points, accommodation facilities and construction compounds.

Following enabling works, the project team will begin main construction which includes erecting transmission towers, stringing transmission lines and substation upgrades.

Delivery of HumeLink West requires:

- 140 km of 500 kV double circuit transmission lines
- two new 500 kV substations (Maragle and Gugaa)
- upgrade of the existing 330 kV substation at Wagga Wagga
- establishment of two temporary accommodation facilities at Kunama and Tarcutta (350 beds each)
- temporary construction compounds at Gugaa, Batlow, Snubba Road, Ellerslie and Maragle
- building or upgrading approximately 300 km of access tracks
- stringing of approximately 3,400 km of conductors.

Delivery of HumeLink East requires:

- 225 km 500 kV double circuit transmission lines
- expansion of the existing Bannaby 500 kV substation
- establishment of two temporary accommodation facilities at Adjungbilly and Yass
- temporary construction compounds at Yass, Crookwell and Bannaby
- building or upgrading approximately 383 km of access tracks
- stringing of approximately 6,000 km of conductors

On completion of main construction, the transmission lines and associated infrastructure will be tested before commissioning HumeLink. This process includes testing new substation equipment and ensuring it meets the design and statutory standards for safe operation.

Restoring and rehabilitating disturbed areas and demobilising worker accommodation facilities and compounds will occur progressively following completion of construction.

Landowners will be able to retain some of the facilities and construction infrastructure, such as access tracks, if requested and agreed with Transgrid.

Transgrid and our delivery partners are committed to respectful engagement with the communities along the project alignment and the participation of local businesses, workers and trainees throughout construction.



Figure 2: Two 500 kV transmission towers being assembled on a Transgrid site.



HumeLink project construction phases timeline







	 Construction phases	 Planning approvals	 Activities involved
	Early to mid-2024 (Complete)		
	Site investigations and associated activities	Post contract award and pre-environmental planning approval These works are undertaken by Transgrid's delivery partners and are assessed and approved via Transgrid's environmental assessment framework	<ul style="list-style-type: none"> • Environmental surveys (biodiversity, heritage, contamination) • Building and road precondition survey • Utility investigations • Geotechnical investigations • Precondition surveys • Installation of instrumentation and monitoring equipment.
	Early to second half 2025		
	Site establishment/enabling works	Post-environmental planning approval and pre-construction approval	<ul style="list-style-type: none"> • Access point and access tracks establishment on private and public property along the alignment. • Establishment of accommodation facilities and construction compounds • Ongoing environmental surveys and investigation activities • Local roads and property condition surveys • Service relocation (including power, gas, water and telecommunications) <p>Installing traffic management and controls at multiple locations along the alignment.</p>
	Second half 2025 to late 2027		
	Construction works	Post construction approval	<ul style="list-style-type: none"> • Construction of transmission towers and lines • Conductor stringing • Construction and upgrade of substations

Figure 3: HumeLink project construction phases timeline.



Stage 1: Site investigations and associated activities



Figure 4: Noise logger used to measure background noise levels.

Site investigations and associated activities, including survey and fieldwork, have taken place at various locations. These informed design refinements and identified ways we could avoid, minimise and mitigate Impacts.

These included:

- heritage survey investigations by a qualified specialist to identify and assess any items of potential heritage significance.
- Aboriginal heritage surveys with our Registered Aboriginal Parties (RAPs), to identify heritage items such as modified trees and artefacts.
- seasonal ecology surveys to supplement information we had previously gathered. These included day and night surveys looking at flora and fauna.
- geotechnical investigations, which included drilling, sampling and testing of boreholes, soil testing and geophysical surveys.

We also conducted associated activities including utility investigations and precondition surveys.



Stage 2: Site establishment and enabling works

Site establishment and enabling works started in January 2025, preparing the sites for main construction to begin in the second half of 2025.

Site establishment

Site establishment activities have included:

- establishing ancillary infrastructure including construction compounds and worker accommodation facilities
- constructing hard-surfaced areas for storage, laydown areas and car parking
- building access points and access tracks
- setting up site environmental management and traffic controls, in accordance with management plans
- conducting property adjustments to fencing, barricades, gates and access
- installing temporary fencing, clearing vegetation and topsoil, including stockpiling of soil
- improving roads to ensure safe vehicle movements (where required under the project's Conditions of Approval).

Access points and access tracks

Temporary and permanent access tracks are required during the construction and operation phases of HumeLink. A total of 230 access points and approximately 680 km of access tracks are required to deliver HumeLink.

Access tracks connect the project footprint to the current road network, allowing safe travel between the transmission line structures and easements, substations and other construction work sites. View the access track locations on the HumeLink interactive map, click [here](#) to view.

Some access tracks and roads require improvement work to allow heavy vehicles to safely access and connect to existing roads. This includes minor maintenance, road widening, drainage work, regrading or resurfacing and minor vegetation pruning or removal.

Construction compounds

HumeLink requires a number of temporary construction compounds to support the construction stage of the project. The compounds accommodate a range of facilities such as plant servicing and fuelling, temporary storage of materials and equipment, stockpiling, concrete production, worker offices and amenities, parking and heavy vehicle deliveries.

Construction compounds for HumeLink West have been established at Gregadoo, Batlow, Ellerslie and Maragle, with two additional locations to be established in Kunama and Tarcutta. The compounds for HumeLink East have been established at Yass, Crookwell and Bannaby. The location of the compounds can be seen on the HumeLink Interactive map, click [here](#) to view.

Worker accommodation facilities

Two 350-bed temporary worker accommodation compounds are required for HumeLink West. One is located on Green Hills Access Road in Kunama, while the other one is located on Mates Gully Road in Tarcutta.

HumeLink East will be using two temporary accommodation facilities, one at Yass and the other at Adjungbilly.

Each of the self-sufficient worker accommodation facilities includes sleeping and bathroom quarters, a dining hall, entertainment areas, medical and laundry facilities and car parking for work vehicles.

Sustainability is a core focus of the design, which encompasses wastewater recycling for uses such as dust suppression as well as the use of green power (sourced from renewable energy) for all facilities and collection and composting of all food waste.

View the detailed locations of the temporary accommodation facilities on the HumeLink Interactive map, click [here](#) to view.

In the planning approval Amendment Report for HumeLink, a workforce accommodation camp was proposed at Woodhouselee, near Crookwell. HumeLink East has since revised its construction delivery strategy and reassessed accommodation needs and the previously planned accommodation facility is no longer required.

Instead, any out of area workers that are required for specialist tasks on the project will stay in local accommodation.

Water supply points

To carry out enabling and construction works, the project requires access to potable and non-potable water from fill points across the project alignment until project completion. Water sources and locations have been determined in consultation with councils, following investigations during the planning stage of the project.

HumeLink West made agreements with Snowy Valleys and Wagga Wagga councils for the provision of water, including the agreement to establish new water fill locations and upgrade existing infrastructure at Tumbarumba, Batlow, Adelong and Tarcutta.

HumeLink East has worked with private landowners to secure water access throughout the alignment. These agreements allow for the use of specific amounts of water from landowners' bores or dams. Potable water for the Adjungbilly temporary accommodation facility is sourced from a bore constructed by HumeLink East, and then treated, while the Yass worker accommodation site accesses potable water through council supply.

The agreements allow for water to be available during project construction while leaving a valuable legacy for the community. The fill stations allow councils and emergency services to prioritise community and residents' supplies, when required. For more information, view the [Water Usage and Transportation fact sheet](#).



Figure 5: Adjungbilly workers accommodation site.



Stage 3: Main construction

HumeLink's main construction works started in the second half of 2025 and include erecting transmission line structures, stringing of transmission lines, building the new substations at Maragle and Gugaa, and upgrading Wagga Wagga and Bannaby substations.

Transmission towers will be built in multiple stages, as outlined in Figure 6. Construction on HumeLink West will start West of Gugaa and progress toward Wondalga. At the same time, works will also be carried out from Wondalga heading south toward Maragle. Construction from Gugaa toward Wagga Wagga is scheduled to begin at a later stage. View the [HumeLink West start of main construction works notification](#) for further information.

HumeLink East main construction works will begin in multiple locations across three zones, north (Bannaby to Pejar Dam), central (Pejar Dam to Murrumbidgee River) and south (Murrumbidgee River to Adjungbilly). View the [HumeLink East start of main construction works notification](#) for further information.

Weather conditions have been taken into account. Road restrictions will be in place during winter in alpine regions. During periods of hot weather, alignment with Forestry Corporation of NSW (FCNSW) and local emergency services conditions will be followed to reduce fire risk.

The [tower fact sheet](#) further explains the types of transmission towers, design features, construction sites and locations, and easements and operations.

What to expect

Transgrid will continue to work with our delivery partners and the local community to minimise impacts throughout delivery of the HumeLink project:

- Where noise can impact our neighbours, we will use mitigation measures to reduce impacts, including consulting and notifying those potentially affected.
- There may be some dust while we carry out the work. We will have suppression measures in place, including water carts, to minimise the impact.

Traffic control will be in place to assist road users, including temporary traffic lights, boom gates, signage, speed reductions and stop/slow traffic management. For the latest traffic updates, visit livetraffic.com or download the app Live Traffic NSW.

Stay informed about project progress by subscribing to the HumeLink mailing list, click [here](#).



Figure 6: Tower assembly and erection on Project EnergyConnect.



How are transmission towers constructed?



Surveying

Surveys determine elevation levels, distances, ground conditions and terrain angles. This provides us with valuable information to identify potential construction sites and access points at each tower location.



Access tracks/road clearing and construction

We upgrade, clear and construct access tracks/roads where required so vehicles, machinery and equipment can safely get to the construction site. Surveying allows clearing to be kept at a minimum.



Excavations

Piling rigs and excavators move soil and rocks for the construction of the tower's foundations.



Construction of foundations

Tower legs (the base of the tower) are installed. This includes reinforcement, setting the levels and pouring concrete.



Tower assembly

The tower sections are pre-assembled at ground level using safe heavy lifting methods, such as cranes. HumeLink uses suspension and tension towers, with tension towers requiring a larger foundation.



Tower erection

The tower is moved in sections onto the concrete foundations using safe lifting methods such as a crane or helicopter.



Stringing

Insulators and pulley blocks are put in place to enable conductors to be installed. The stringing process uses brake and winch sites or helicopters and/or drones to pull thorough the conductors and connect them at each end. The pulley blocks are then removed and the cables connected to the insulators. This is known as clipping in.



Rehabilitation

Any disturbed ground or vegetation will be stabilised during construction, and rehabilitated as soon as practical after construction. We will consult with the landowner to plan this work.

Figure 7: Transmission line construction process

Use of drones and helicopters

During the main construction phase, stringing for the project will be carried out using methods such as drones, helicopters, and break and winch.



Figure 8: Example of drone stringing system.



Stage 5: Testing and commissioning

The testing and commissioning stage includes pre-commissioning activities, such as tests and checks, to confirm the completion of construction, quality assurance documentation, inspection and test plans, checklists and associated activities. Pre-commissioning activities ensure each component of the project has been installed in accordance with design and statutory standards and is safe to proceed to commissioning.

Specific activities will include:

- testing and commissioning of the new substation equipment
- point-to-point testing of the new transmission lines and substation connections
- earthing testing
- high-voltage testing
- high-voltage equipment operational checks
- testing of the installed protection, metering, control, and communication systems.



Stage 6: Demobilisation and rehabilitation

Following testing and commissioning, the demobilisation and rehabilitation stage will be rolled out progressively across the project footprint. These activities include:

- earthing testing
- high-voltage testing
- demobilisation of construction compounds and worker accommodation facilities
- removal and disposal of materials, waste and redundant structures not required during the operation phase
- removal of temporary fencing and environmental controls.

Connect with us

Transgrid is committed to working with landowners and communities through the development of HumeLink. Please connect with us for more information.



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