Borumba Pumped Hydro Project – Transmission Line Corridor Options

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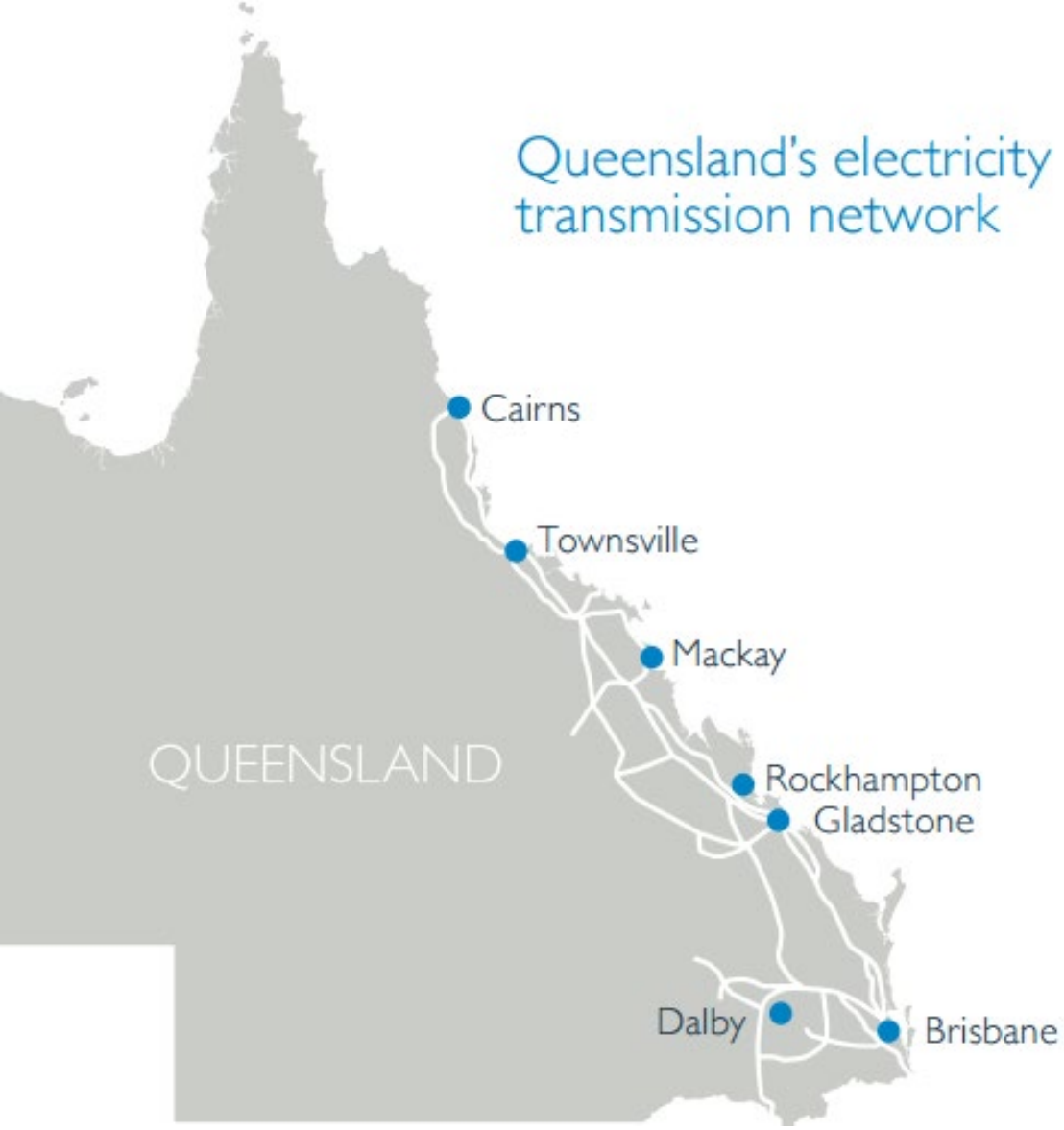
Acknowledgement

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.

About Powerlink



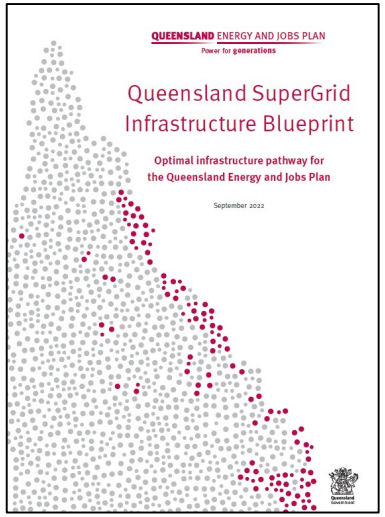
- Queensland Government Owned Corporation
- Owns, develops, operates and maintains the transmission network, providing electricity to five million Queenslanders and 238,000 businesses
- Network transports electricity from where it is generated eg. power stations and renewable generators such as large-scale wind farms to distribution networks eg. Ergon Energy and Energex
- Also have large industrial customers such as mines, rail companies and mineral processing facilities connected directly to our network
- Committed to genuine and timely engagement with landholders, local communities and other stakeholders in planning our future network development in Queensland

Queensland Energy and Jobs Plan

Plan & Blueprint

Three focus areas

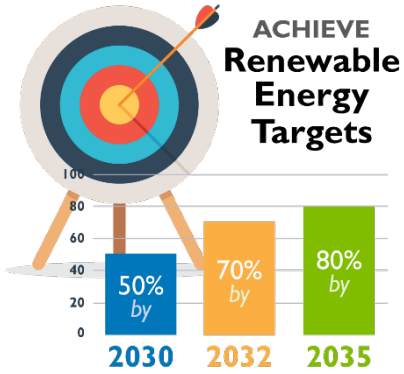
- Clean Energy Economy
- Empowered households and businesses
- Secure jobs and communities

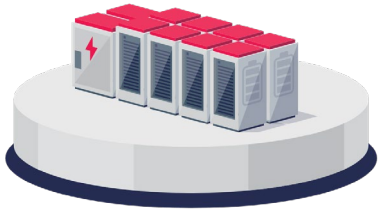


Queensland SuperGrid

- Infrastructure Blueprint outlines the infrastructure to enable the decarbonisation of the existing electricity system.
- Includes Renewable Energy Zones, Pumped Hydro Energy Storage and High Capacity Transmission

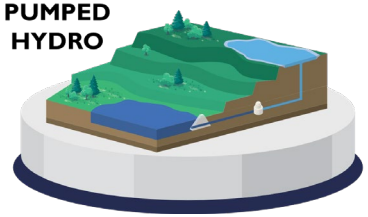
Key Targets and Objectives





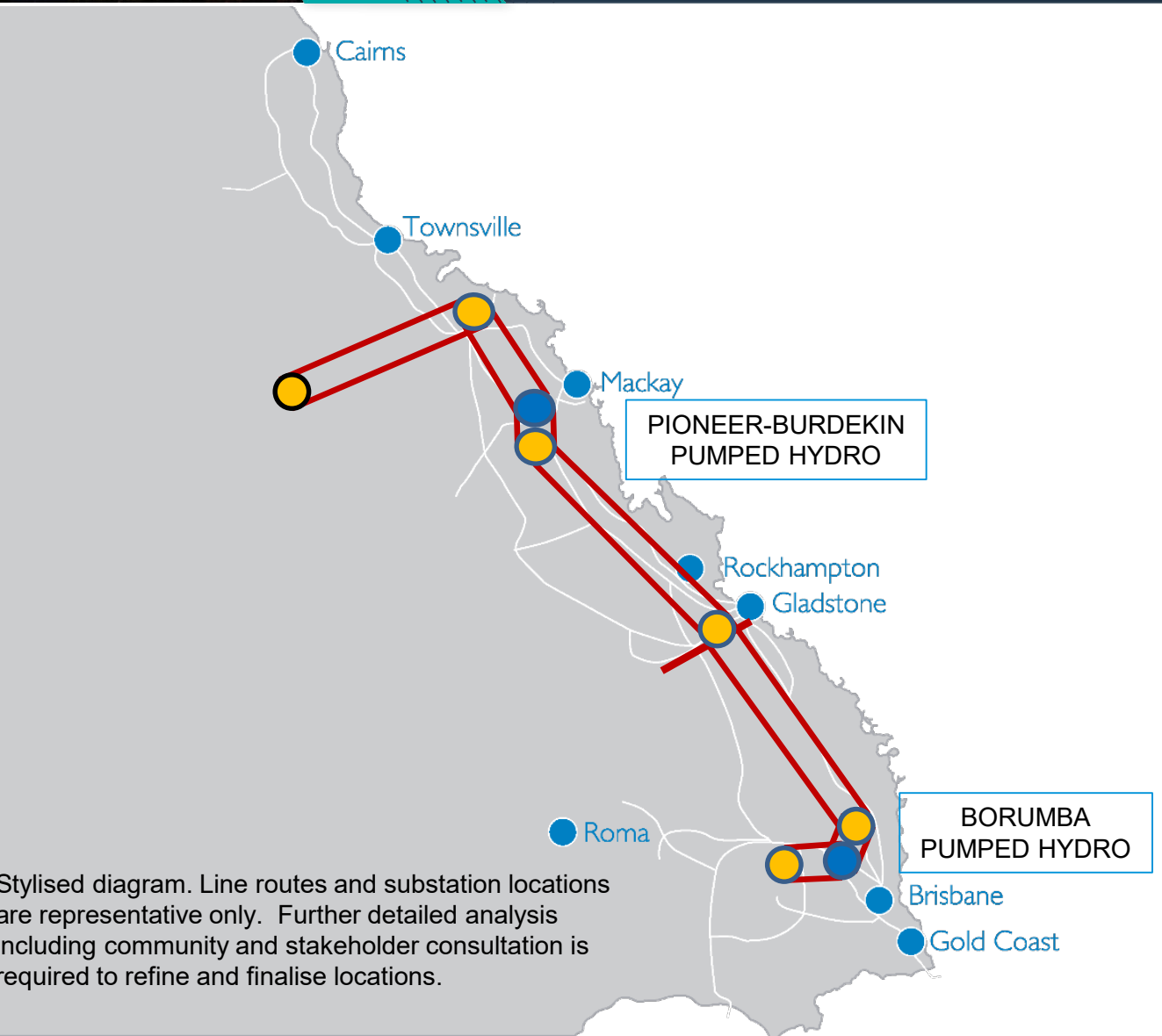
Support growth of utility scale
BATTERY STORAGE

Develop at least
6GW
PUMPED HYDRO



Connect an additional
22GW
WIND & SOLAR
in Queensland Renewable Energy Zones by 2035

Upgrading the transmission network



Stylised diagram. Line routes and substation locations are representative only. Further detailed analysis including community and stakeholder consultation is required to refine and finalise locations.

Stage 1: Borumba Pumped Hydro transmission connection
- Commissioning works in 2029

Stage 2: Central Queensland connection
- 290 kilometre connection
- Support Central Queensland REZ renewable generation developments
- Commissioning planned in 2031

Stage 3: Pioneer-Burdekin Pumped Hydro and North Queensland connection
- Operational date in 2032

Stage 4: Connection to Hughenden Area (Clean Energy Hub)
- Commissioning planned in 2036

Engagement activities for Borumba Pumped Hydro Project – Transmission line connections

- Engagement with stakeholders and the wider community on pumped hydro project started late 2021
- Community information sessions on transmission connections #1 at Imbil and Gympie in July 2022 and Yarraman and Nanango in August 2022
- One-on-one briefings with local community groups in Kandanga in July 2022; and Yarraman, Nanango, Kingaroy in September 2022
- Stakeholder list include landholders in the area, Traditional Owners, local and state government reps, business groups, wider community
- Early discussions focused on information gathering to help with our decision-making and planning
- Ongoing engagement with landholders and other stakeholders via Burnett Stakeholder Reference Group, catch ups in person, phone calls, project website, email and interactive map

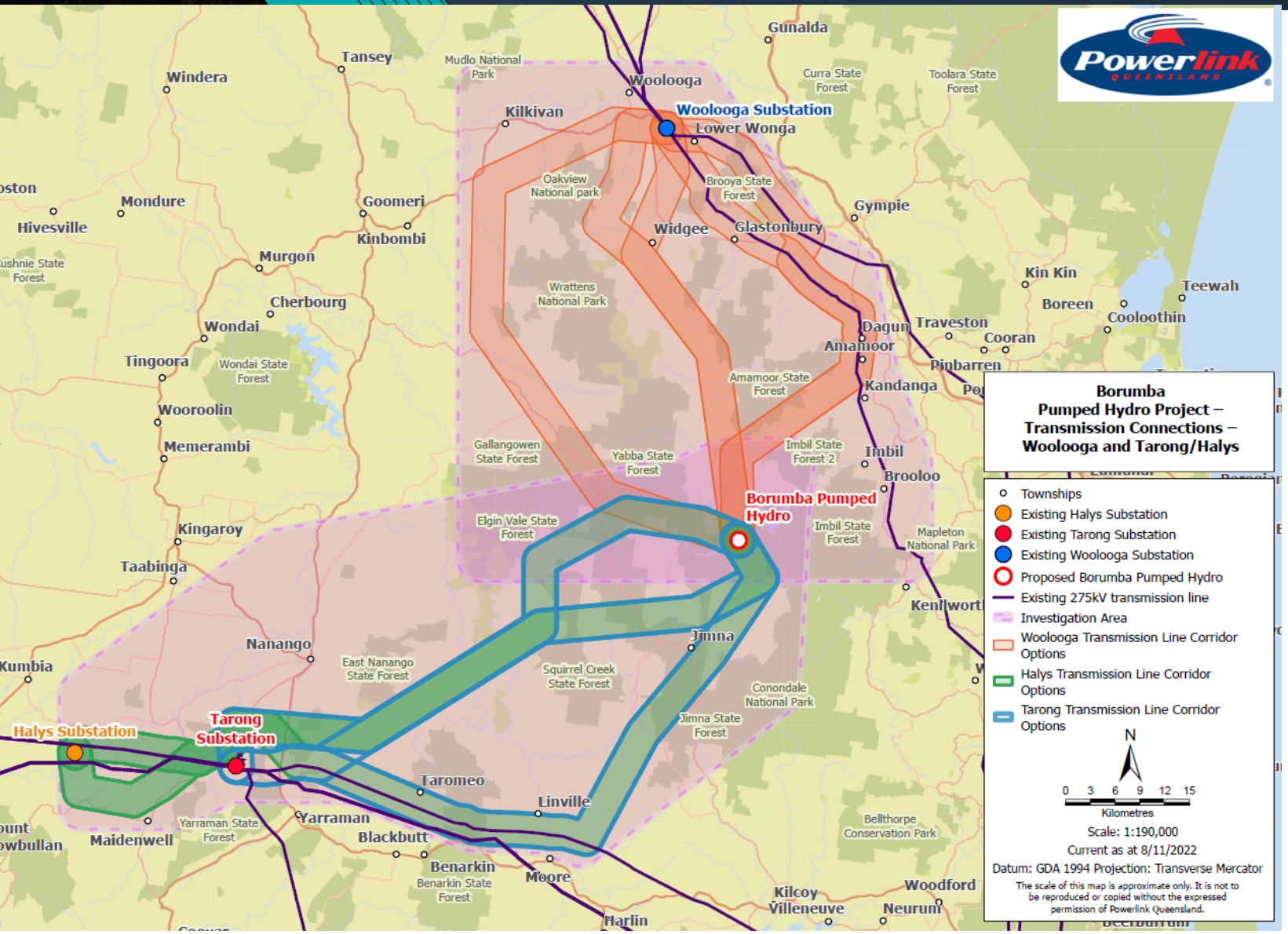
Transmission network connection

- Two new transmission lines will need to be built to connect the pumped hydro facility to the existing transmission network at Powerlink's Woolooga Substation (to the north) and Tarong/Halys substations (to the west).

- We are currently investigating important factors for the potential transmission corridors including:
  - Environmental and physical
  - Social
  - Economic

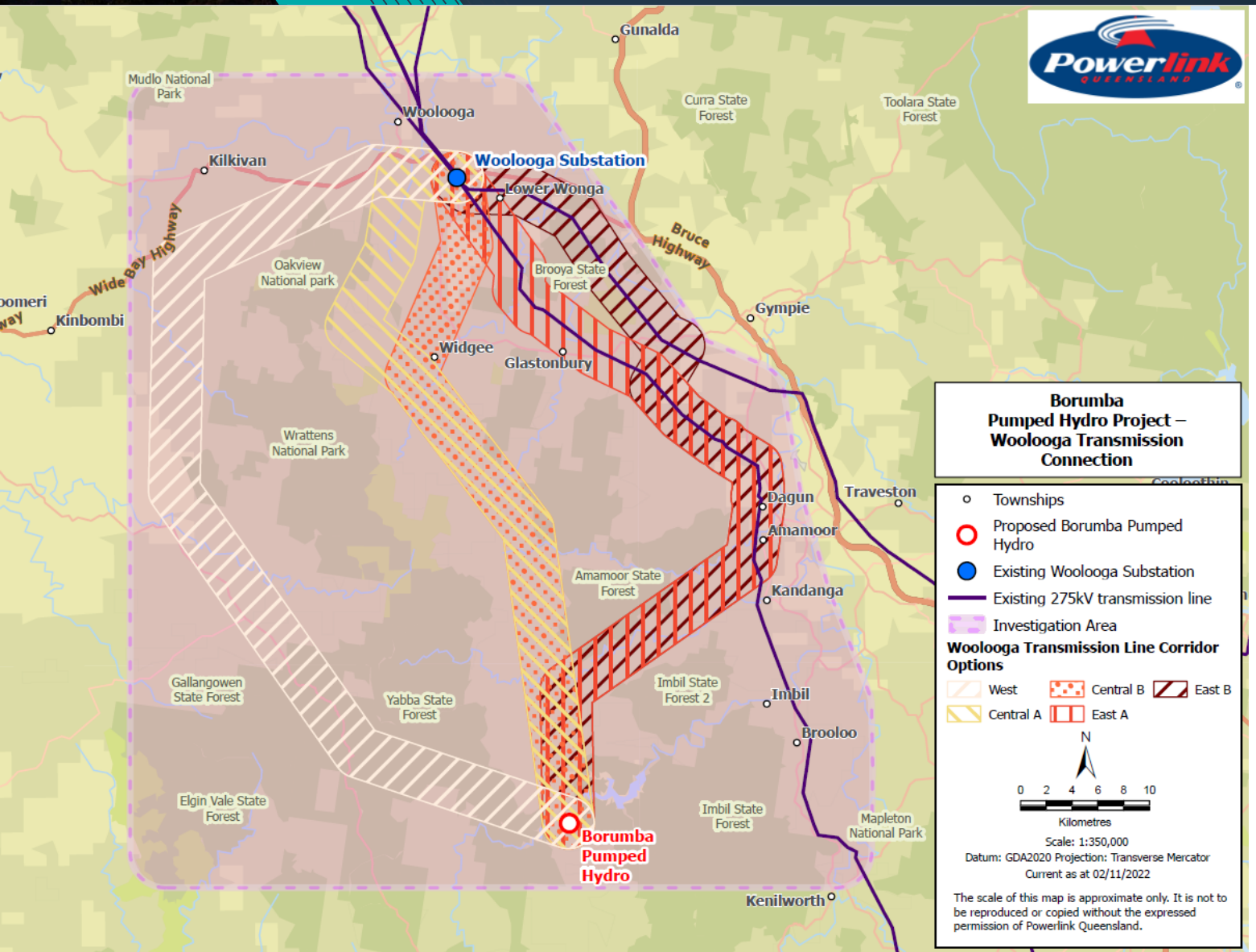
- At the same time, we are engaging early with local communities and stakeholders to gain valuable insights and input to help identify potential transmission corridor options.

Project map and potential transmission connection points



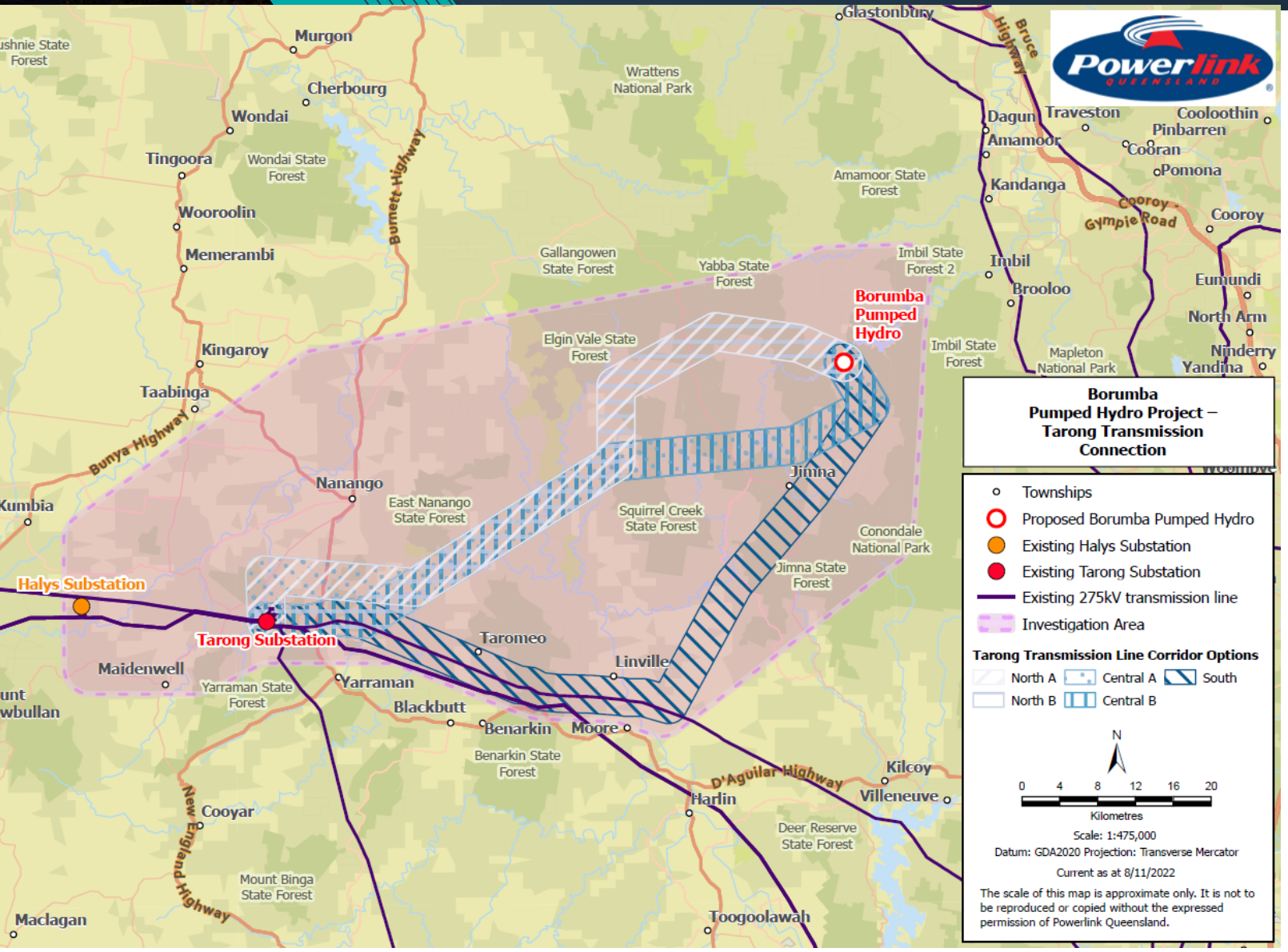
- Following feedback from the wider community and initial desktop investigations, we identified:
- Three potential corridor options for the Wooloogа end - Western, Central and Eastern
- Three potential corridor options for the Tarong/Halys end - Northern, Central and Southern
- Connection may be 275kV (similar to existing lines in the area) or up to 500kV, if required
- Corridors are 4km wide, final selected easement is 60m (275kV), 70m (500kV)
- We are now seeking feedback from the community regarding the proposed transmission line corridor options

Woolooga Transmission Line Corridor Options



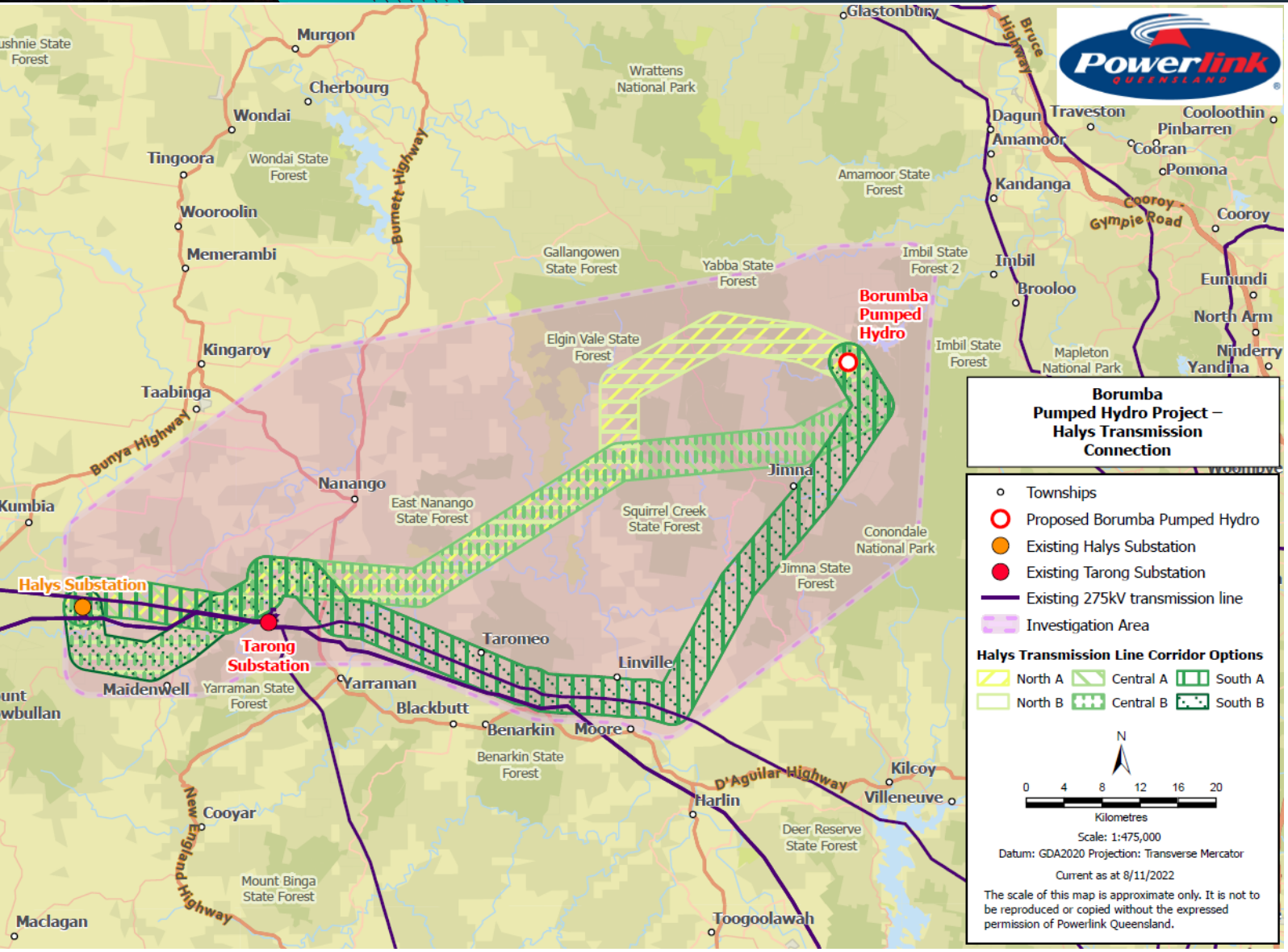
- New line to connect into Woolooga Substation
- Three options proposed
  - Woolooga West Option
  - Woolooga Central (with options A & B)
  - Woolooga East (with options A & B)
- Corridor extends across Brooloo, Imbil, Kadanga, Amamoor, Dagun, Glastonbury, Lower Wonga, Widgee and Kilkivan
- Some impact on intensively cultivated areas
- Opportunity to follow property boundaries
- Potential impacts to remnant vegetation

Tarong Transmission Line Corridor Options



- New line to connect into Tarong Substation
- Three options proposed:
  - Tarong North (with options A & B)
  - Tarong Central (with options A & B)
  - Tarong South Option
- Corridor extends across Nanango, Jimna and Linville
- Opportunity to co-locate with existing lines
- Some impact on intensively cultivated areas
- Opportunity to follow property boundaries
- Potential impacts to remnant vegetation

Halys Transmission Line Corridor Options



- New line to connect into Halys Substation
- Connection to Halys follows a similar corridor proposed for Tarong
- Three options proposed:
  - Halys North (with options A & B)
  - Tarong Central (with options A & B)
  - Tarong South (with options A & B)
- Opportunity to co-locate with existing lines
- Some impact on intensively cultivated areas
- Opportunity to follow property boundaries
- Potential impacts to remnant vegetation

Factors affecting route selection

When selecting a corridor, we consider a range of factors including:

- social impacts, including proximity to residential dwellings
- topography (features of the land, such as hills and creeks)
- important agricultural land and activities
- significant Aboriginal and non-Aboriginal Cultural Heritage
- environment and conservation areas
- constructability (where it can be built)
- location of towns and high population areas
- location of existing infrastructure
- economic cost

Transmission engagement timeline to early 2023

July

Early engagement with key stakeholders including Council, Traditional Owners and Peak Bodies

July/August

Wider community engagement, based on Preliminary Study Area, to gain better insights into constraints and matters of interest

September/October

Incorporate community feedback into consideration of corridor options

November/December

Community engagement to gain feedback on a number of corridor options and next engagement

Early 2023

Develop and release Draft Corridor Selection Report – with recommended corridor

Community engagement on Draft Corridor Selection Report begins

What's next

- Borumba Stakeholder Reference Group meeting 24 Nov

- Community information sessions at:
  - Kilkivan 22 Nov 10am-12pm
  - Woolooga 22 Nov 3-7pm
  - Imbil 23 Nov 3-7pm
  - Gympie 24 Nov 3-6pm
  - Jimna 28 Nov 3-6pm
  - Yarraman 29 Nov 3-7pm
  - Nanango 30 Nov 3-7pm

Thank you

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