

Wurdong Heights Battery Energy Storage System (BESS)

Akaysha Energy is committed to the delivery, development and deployment of large-scale batteries and renewables around the world.

We are proposing to develop a large-scale Battery Energy Storage System (BESS) at Wurdong Heights, Queensland.

This critical piece of energy infrastructure will help secure the energy supply in Queensland, by providing storage of excess energy generated during off peak hours for use during high demand periods.

What is a Battery Energy Storage System?

The Wurdong Heights BESS functions as a robust, rechargeable battery for the power grid. It captures excess energy from various sources from the grid, including solar and wind, to store for later use. This stored energy can be rapidly released back into the grid during periods of high demand or when renewable generation is low, helping to balance supply and demand and ensure a reliable flow of electricity.

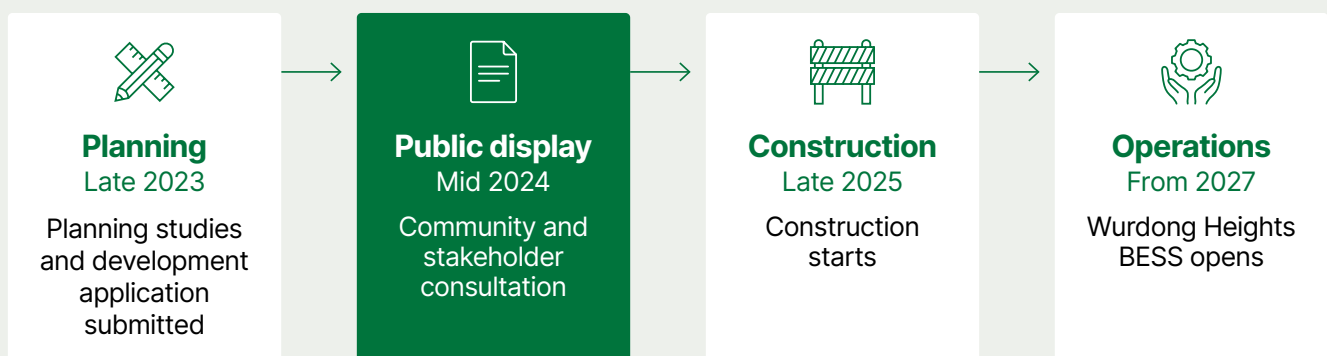
Where will the BESS be located, and what is its capacity?

The BESS is proposed to be built at 89 Hughes Road, Wurdong Heights, adjacent to the existing substation and electrical infrastructure. The BESS will be built on approximately 5 hectares (ha) of undeveloped land.

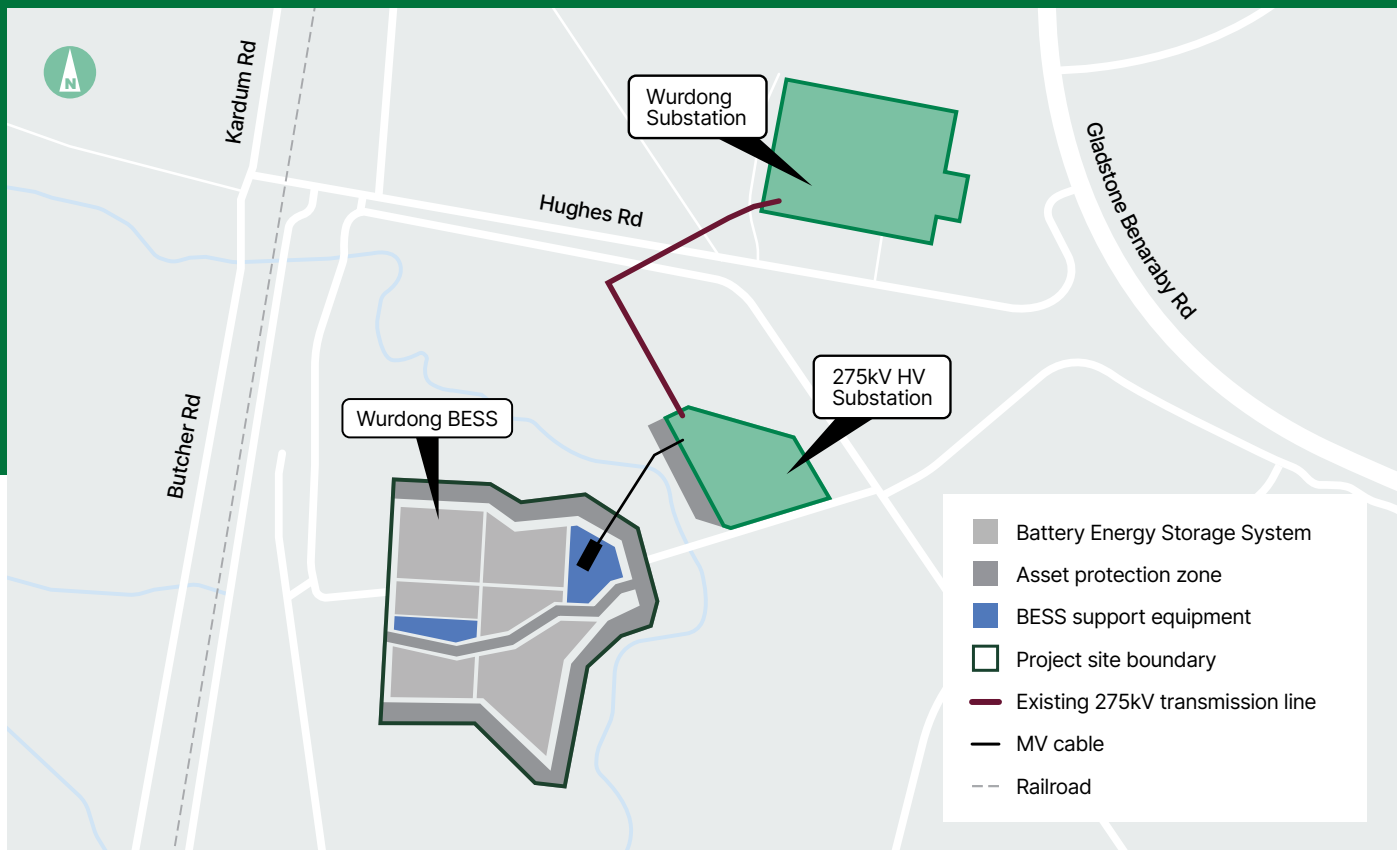
The BESS is being designed for a capacity of 400MW/1600MWh providing up to 4 hours of energy storage, delivered using world-class leading battery technology.

What is the proposed timeline for the project?*

The first stage involved detailed planning studies and project planning. The approval process has commenced with the submission of our designs and plans to Gladstone Regional Council. Following planning approvals we will commence construction in late 2025.



*Time frames are indicative only



The project will include:



Installation of battery units, inverters, cooling systems, and other equipment



Connection to the local electrical grid



A 275 kV HV substation and transmission line connecting to Wurdong Substation

The BESS will support the state's energy network and a transition to clean energy

What is the land currently used for, and why was it selected?

The Wurdong Heights BESS is being proposed to be built on undeveloped land adjacent to the existing electrical infrastructure. We selected this site following extensive studies conducted across several locations. It has been chosen for:

- Grid location
- Proximity to substation
- Renewable support

Project benefits



Storing up to 400MW/1600MWh of energy and providing up to 4 hours of energy storage.



Creation of approximately 150 jobs throughout construction and operations, supporting the need for more local employment and stimulus in the economy.



Increased energy reliability by supplying stored energy at times of low renewable energy generation.



Funding for local community benefit programs.

What should I expect during construction?



Traffic

The busiest traffic periods associated with a BESS will occur during the construction phase. A Traffic Management Plan (TMP) will be crafted in collaboration with the relevant road authority to ensure proper management of construction traffic.



Noise

Construction noise limits are determined by state or territory regulations. Noise modelling for construction activities have been conducted and all works will be arranged to meet noise regulations and approval conditions. Mitigation measures to minimise the impact on local residents will be implemented where necessary.



Community impact

During construction, you may notice an increase in people and vehicles in the area. This temporary workforce will provide an economic boost to local towns by spending on accommodation, food, and other local goods and services.



Safety

Our top priority is safety. We collaborate closely with our construction contractors, and Health and Safety Management Plans are developed to ensure safe construction practices and proactive risk identification and mitigation processes.

What does a BESS look like and what are the visual impacts?

BESS facilities typically consist of containerised, modular systems that can be tailored to meet specific site and capacity needs.

The project is strategically located adjacent to existing electrical infrastructure, near the Wurdong substation and transmission lines, to minimise visual impact.

Additionally, we will integrate vegetative screening, blending the facility with existing vegetation and adding extra screening as needed.

Artist's Impression

The artist's impression provides a visualisation of how the BESS could look. The image is indicative only and is subject to change based on further engineering, planning studies, and feedback from communities and stakeholders.



Artist's impression of the proposed BESS at Wurdong Heights.



Artist's impression of the proposed BESS at Wurdong Heights.

Planning pathway

A planning application is currently with Gladstone Regional Council for consideration.

The planning documents will be available to review during the Public Notification period from Wednesday, 17 July until Wednesday, 7 August.



Scan here to view the project and planning documents.

Want more information?

To find out more about the proposed Battery Energy Storage System (BESS) in the Wurdong Heights area, come and speak to the Akaysha Energy team at our upcoming community drop-in sessions.



Community drop-in sessions

Wednesday 24 July

Session 1: 3pm – 6pm

Thursday 25 July

Session 2: 8am – 12pm

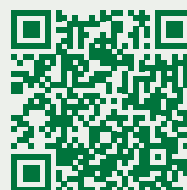
Location: Benaraby Progress Association Hall, 48845 Bruce Hwy, Benaraby QLD 4680

Contact us

We're committed to keeping you informed as we progress. Register to stay up-to-date or contact our project team for more information on our website.

You can also contact us via:

Email address: wurdongbess@akayshaenergy.com



Scan here and visit our website