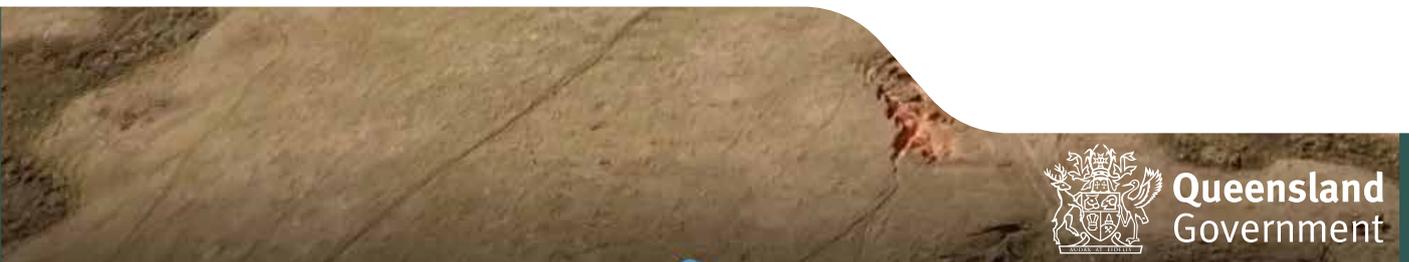


# Project fact sheet

Pioneer-Burdekin  
Pumped Hydro Project



Queensland  
Government

# About the project

*The Pioneer-Burdekin site has been identified for a long duration pumped hydro energy storage facility.*

Pumped hydro storage will play a vital role in the move to renewable generation and will support energy remaining affordable, reliable and secure for our communities.

In June 2022, the Queensland Government announced \$35 million of funding, to identify a second site, in addition to the Borumba project announced in June 2021.

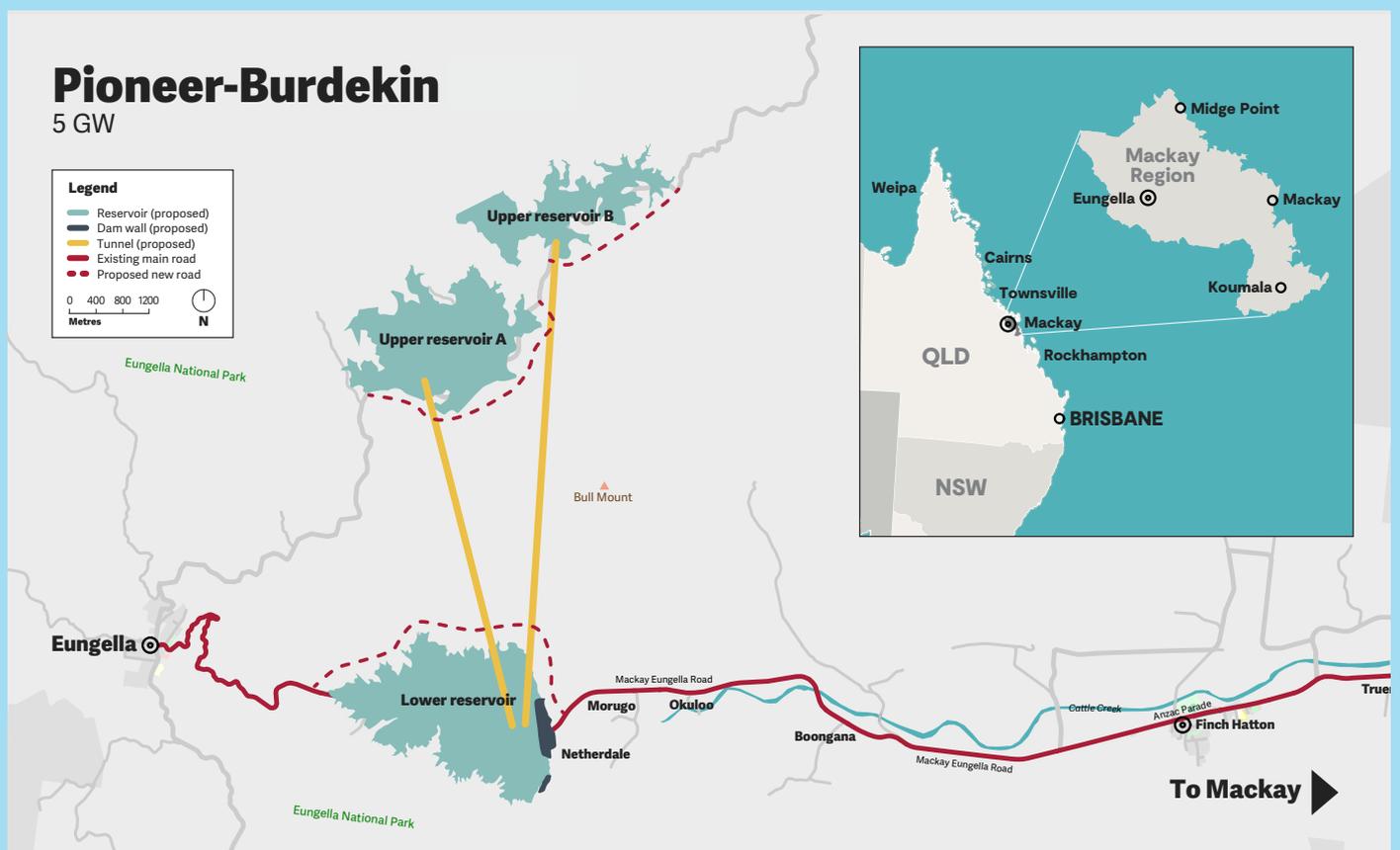
Further studies are required to better understand the impacts and benefits the Pioneer-Burdekin project.

Queensland Hydro will carry out detailed analytical studies over the next 18 months to refine knowledge of the pumped hydro potential between the proposed upper reservoirs in the Burdekin catchment, and the lower reservoir proposed in the Pioneer Valley, near Netherdale. Studies will also include geotechnical investigations, environmental assessments, social and cultural assessments.

## Site location

The Pioneer Valley and adjacent ranges, about 75 kilometres west of Mackay, have been identified for its significant potential for a long duration pumped hydro facility given the topography, favourable hydrology and proximity between upper and lower reservoirs.

The site's proximity to high-quality wind and solar generation sources in the Central and Northern Queensland Renewable Energy Zones could unlock large volumes of renewable energy.



## Queensland Hydro

Queensland Hydro will drive delivery of world-class pumped hydro assets to provide the long duration storage and reliability needed to power Queensland's clean energy future.

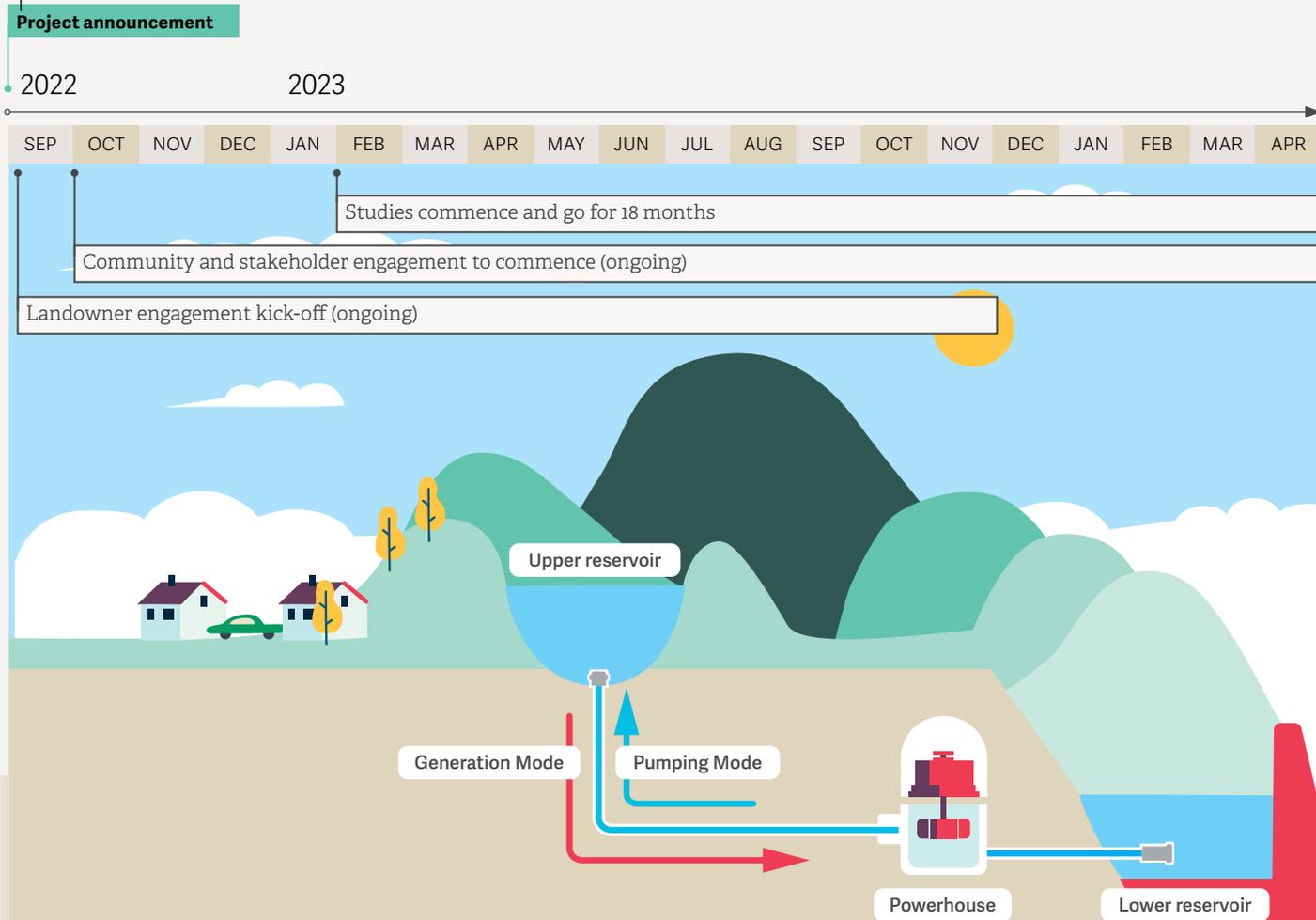
A publicly-owned entity established by the Queensland Government, Queensland Hydro will deliver the long duration hydro assets that will be the cornerstone for the transformation of the state's energy system.

## Transforming Queensland Energy

Pumped hydro will store energy when the wind blows and the sun shines and make it available when we need it. It will support the delivery of affordable, reliable, clean energy for all Queenslanders.

Long duration pumped hydro will support growth in renewable energy, and a more diverse generation mix.

### Project timeline



### Why pumped hydro?

Pumped hydro is a proven technology. Long duration pumped hydro has the scale, operational flexibility, and low energy costs necessary to ensure the ongoing security and reliability of supply for Queensland's future clean electricity system with high levels of wind and solar generation.

Pumped hydro allows for renewable energy to be stored and dispatched at times when the sun isn't shining and the wind isn't blowing.

Rather than shifting energy between places – pumped hydro allows us to shift energy between times. This will become increasingly important as the share of renewables in Queensland's energy system grows to continue to provide a stable and reliable energy system for Queensland.

Long duration pumped hydro assets are able to supply energy over a 24 hour period, or longer. Long duration pumped hydro stores energy while renewable generation is plentiful and discharges it when there is insufficient generation to meet demand. Long duration storage can also provide intra-day storage benefits, along with the ability to deal with extended solar and wind droughts.

There is a need for both pumped hydro and batteries in the future. Batteries play a role in providing an immediate response to changes in the power system. However, the scale and capacity of long duration pumped hydro is significantly greater than the biggest utility-scale batteries, enabling cost efficient delivery of electricity to consumers long after batteries have discharged.

## Key pillars

### Community

Stakeholder engagement is a key priority for us, to ensure we deliver the best outcomes for both Queensland as a whole and the local community. We are committed to engaging early and often with the community and key stakeholders. We will work openly and transparently with communities to manage impacts and create lasting benefits for the places we plan to operate.

### Environmental

Minimising adverse impacts on the natural environment is a guiding principle in developing pumped hydro. Understanding potential environmental issues and risks is a key focus for the project team.

### Technical

Pumped hydro will play a vital role in helping to meet the Queensland Government's renewable energy targets and net zero emissions by 2050, supporting the shift in our economy to a decarbonised energy system.

### Hydrological

Hydrological studies will provide detailed assessment of the sustainable yield of the Pioneer-Burdekin catchment, timeframes for filling of the reservoirs, reliability, impact on other water users, and the impact of climate change. The project will avoid impacts on existing water level allocations.

### Economic

The project is an opportunity to act as an attractor and generator of jobs. It will support diversification of the regional economy to include green energy generation, transforming industries and allow local businesses in the region to grow.

## Next steps



Over the next 18 months, Queensland Hydro will carry out environmental, social and cultural assessments, geotechnical investigations and engineering design.



The project if approved could support several thousand jobs over the construction period, which is expected to extend for more than six years.



If approved, construction will commence following detailed planning, environmental studies, and approval processes.



Get involved – we encourage you to share local insights, feedback and ideas through our website and at community drop-in information sessions.

### Get in touch

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**Queensland  
Government**