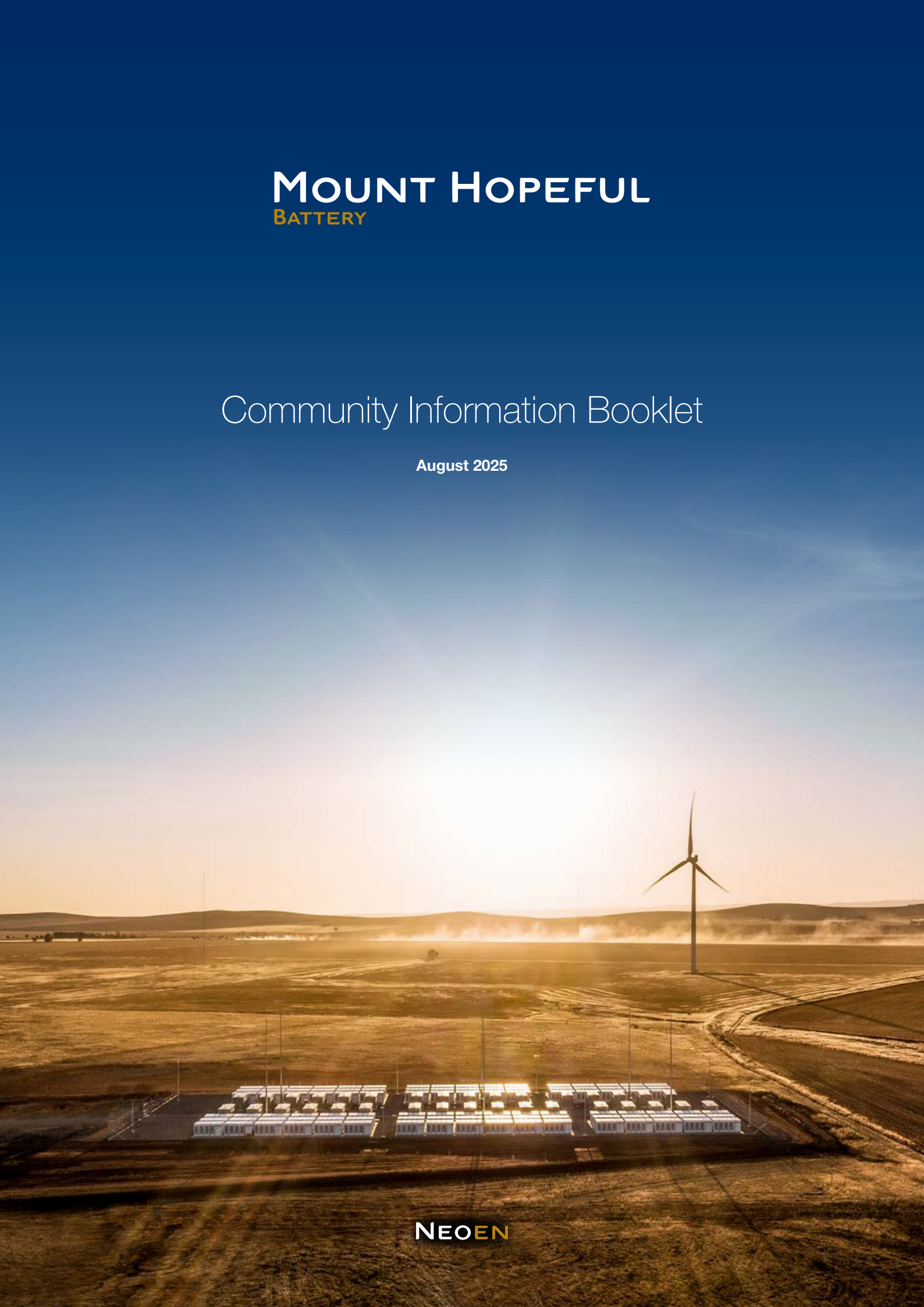
Mount Hopeful Battery

Community Information Booklet

August 2025



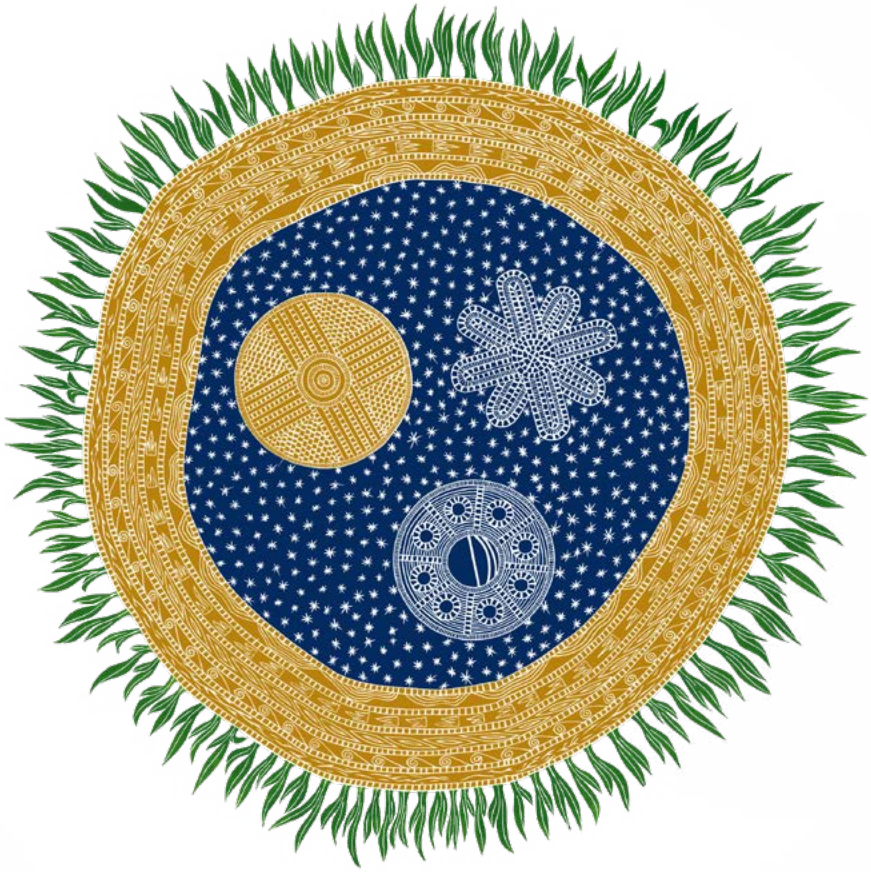
NEOEN

Acknowledgement of Country

Neoen acknowledges the Traditional Owners of Country throughout Australia and recognises their continuing connection to land, waters and culture.

We pay our respects to their Elders – past and present.

In particular, we acknowledge the Darumbal people, Traditional Owners of the lands on which we are developing the Mount Hopeful Battery.



RAP ARTWORK

Celebrating Renewal

Teho Ropeyarn, 2022

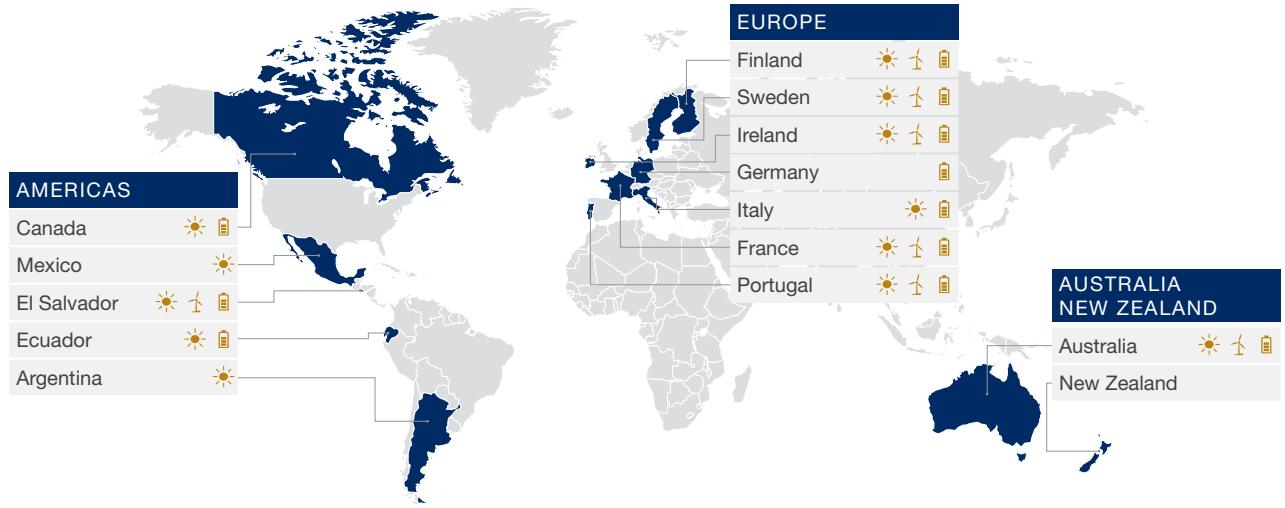
Contents

NEOEN

Neoen produces green electricity from renewable sources such as sunlight and wind using mature, tried and tested technologies. We are also leaders in energy storage.

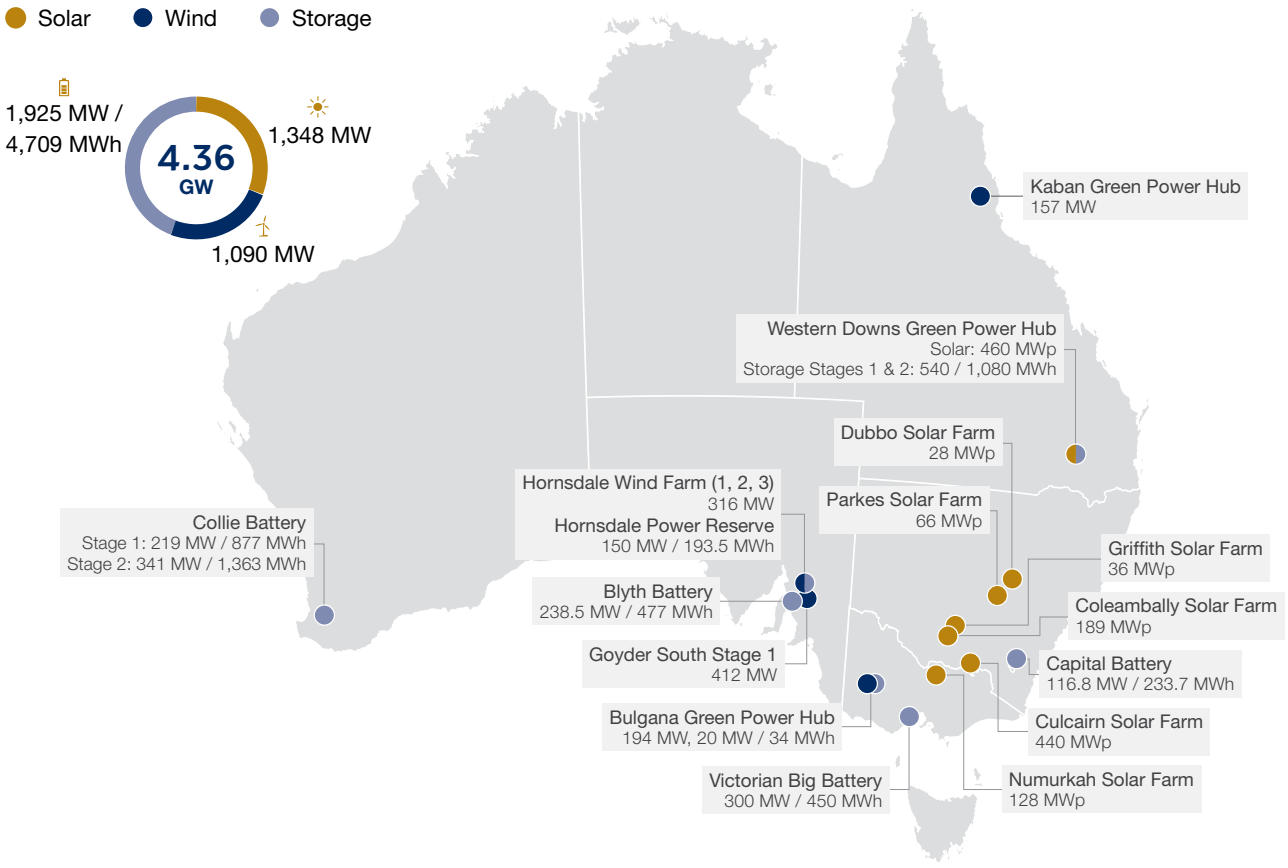
Globally

Neoen has a presence in 14 countries with over 8 GW of assets in operation and under construction worldwide.



In Australia

Since 2012, Neoen has developed over 4.3 GW of wind, solar and storage projects across six states and territories*.



*Accurate as at 31 July 2025

Australia's largest renewable energy company

Long-term approach

Neoen has end-to-end expertise in developing, building and operating its assets, ensuring high quality projects that are well-integrated into the community over their 30+ year lifetime.

Our 24/7 Operational Control Centre in Canberra monitors and oversees our 21 Australian operating assets including wind farms, solar farms and big batteries*.

Strong track record

Neoen is Australia's largest renewable energy company with 4.3 GW and has invested over $7 billion in Australian renewable energy assets.

We have proven experience in partnering with stakeholders to develop, build, commission and operate power plants in the Australian electricity market.

Trusted energy supplier

Neoen is a trusted supplier of clean energy to major energy consumers including Coles, Energy Australia, AGL and BHP.

We have contracts with governments in South Australia, New South Wales, Western Australia and with Cleanco in Queensland as well as with the Australian Energy Market Operator.

We are known for our professionalism and delivery track record.

100% renewables

Neoen is not involved in any other energy business streams outside of the investment, construction, and operation of renewable energy assets.

There is no other part of the Neoen company that will impact on the social, carbon, or ecological standing of Neoen: we are a 100% clean renewable energy company.

*Accurate as at 31 July 2025

Leaders in the energy transition

Hornsdale Power Reserve

IN OPERATION

150 MW / 193 MWh, South Australia

This was the world's first big battery. Co-located with a wind farm, this battery took less than six months to build and saved SA energy consumers over $150 million in its first two years.

Collie Battery Stages 1 & 2

STAGE 1: IN OPERATION
STAGE 2: UNDER CONSTRUCTION

560 MW / 2,240 MWh, Western Australia

The first long-duration 4-hour battery in our portfolio and in the state. The Collie Battery can charge/discharge 20% of the average demand in Western Australia's south-west system.

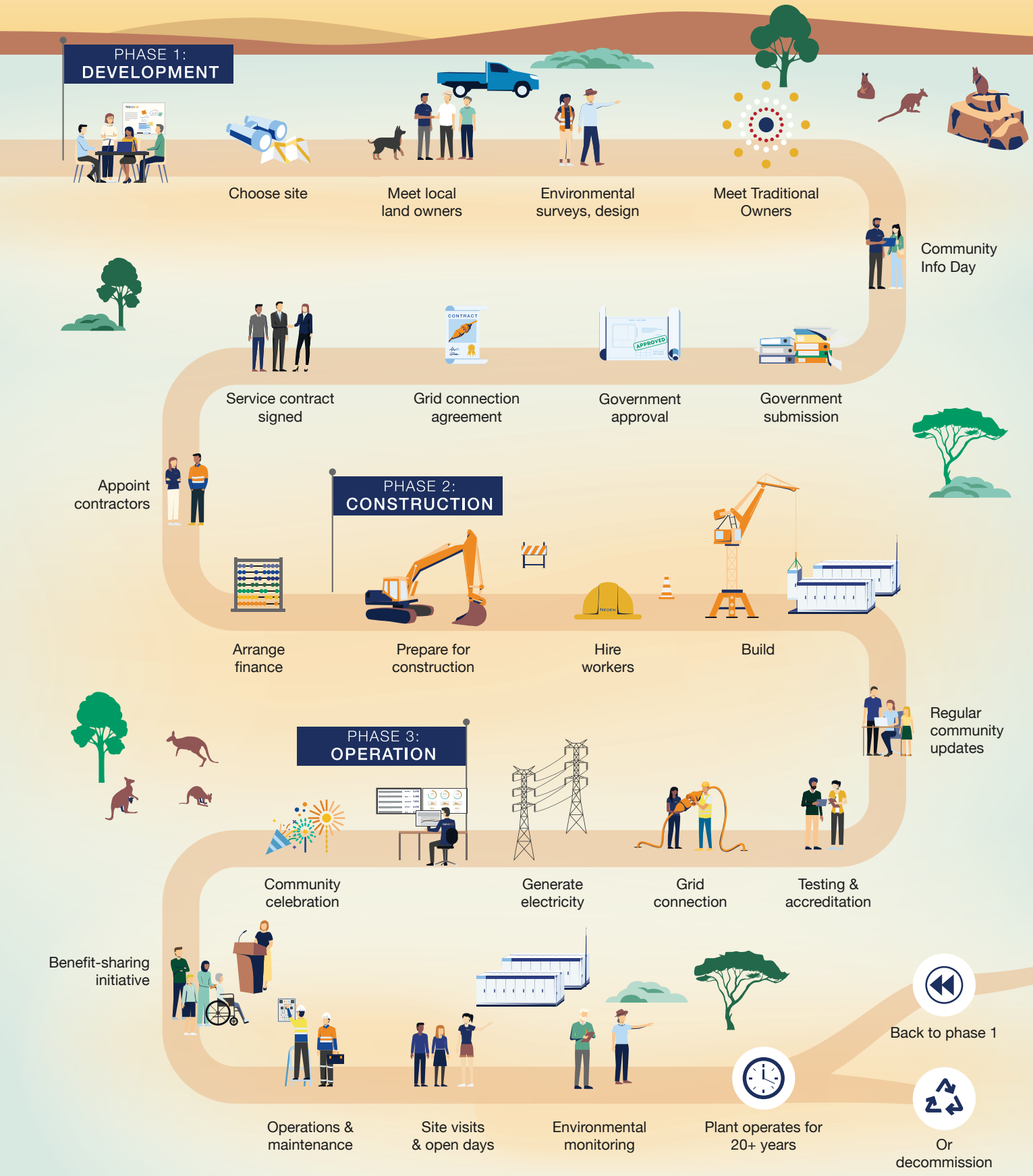
Western Downs Green Power Hub

IN OPERATION

540 MW / 1,080 MWh, Queensland

Co-located with a solar farm, this site hosts our innovative virtual battery solution with customers including AGL and Shell Energy Australia.

Project lifecycle



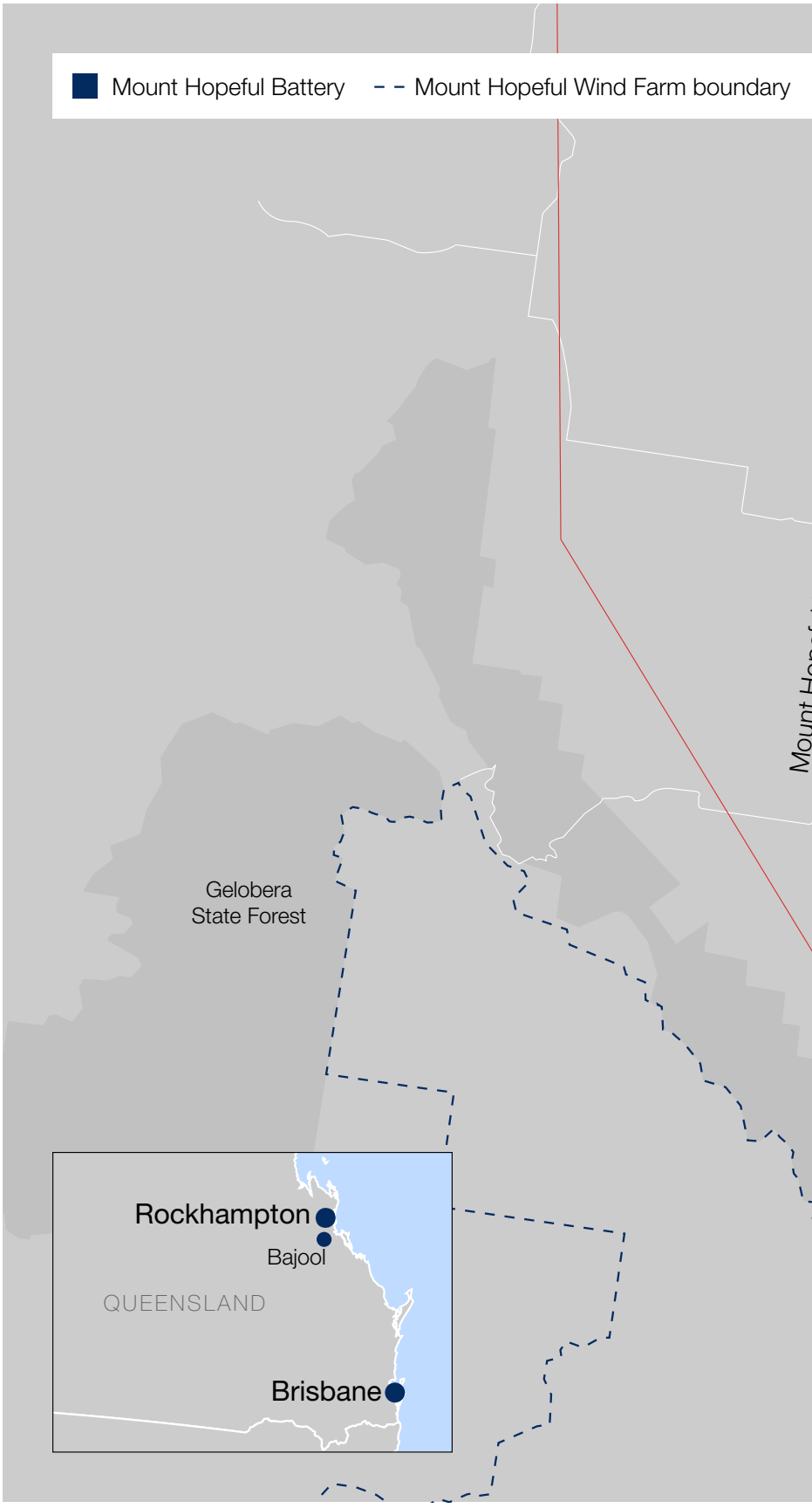
Project layout

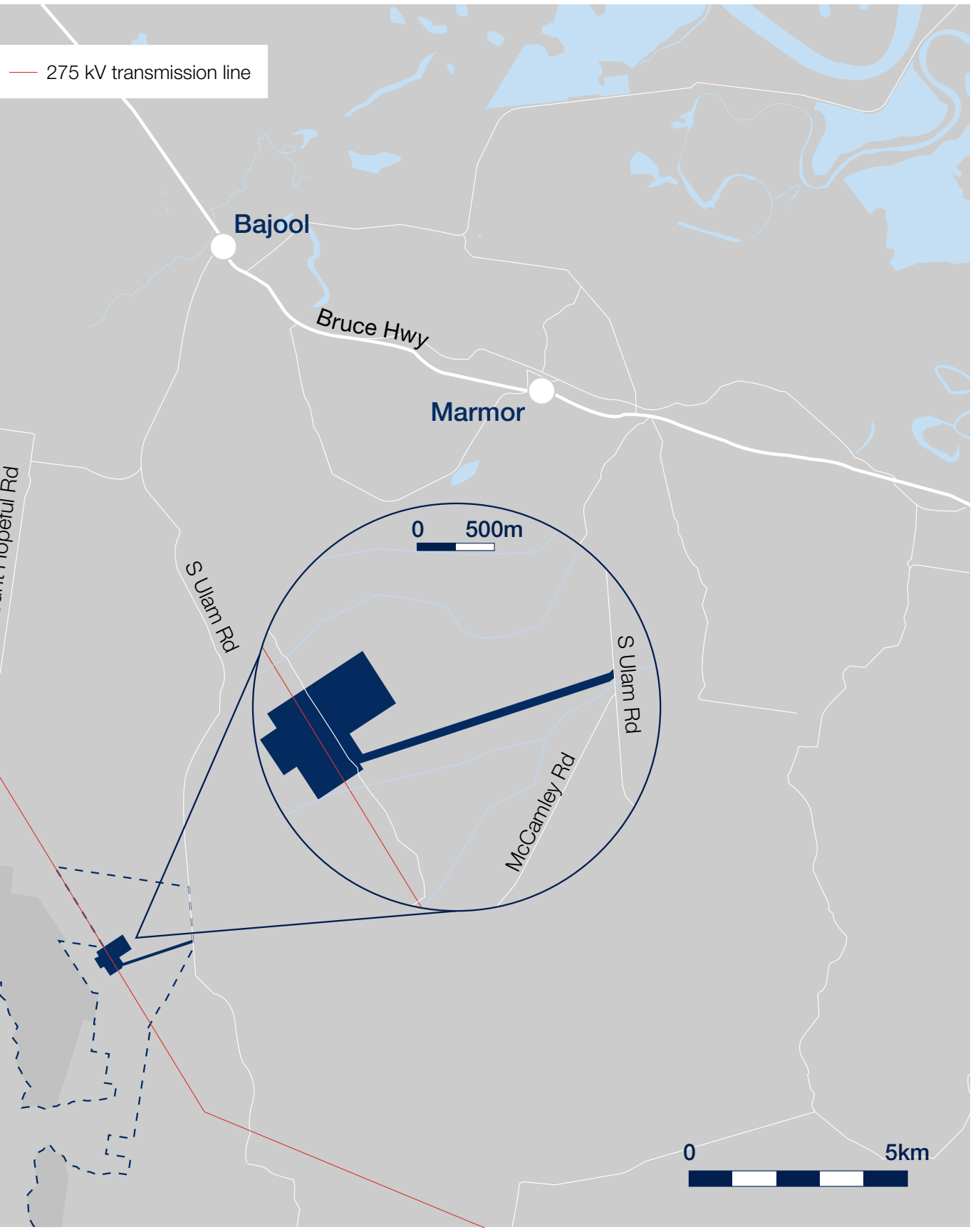
The proposed Mount Hopeful Battery will have a capacity of up to 600MW, and up to four hours of stored energy. It will likely be built in two stages.

The battery will store up to 2,400 MWh of energy that can be discharged quickly on demand.

The Mount Hopeful Battery is a key part of the broader Mount Hopeful Wind Farm and Battery Project.

It will be located approximately 15 km south of Bajool in Queensland on the eastern side of the wind farm site, along South Ulam Road.




275 kV transmission line
Bajool
Bruce Hwy
Marmor
Hopeful Rd
S Ulam Rd
0 500m
S Ulam Rd
McCamley Rd
0 5km

About big batteries

What does a big battery do?

Like a pocket knife, a big battery has many uses:

Basic Function

When there is excess energy, the battery will charge. When there is high demand for energy, the battery will discharge.

Frequency support

To maintain stability of the system, the grid has frequency control. The battery discharges electricity in response to frequency changes, this also adds competition to the energy market.

Virtual Inertia

Like cruise control in your car, inertia services are a way of maintaining stability of the grid. A big battery enables advanced power inverters to emulate the existing inertia services supplied by fossil fuels.

Network support

Like adding another lane to a freeway, the battery can unlock additional capacity on existing transmission networks, saving customers millions in expensive transmission line upgrades.

Firming renewables

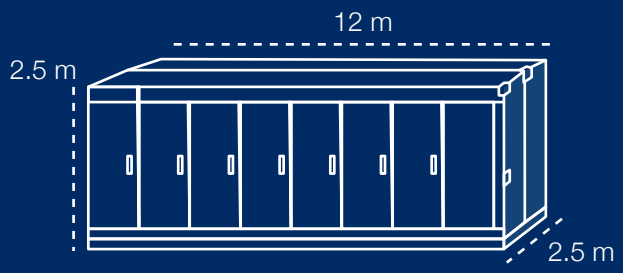
Along with wind and solar, batteries firm varying renewable energy. Batteries are an essential component in the stable transition to clean electricity and achieving emissions reduction targets.

What's inside?

The battery packs are likely to be lithium-ion enclosed in steel cabinets, similar to shipping containers. The battery brand is yet to be determined.

Cabinets are water and dust-proof and the colour is light to assist with heat management. Each cabinet has its own internal thermal management system.

Inverters are made from galvanised steel, and may exist as one single 12m container or a few outdoor cabinets on concrete slabs.



Store
Energy is stored in the battery cabinet.

Convert
Energy is converted from DC to AC at an inverter, then progressively stepped up via transformers.

Send/receive
Energy is imported or exported depending on the needs of the electricity grid.

Do big batteries pose a fire risk to surrounding communities?

Neoen takes fire safety and mitigation very seriously on all its assets.

As a long-term owner and operator of renewable energy assets, we work closely with relevant fire and emergency services from early stages of development to construction and across operations.

Our projects involve building new infrastructure and we are committed to ensuring that in doing so, we do not put unnecessary, additional pressure on valuable, local resources (such as fire fighting) or bring unmitigated risk to the natural environment and communities surrounding our project sites.

Big batteries can be beneficial in mitigating bushfires:

- Asset Protection Zones around the big battery act as a fire break in both directions
- Access to water tank(s) on site, guaranteeing reserves for fire fighting purposes in an emergency
- Additional eyes on the project area to detect and raise alarms during an emergency
- Additional funding opportunities become available for local fire fighting volunteers and authorities.

Over the last decade, Neoen has partnered with the following agencies to successfully develop more than 22 assets across six Australian states and territories:

Tasmania Fire Service

Local benefits

Community Benefit-Sharing

Neoen will make an **annual commitment** under the Community Benefit-Sharing Program to provide benefits to communities living around our Mount Hopeful Battery.

Funding will be available when the project goes into operations and will continue for its 30+ year lifespan. We aim to fund local projects and initiatives in one of the following growth areas:

Arts, culture & events

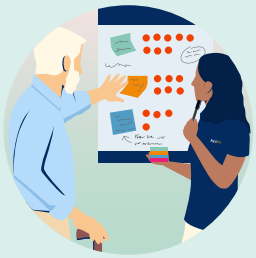
Disaster relief & emergency services

Education & Training

Energy efficiency & environment

First Nations Initiatives

Health & Wellbeing



Submit your ideas: shorturl.at/r8OHr

Case Study: Concongella Primary School

Our Bulgana Green Power Hub has a $120,000 annual Community Benefit Fund administered by the Northern Grampians Shire Council. Local community groups apply for grants ranging from $1,500 – $20,000.

"We applied for a grant to install a wind turbine and solar panel array at the school... for the students to understand streams of energy production. It was a very simple application process."
– Kristie Miller, Principal

Artwork commitment

We create an artwork on all our projects with an energy capacity of over 50 MW. This commitment aims to celebrate renewable energy as well as the culture, history or flora and fauna of the local region in which we build and operate our project.

Environmental Above & Beyond initiatives

We are committed to supporting local environmental and biodiversity initiatives in the areas in which we own and operate our projects. This initiative is 'above & beyond' our offset requirements on a project with an energy capacity of over 50 MW.

Have your say!

You know this area best so we'd like to hear your ideas for community benefits. Scan this QR code or visit our website:

shorturl.at/r8OHr

Batteries

How long will it take to build the battery?

Construction of the Mount Hopeful Battery will take around 18-30 months.

How big will it be?

The Mount Hopeful Battery will have a capacity of up to 600MW with a storage duration of up to four hours. It is likely to be built in two stages. Once completed, the battery will take approximately 25 hectares of land. The battery cabinets are normally around 2.5 meters tall.

Where will it be located and why?

The Mount Hopeful Battery will be located next to the 275kV high-voltage power line that runs from Bouldercombe to Calliope River, on a freehold rural property approximately 15km south of the town of Bajool. The land was selected because it is flat, close to the electricity network, and in a rather isolated area.

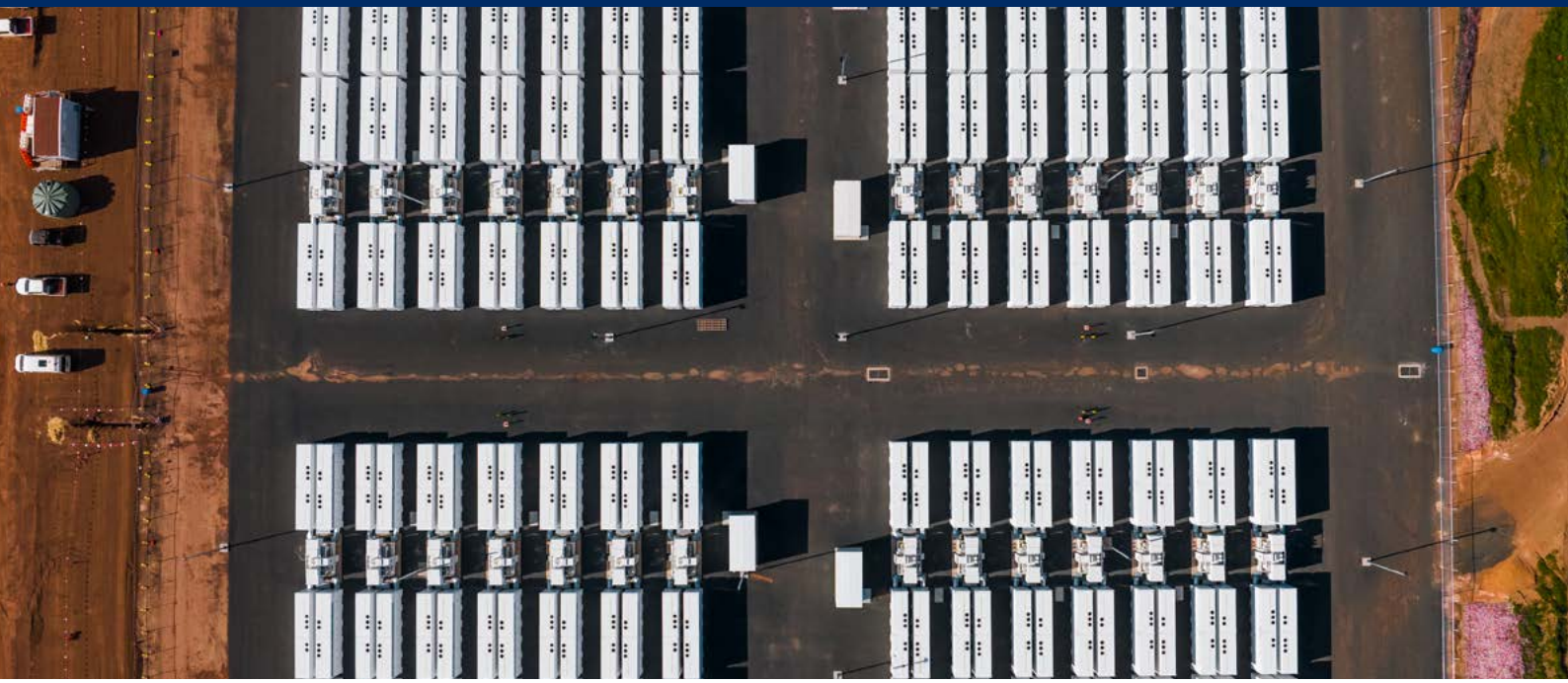
What technology is being used for the project?

The Mount Hopeful Battery will utilise Lithium-Ion batteries and associated equipment from leading manufacturers. These manufacturers are selected through a competitive tender process.

The facility will be an orderly arrangement of battery cabinets, inverters and control systems including electrical and data cabling. The battery packs are enclosed in custom designed, dust and waterproof ‘cabinets’ made of steel. The cabinet colour will be white, or light coloured to assist with heat management and each cabinet has its own internal thermal management system.

What is the life cycle of the Battery?

Current battery technology comes with a 20-25 years warranty. The batteries will still retain the majority of their capacity during this period and will be capable of operating beyond it depending on market conditions and other factors.



How does it work?

The Mount Hopeful Battery will store energy in times of high production and release energy in times of high demand, similar to how a battery on a home solar system works. It will also help to stabilise the grid in a few different ways – it has an emergency response mode to prevent blackouts and it can maintain voltage and frequency levels.

What are the benefits of battery energy storage?

In making the transition from fossil fuels to 'baseload' renewables, the ability to store and dispatch energy will play a key role. Pumped hydro is an example of longer-term storage that is suitable for storing energy and releasing it over days or weeks. However, pumped hydro has a relatively slow 'ramping' time and is less suitable for providing rapid-response services to grid contingency events such as outages or heat waves (with high demand created by air-conditioning). Battery storage fills this key short-term role.

These are some of the functions a grid-scale lithium-ion battery may be expected to perform:

- Frequency support: To maintain the stability of the system, the grid has frequency control. The battery discharges electricity in response to frequency changes. The battery will also add competition to the market, reducing electricity costs.
- Virtual inertia: Like a cruise control button in your car, inertia services are a way of maintaining stability of the grid. A big battery can enable the advanced power inverters to emulate the existing inertia services being supplied by an ageing fleet of fossil fuel power plants.
- Network support: Grid-scale batteries can provide dynamic warp-speed responses so existing transmission lines can operate at full capacity. Like adding another lane to a freeway, the battery can unlock additional capacity on existing transmission networks, saving customers millions of dollars in expensive transmission line upgrades.
- Firming renewables: Along with wind and solar technologies, large-scale batteries help firm variable renewable energy. Batteries are an essential component in the stable transition to clean electricity and achieving emissions reduction targets.

Many of these services have been provided by coal and gas generators in the past. But as they close down, battery energy storage can, and is, being used to deliver these critical services.

Economy

Who will pay for it?

The project will be privately financed by Neoen.

How is the battery reducing costs for consumers?

Mount Hopeful Battery can reduce costs for consumers in three ways:

- supporting more wind and solar, which are commonly seen as the cheapest forms of power
- increasing competition in ancillary markets which lowers electricity prices
- helping to avoid blackouts and the associated costs.

Will local jobs be created?

It is expected that Mount Hopeful Battery will create a significant volume of construction jobs and a number of full-time ongoing positions during operations. One of our key areas of focus for the broader local community is facilitating the involvement of local jobseekers and businesses to ensure a strong regional economic benefit.

Expressions of interest for work can be registered on the project website. When the project gets closer to construction, we will develop a Local Participation Plan which will go into greater detail to identify and map the following:

1. Employment opportunities for local jobseekers
2. Supply chain opportunities for local contractors
3. Training and apprenticeship opportunities

Local

I live nearby - what impact will this have on me?

During construction, we expect some localised traffic, noise, and dust impacts. However, we will be working with the community, neighbours, and council to minimise the impacts as much as possible.

Following installation, the battery will be visible in the distance (1.5km) from South Ulam Road. The tallest element of the works will be the overhead line towers followed by the switchyard transmission gantries at approximately 24m which will be beneath the level of the existing 275kV Powerlink overhead line on site. The presence of vegetation along the road will reduce its visual impact, and additional vegetation will be planted around the battery to allow it to blend into the landscape.

The battery will also generate some noise, mainly from the cooling fans located within the battery containers. This impact is being carefully assessed, and the project will be designed to comply with all relevant regulations. Measures like equipment selection and layout will help ensure noise levels stay within acceptable limits for neighbours.

How can I have my say on the project?

We will be working with the community throughout the project to understand local concerns and aspirations, and ensure we minimise any impacts.

We encourage the community to provide feedback through completing the survey on the website home page: shorturl.at/r8OHr

How will the community benefit from the project?

We have a long-term approach to our projects and we are committed to sharing the benefits with surrounding communities. A Community Benefit-Sharing Scheme will be established for the life of t

Safety & Environment

What approvals are required for the project?

The Mount Hopeful Battery received development approval from the Queensland Government in 2022 and EPBC approval from the Commonwealth in 2024 as a component of the Mount Hopeful Wind Farm. Neoen has identified an opportunity to deploy the battery as a standalone asset to provide services to the national electricity market. A new development approval from Rockhampton Council would be required which we are aiming to submit in September 2025.

Will the battery increase the risk of fire?

Big batteries play a critical role in Australia's energy transition by offering services that provide stability, strength and reliability to our electricity grid. However, like all electrical infrastructure, they come with a level of fire risk.

In Australia, there have been two fire incidents at large-scale battery storage sites – one at the Victorian Big Battery in 2021 and another at the Bouldercombe Battery in September 2023. Both fires were contained within the site with help from local fire authorities and did not spread to the surrounding areas.

Australia has strict safety requirements for companies like Neoen looking to develop and operate big batteries. These include ensuring vegetation control around electrical infrastructure and on site, provision of adequate water reserves and more. Neoen ensures that its projects including a big battery site meets all safety requirements from the local and state government fire authorities.

What happens to the batteries when they reach the end of their life?

We make a commitment that all above-ground infrastructure will be removed, and the site rehabilitated when the project ceases to operate. After removal, a large percentage of the material in the batteries will be reclaimed or recycled; over 60% of materials especially critical minerals will be recovered for re-use.

Is the project reducing air quality?

Batteries do not produce any gas or smoke under normal operations.

Before installation, the battery will also be evaluated for the potential release of toxic and flammable gases under abnormal and fault conditions including thermal runaway or mechanical damage. The testing will provide measured data on gas type, quantity, and propagation to ensure that air quality standards are maintained.

MOUNT HOPEFUL
BATTERY

mounthopefulbattery.com.au

Adrien Barbry, Project Manager

contact@mounthopefulbattery.com.au

1800 966 227