Borumba Pumped Hydro Project
Transmission Connections

Halys to Woolooga transmission connections and acquisition process

Friday 9 August 2024
HTW Government Property Forum - Brisbane

Powerlink acknowledges the Traditional Owners and their custodianship of the lands and waters of Queensland and in particular the lands on which we operate.

We pay our respect to their Ancestors, Elders and knowledge holders and recognise their deep history and ongoing connection to Country.

Powerlink Queensland

Queensland Government owned – one of Australia's leading transmission network companies.

We own, develop, operate and maintain the **high voltage transmission** network.

We provide electricity to more than **five million Queenslanders** and **253,000 businesses**.

Our network runs **1,700km** from north of Cairns to the New South Wales border.

Comprises **15,358** circuit kilometres of transmission lines and **147** substations.

The role of transmission

Electricity supply chain

Generators
Generate electricity.

Transmission lines
Carry high voltage electricity from generators to the local network.
Powerlink

Distribution lines
Supply electricity to homes and business.
Ergon Energy and Energex

Electricity retailers
Purchase electricity from generators, pay network costs and bill end users.

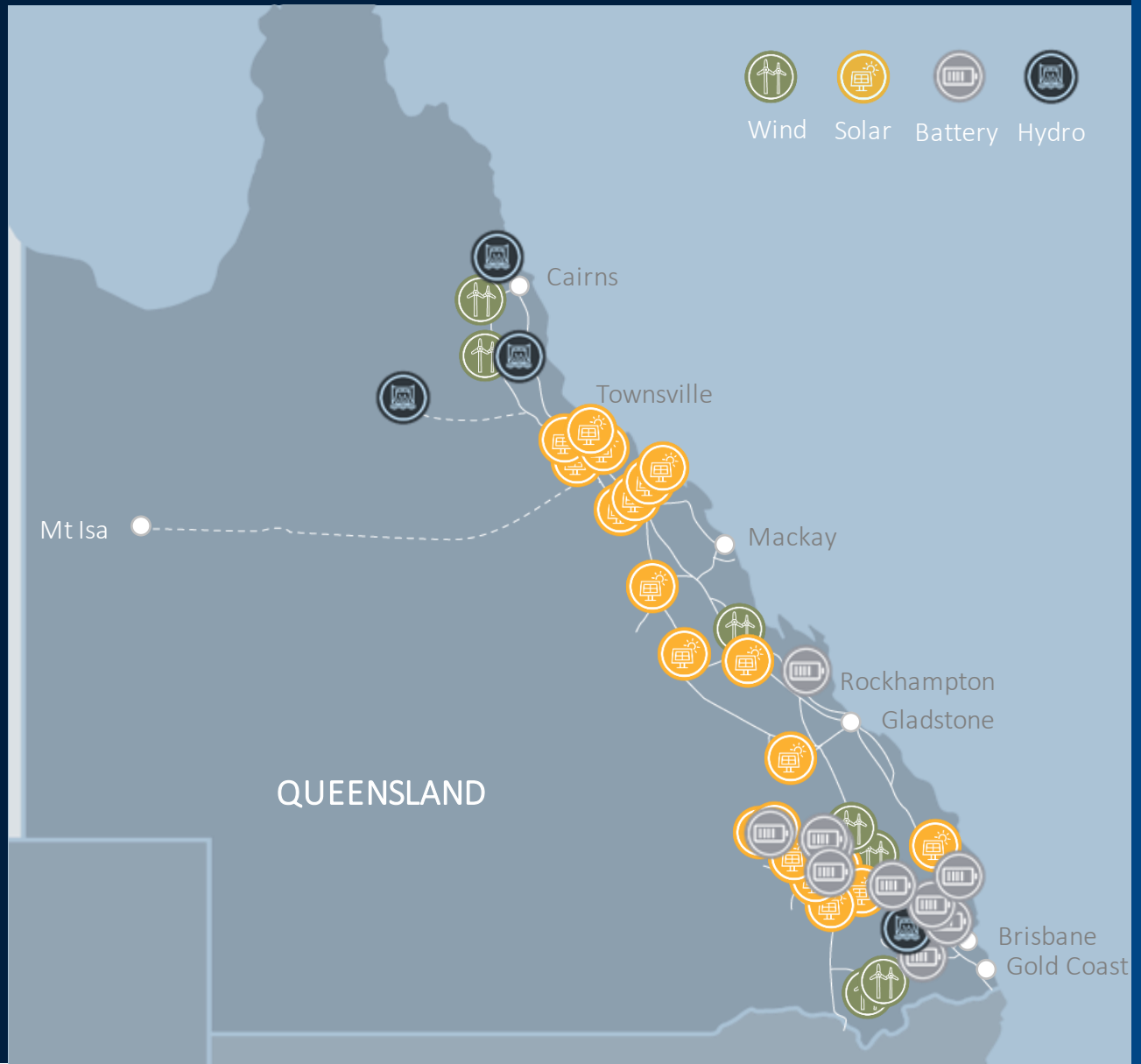
Customer

Queensland connections

41 renewable and storage projects operational or under construction with combined maximum output of 8,238MW

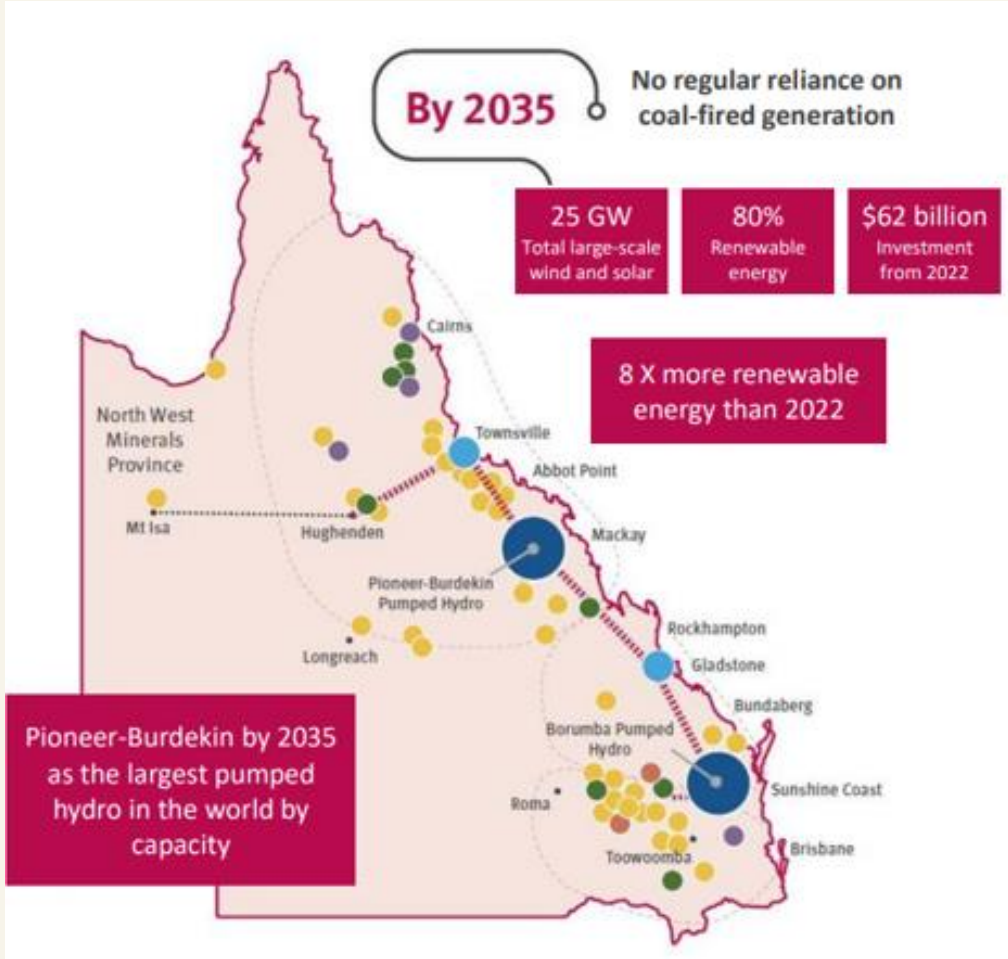
As at May 2024, 59 renewable applications being processed representing ~23,572MW

Projects at the enquiry stage (including early engagements) with combined max output of ~99,212MW



Queensland SuperGrid

- The Queensland SuperGrid is the new transmission backbone to enable large-scale efficient transportation of electricity from renewable sources across the state is to be delivered.
- Construction of this new transmission backbone will enable the grid to reliably generate, store and transport cleaner electricity across the state with greater energy independence.
- The transmission lines that will connect to the Borumba Pumped Hydro Energy Storage (PHES) project are Stage 1 of the new SuperGrid and will be part of the shared network across the state.



Project Overview

Borumba Pumped Hydro Project Transmission Connections Project webpage

Overview

- Powerlink has been engaged by Queensland Hydro to develop transmission line corridors to connect the proposed Borumba Pumped Hydro Project to the existing electricity transmission network.
- This new transmission infrastructure will support the broader need for this line in the area in line within the Queensland Energy and Jobs Plan.
- Due to the potential generation and storage capacity, new transmission infrastructure is needed from the proposed facility at Lake Borumba to Woolooga in the north and Halys in the south-west.
- The Borumba Pumped Hydro Project will be capable of dispatching 2,000MW and storing energy for up to 24 hours. When fully operational the facility will have the capacity to power up to 2 million Queensland homes.
- The project is highly strategic to Queensland's future energy system. It will play a significant role in Queensland's renewable energy transformation.

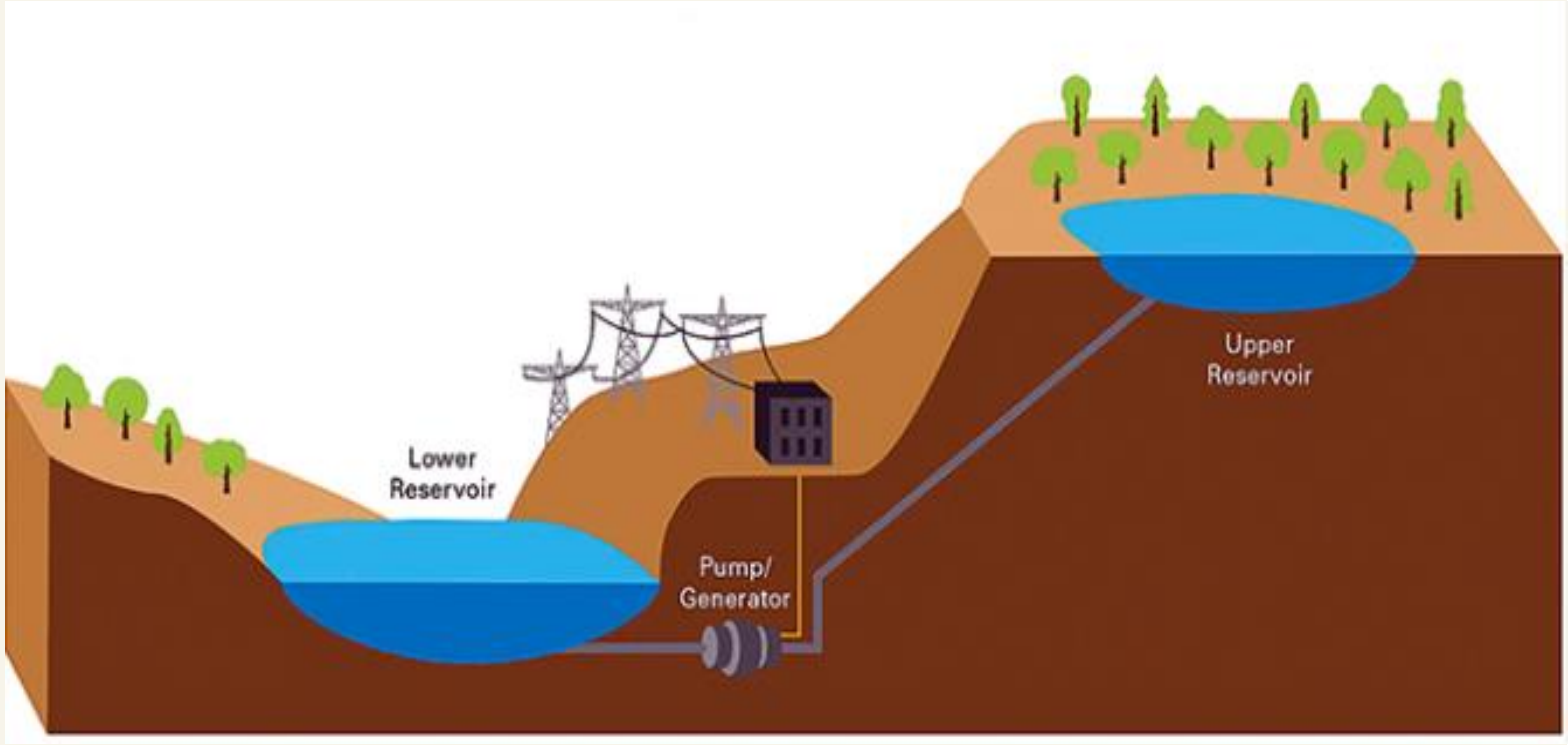
Why Borumba?

From initial State-wide studies Borumba was identified by the Queensland Government as one of the best potential sites for long-duration PHES in Queensland. This is also documented in the QEJP.

Infrastructure	Land use	Proximity	Location
Borumba Dam has existing dam infrastructure that can be utilised	Land is reserved for pumped storage hydro development	Proximity to existing high capacity transmission infrastructure	Strategic location to electricity network to support development of more renewables

Scheme Operation – Concept Design

- Rated gross head = 333m
- Power rated = 2,000MW
- Typically pumping at times of high solar generation
- Typically generating when no or limited solar (night or poor solar days).
- Daily fluctuation in water levels are dependant on:
  1) Volume of water in Lake Borumba at time of pumping/generation
  2) Daily duration of pumping/generation
  3) Installed capacity of scheme



Project Status

- Powerlink commenced stakeholder engagement regarding the transmission lines required for the proposed pumped hydro project began in December 2021
- This was followed by the release of a study area in mid-2022. Feedback from landholders, Traditional Owner groups, community members and other stakeholders was used in the release of draft corridors in late 2022.
- We continued to engage with these stakeholders throughout this process to help inform the refinement and selection of the final 1km-wide corridors
- Powerlink identified 1km-wide final corridors for Borumba to Halys (106km) in September 2023 and Borumba to Woolooga (90km) in November 2023

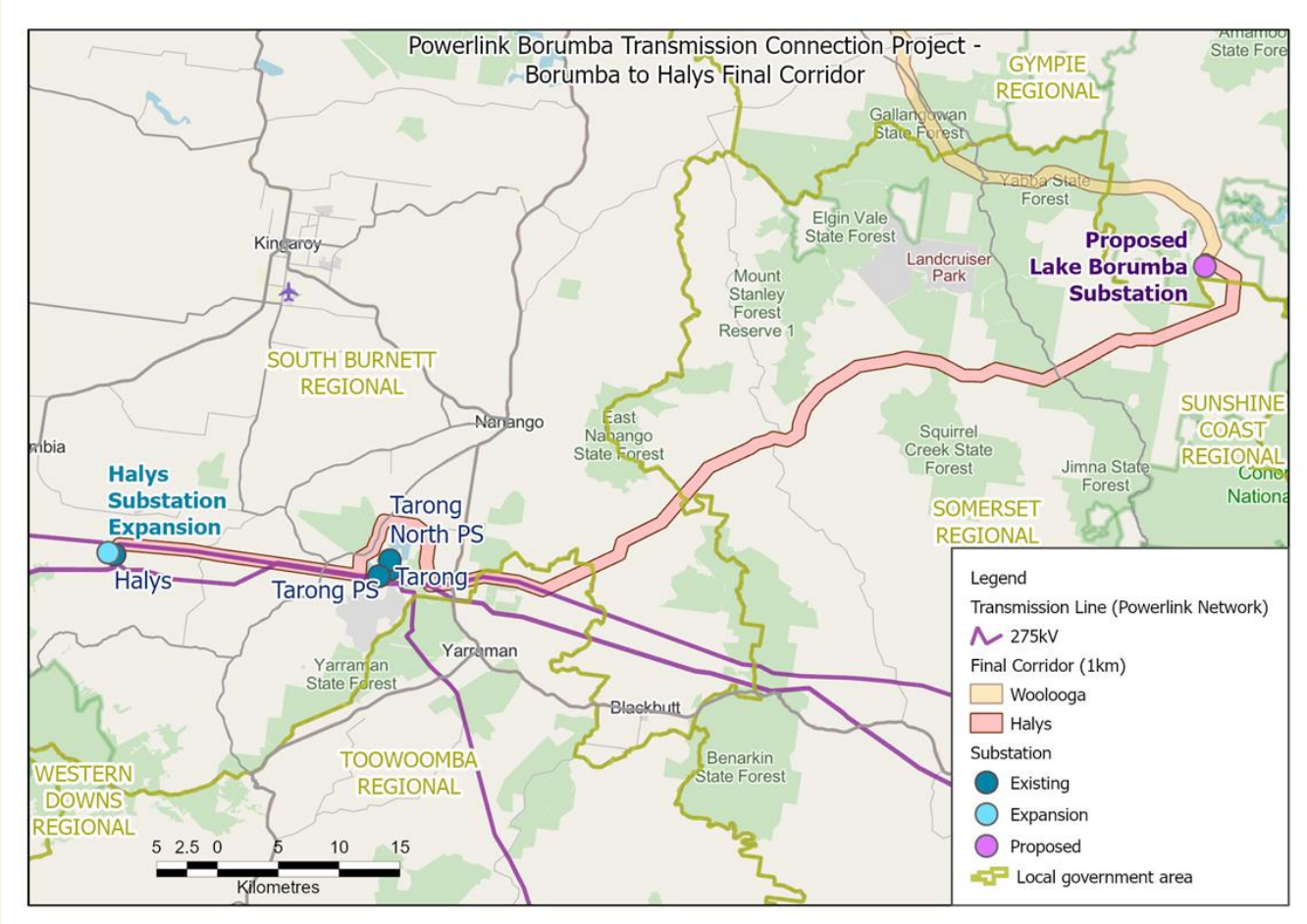
Transmission Easement Engagement Process

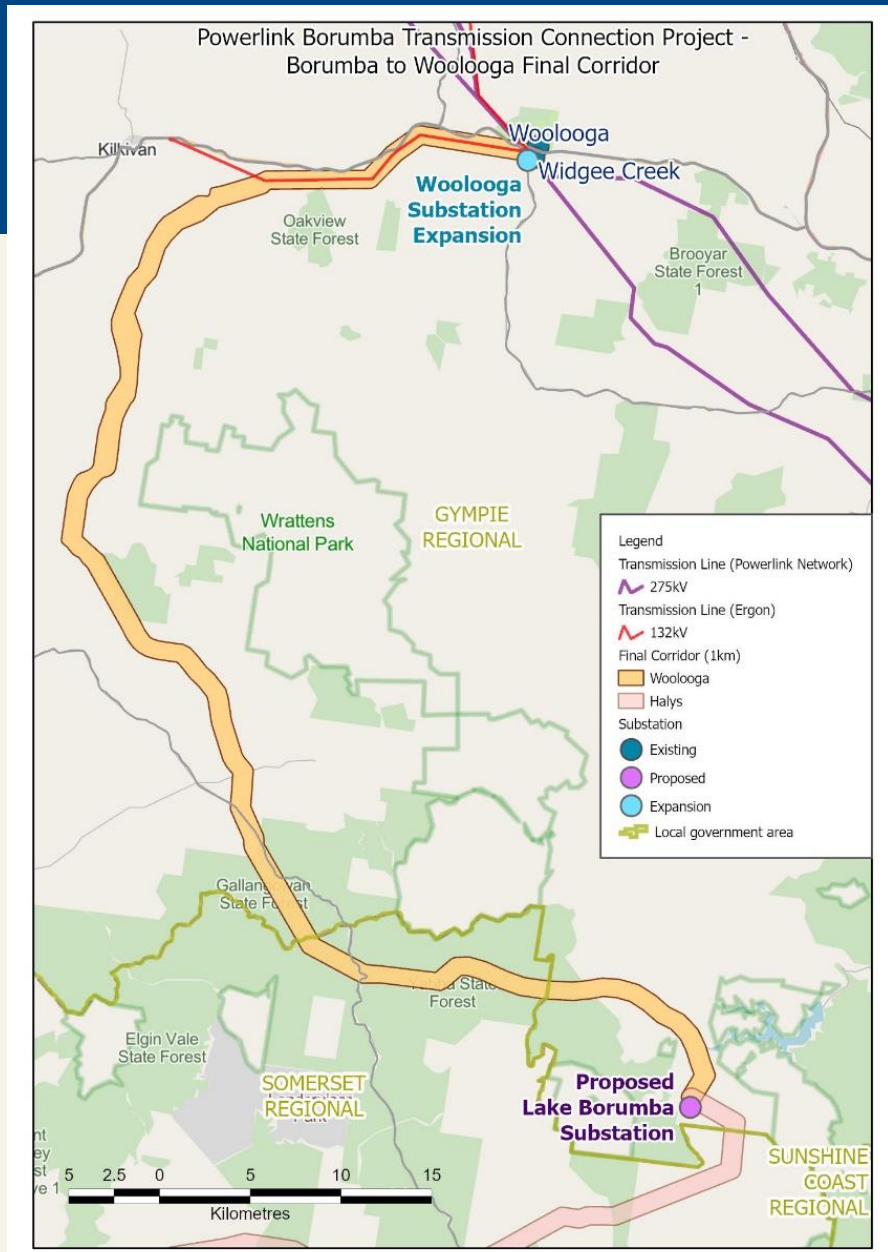
1.	2.	3.	4.	5.	6.	7.	8.
Introduce project and determine corridor selection criteria	Corridor options	Recommended corridor	Final Corridor	On-site land studies	Easement alignment and negotiations	Planning and environmental approvals	Ongoing engagement and commitments

We are here

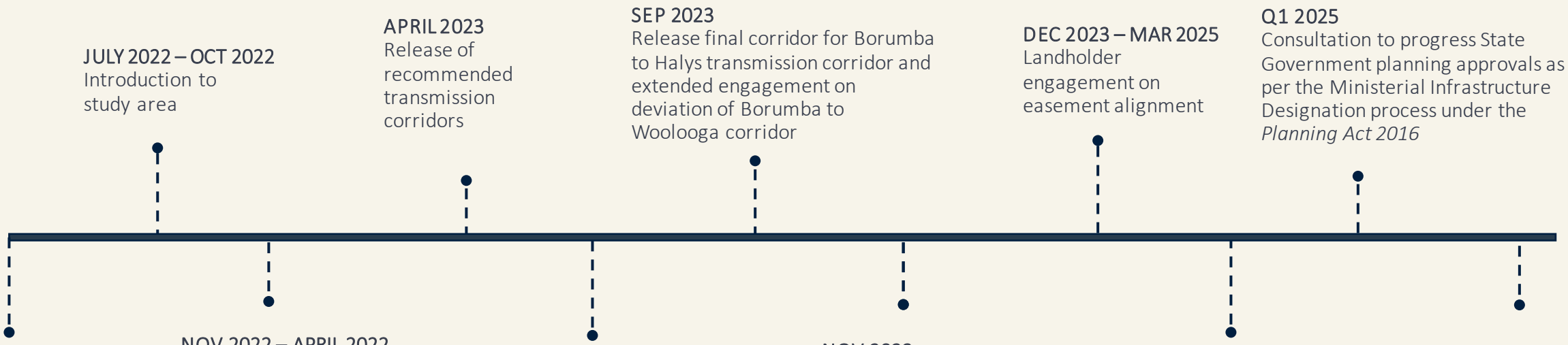
COMMUNITY INSIGHTS

Borumba final corridors





Project timeline



Environmental and planning approvals

- Powerlink is committed to following the rigorous environmental and planning approval processes set by the federal and state governments for our Borumba transmission line connections project.
- The environmental approvals for the transmission line component of the Borumba Pumped Hydro Project will be managed by Powerlink and will proceed on different timeframes to Qld Hydro's approvals for the pumped hydro component.
- The Federal *Environment Protection and Biodiversity Conservation (EPBC) Act 1999* protects Australia's natural and cultural heritage from any significant impacts caused by development projects. Powerlink needs to apply for approval under this act and show that we have done a thorough assessment of the potential effects of our project on the environment and biodiversity.
- The State Government also has legislation called the *Planning Act 2016*, which sets out the rules and processes for planning and development in Queensland. Under this Act, we need to seek Ministerial Infrastructure Designation from the Minister for Housing, Local Government and Planning and Minister for Public Works, which will allow us to construct our project and streamline some of the approvals and permits we need.
- The key documents that we need to prepare for both the federal and state government approvals are the EPBC referral document and Environmental Assessment Report (EAR). These reports describe our project, the existing environment, the potential impacts and how we plan to avoid, minimise or mitigate them.
- Powerlink is committed to involving the community in this process. Feedback will be sought following the release of the draft reports, due in early 2025.

Project Participation and Access Allowance (PPAA)

- Powerlink introduced the Project Participation and Payment Allowance (PPAA) for eligible landholders in 2014 to recognise the important role they have in planning and delivering transmission projects, particularly providing access to their land for on-site investigations.
- The PPAA is paid to eligible landholders per lot in recognition of their cooperation and participation in the process of providing access to their property for field investigations to determine a transmission easement alignment and/or substation site.
- The PPAA **is separate and in addition** to compensation paid under the Acquisition of Land Act 1967.
- The PPAA comprises a payment of $5,000 (plus GST if applicable) for an initial 12-month period of access for field investigations per lot to be accessed, with an additional $5,000 for each further 12-month period (or part thereof).
- Accepting the PPAA and providing access for on-site investigations does **not** mean you support or accept the Project.
- Receiving the PPAA is not compulsory; a landholder may agree verbally to provide access and waive the PPAA if that is their preferred course of action.

Professional fees

- Powerlink is committed to ensuring every landholder can access independent advice to provide support during the negotiation process
- We offer a set payment for hosting landholder to obtain expert professional advice including legal, financial tax and valuation services
- This allowance and amount will be offered during discussions with the Landholder Relations Representative
- The allowance can be paid in advance (subject to execution of agreement to advance payment of professional fees) or included in agreement as “Professional Fees Allowance” item
- Payment for professional fees for obtaining advice and reviewing agreement and to cover preparing claim for compensation under ALA in event agreement not reached and proceed with compulsory acquisition
- If landholder does not take up one-off advance payment of professional fees the amount is to be included in the agreement as “Professional Fees Amount”.

SuperGrid Landholder Payment Framework

Powerlink has developed a new framework that significantly boosts payments to landholders who host new transmission infrastructure.

Under the SuperGrid Landholder Payment Framework, payments will be calculated on the value of individual properties, and the infrastructure's impacts on each specific property, rather than a flat rate.

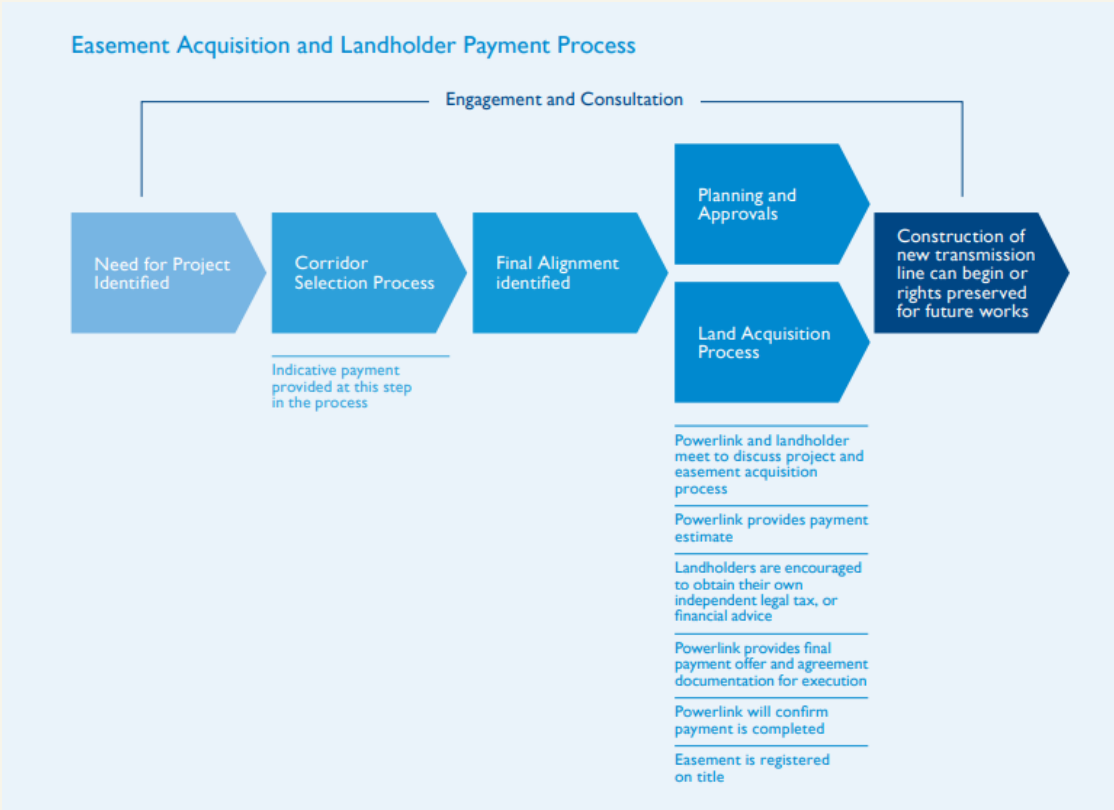
Powerlink is also the first transmission company in Australia to offer payments to landholders with properties next to new transmission infrastructure.

How are payments determined?

During the establishment of an easement, Powerlink will employ an independent registered property valuer to carry out a detailed land valuation to assist with determining each payment package. Payment under the ALA is based on a range of different factors associated with the easement, including but not limited to the:

- value of the property
- impact of the transmission infrastructure on amenity and use of the property (e.g. impacts on farming practices and/or business operations and off easement access requirements).

In addition to the ALA framework, hosting landholders will also receive an incentive payment plus an allowance for professional advice and services. Together these payments contribute to the total payment amount.



The framework will also see an increase in flexibility around the timing of payments – offering the option of an annual payment – and will see landholders given payment estimates much earlier in the process.

Further Information

Project webpage
(Including contact details for project team)

Transmission Easement Engagement Process (TEEP)

Thank you

Nicole Gagen
Property Project Manager