

GOYDER BATTERY

GOYDER RENEWABLES ZONE

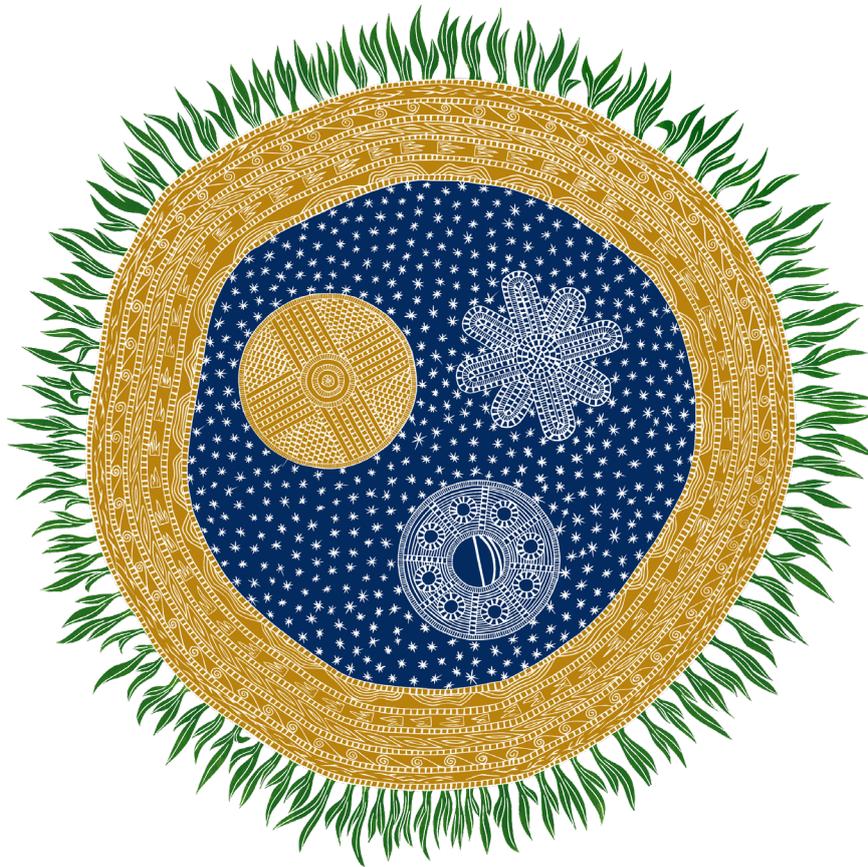
Construction Information Booklet

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 Mid-Murray & Mallee People, Traditional Owners of the lands on which we are developing the Goyder Battery.



RAP ARTWORK

Celebrating Renewal

Teho Ropeyarn, 2022

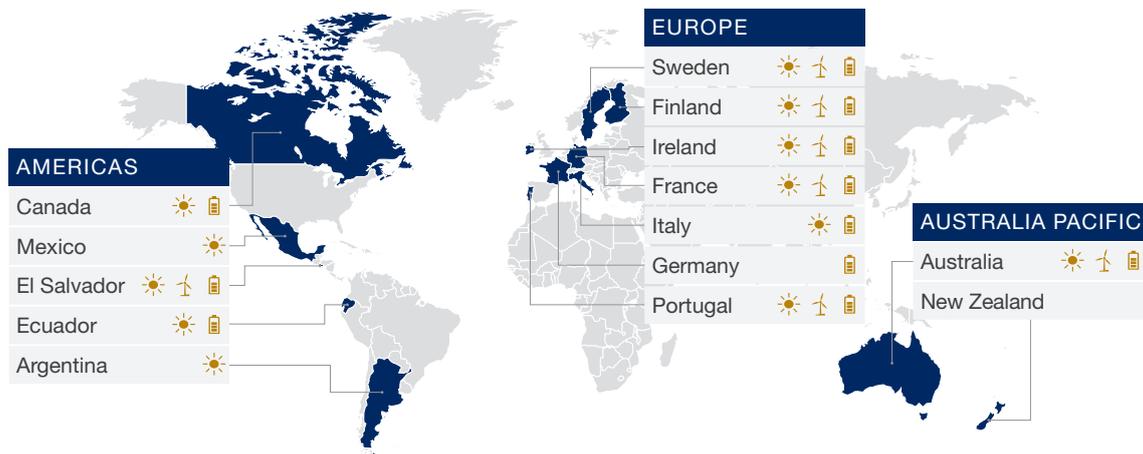
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Neoen produces green electricity from renewable sources such as sunlight and wind using mature, tried and tested technologies. We are also leaders in energy storage.

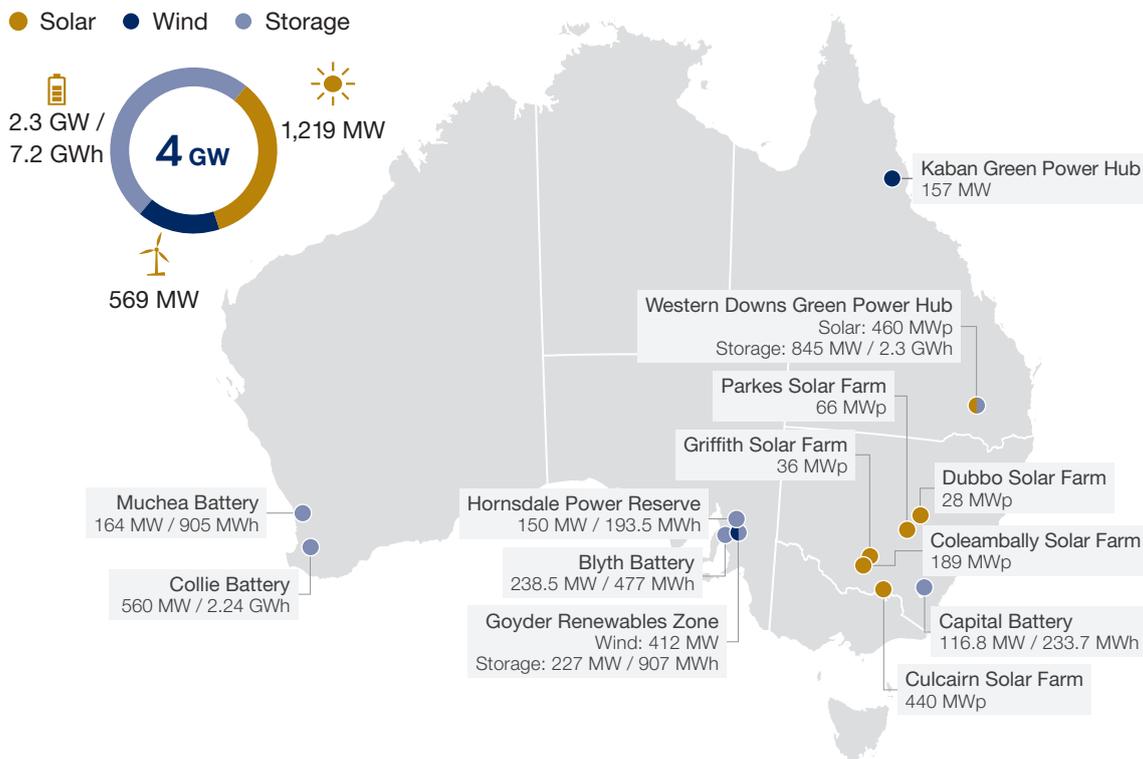
Globally

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



In Australia

Neoen has a high-quality portfolio of wind, solar and battery assets with a total capacity of 4 GW under construction or in operation.



Accelerating Australia's energy transition



LONG-TERM APPROACH

Neoen has end-to-end expertise in developing, building and operating its renewable energy assets, ensuring they are delivering value across their 25+ year lifespan.

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



STRONG TRACK RECORD

Neoen has contributed over 5 GW of renewable energy assets and has invested more than \$7 billion in the Australian market.

We have proven experience in partnering with stakeholders to develop, build, commission and operate power plants in the National Electricity Market and the Wholesale Electricity Market.



TRUSTED ENERGY SUPPLIER

Neoen is a trusted supplier of clean energy to major energy consumers including AGL, BHP, Engie, Flowpower and Shell.

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 consistently innovating new solutions for the market, for the grid and for our customers.



100% RENEWABLES

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

We are a 100% clean energy company.



Goyder Battery



227 MW / 907 MWh



Located approximately 12km North-East of Robertstown and 110km North of Adelaide, within the Regional Council of Goyder



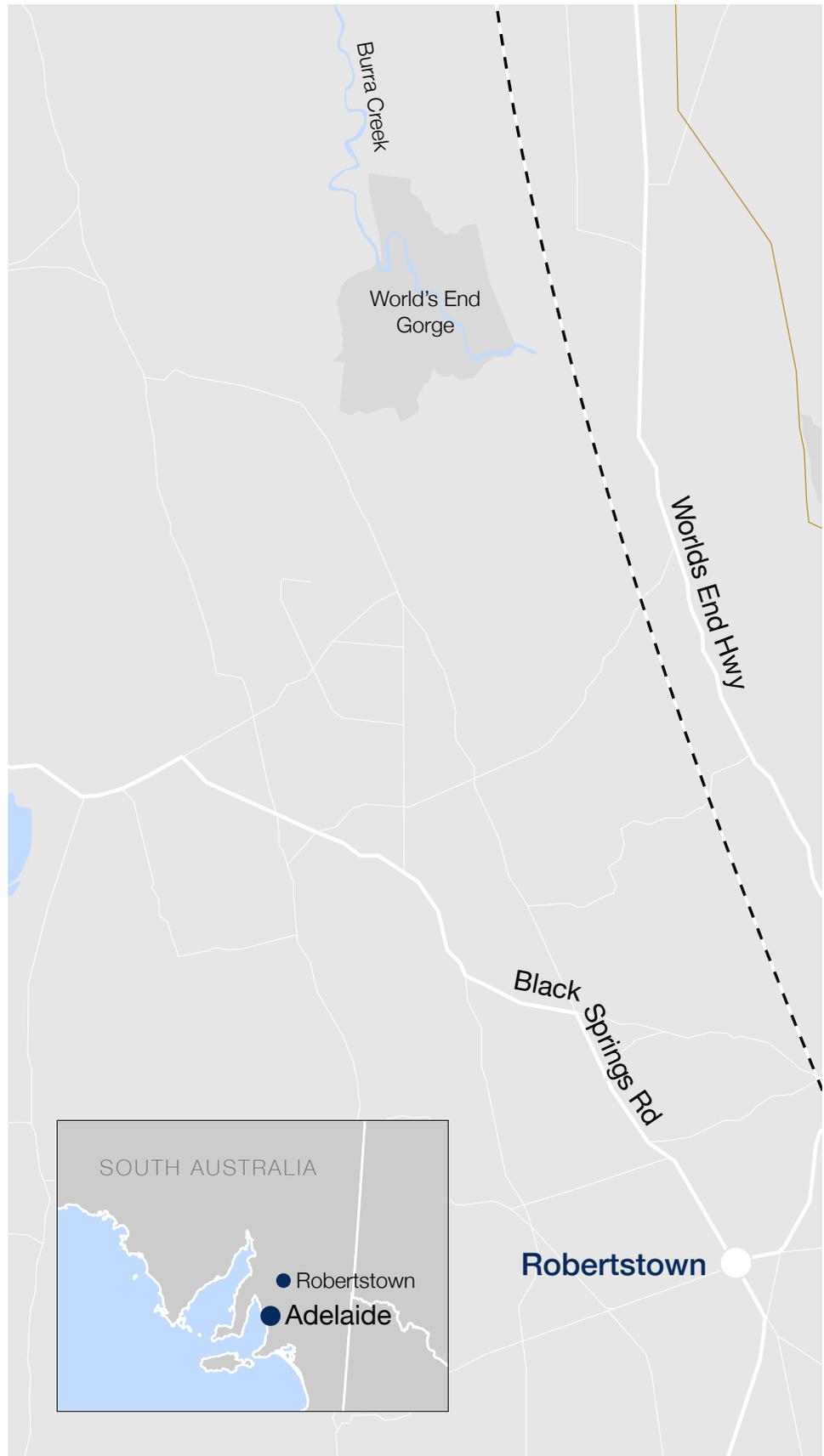
It will connect into the electricity grid through the existing ElectraNet Bunday Substation.

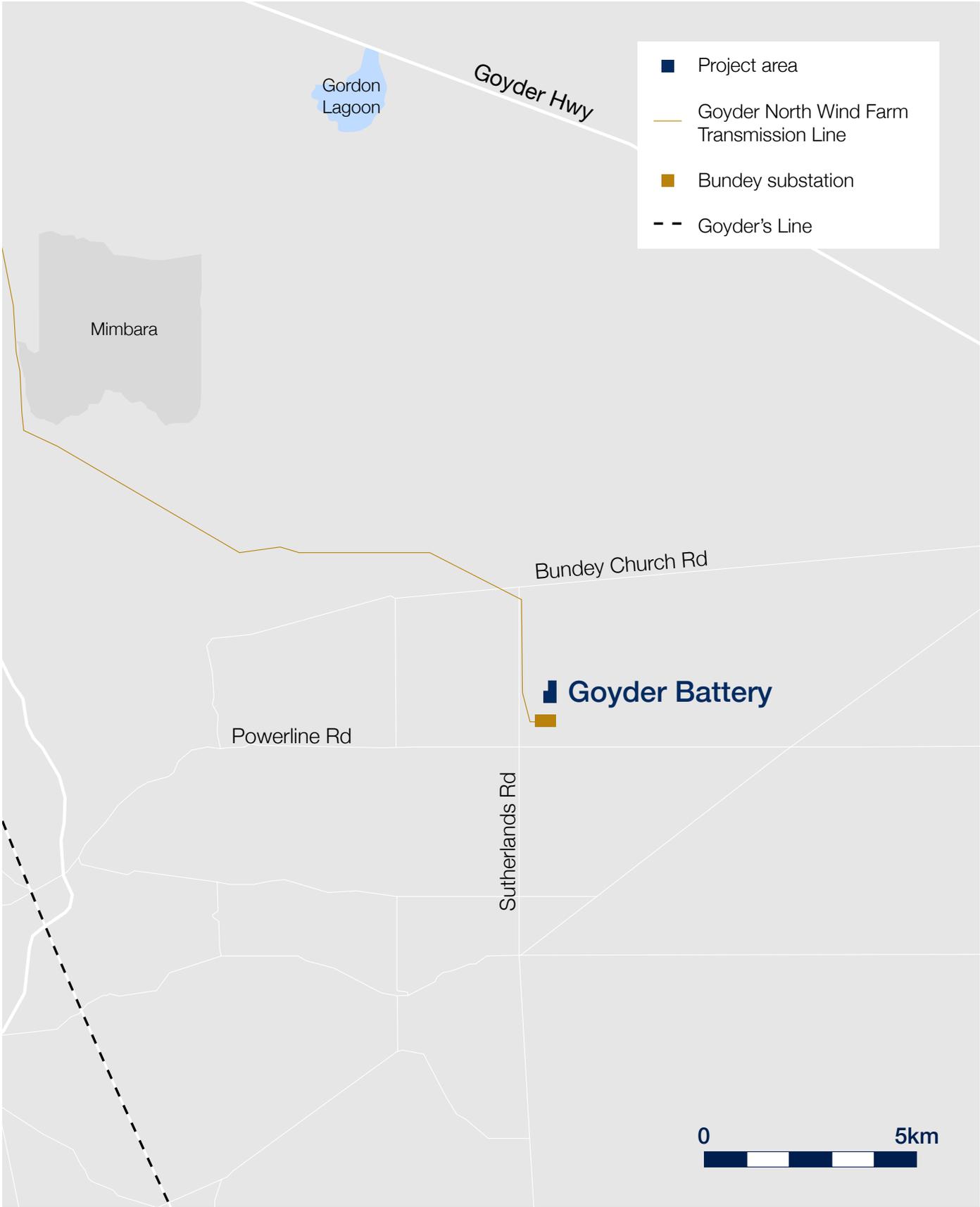


Neoen's first 4-hour long-duration storage asset in SA



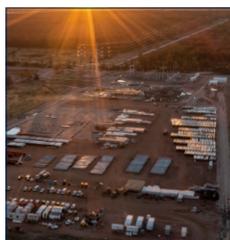
It will help power homes during SA's evening peak and provide essential grid stability and reliability services.





What to expect during construction

Community engagement



Early works 3–6 months

- Minimal site activity (e.g. geotechnical studies)
- Contractors are tendering work packages
- Establishment of the temporary construction compound

We are here



Civil construction 2 months

- Bulk earthworks to complete bench and laydown areas
- Public road upgrades (as required)



Foundations ~4 months

- Excavation/foundation pouring for battery and equipment



Battery installation ~4 months

- Batteries will be delivered from Perth
- Cranes will lift batteries in to place



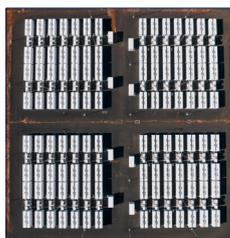
Electrical works ~6 months

- Installation of cables from batteries to switch room
- Construction of high voltage equipment and transmission link to substation
- Minor upgrades to existing substation if required



Testing & accreditation 6 months (varies)

- The workforce will begin to reduce
- Main construction activities are completed
- The battery undergoes testing and connects to the grid

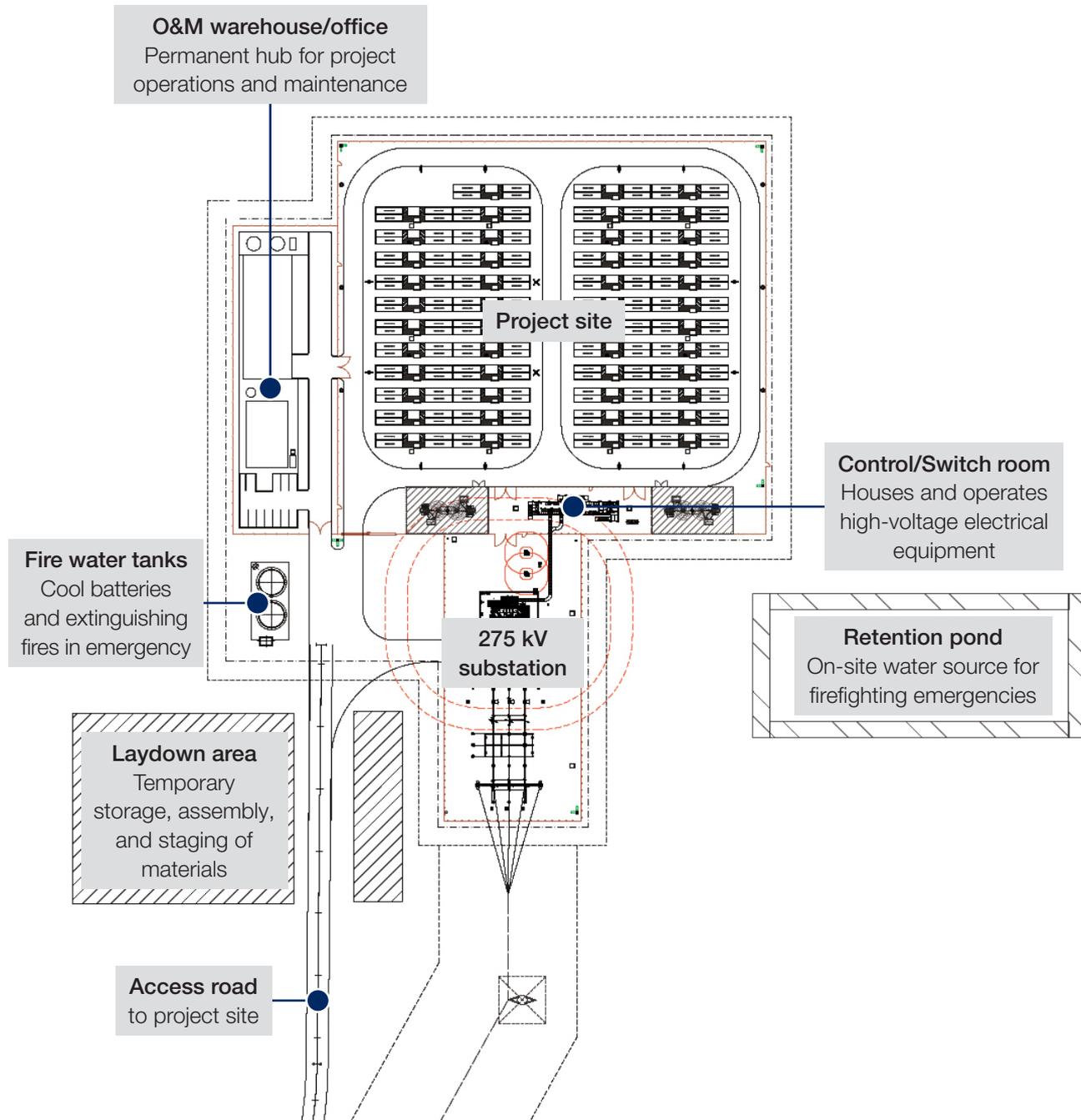


Commence operations 20+ years

- The battery is ready to charge and discharge at full capacity
- Site is handed over to the operations team

Community celebration & benefit-sharing

Site layout and equipment



Typical equipment needed:

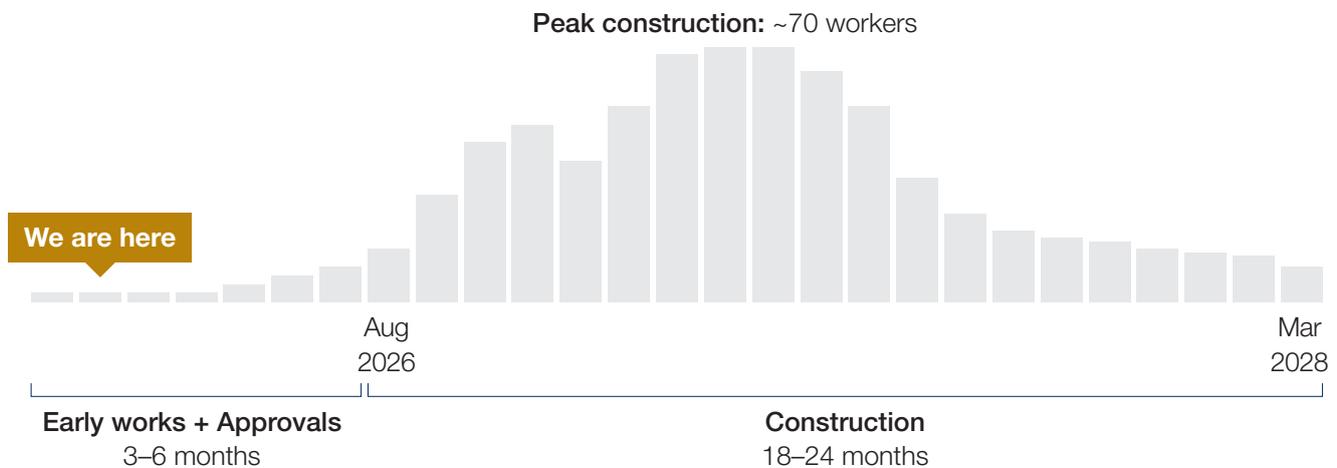
Graders	Trucks	50–100t cranes
Rollers	Concrete Agitator Truck's	Semi, flat bed, tilt tray, drop trailer
Excavators (2t to 50t)	Pump trucks	Long trailers, platforms and cranes 750t
Moxy	Franna	

Our team



Workforce

The workforce is expected to fluctuate during project phases, and peak at around 70 workers during 2027-2028.

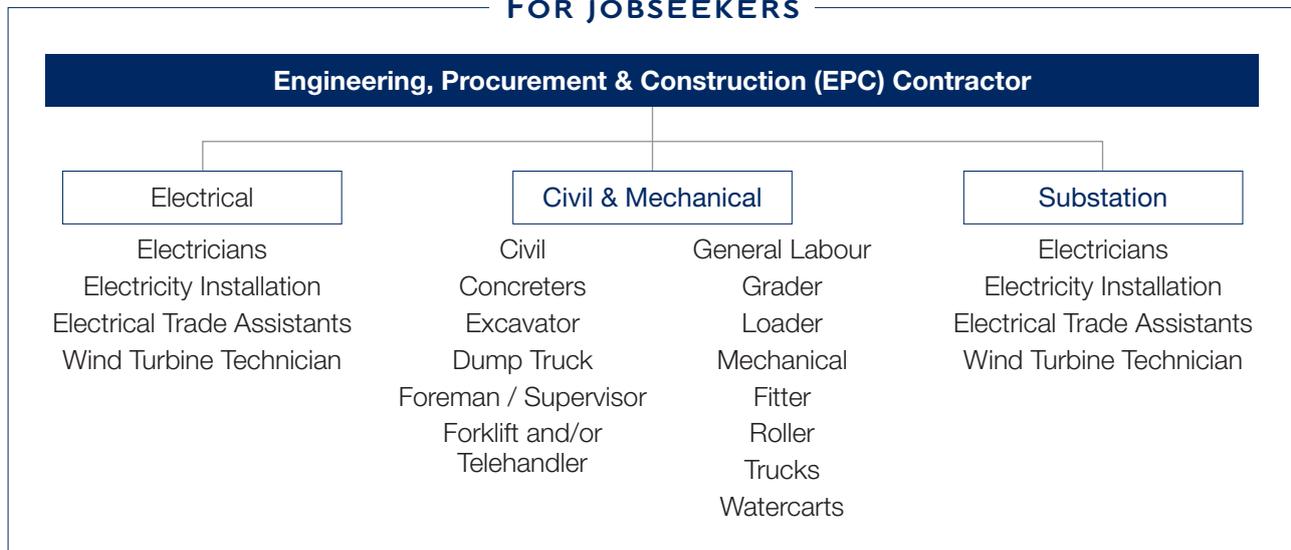


Work days

7am – 7pm Mondays to Saturdays excluding Sundays and Public Holidays.
Works may occur outside these hours such as concrete pours or battery installation.

Work opportunities

FOR JOBSEEKERS



FOR SUPPLIERS



FOR LOCAL BUSINESS



Anyone interested in working on the project can register their interest via our project website: goyderenergy.com.au/work-with-us



Local benefits

Neoen is committed to sharing benefits with local communities living near its renewable energy projects. Our total community contributions in Australia exceeds \$700,000 per year.

Under Goyder South, we are distributing **\$250,000 per year** across the following three Funds to support short and long-term initiatives in the Goyder region. Additional funding will be allocated to this program once Goyder North becomes operational.



Community Benefit Fund **Annual**

\$100,000 p.a till 2027,
\$80,000 p.a. afterwards

An open and competitive grants process to sponsor smaller initiatives. Applications accepted in May for 6 weeks.



Major Projects Fund **Every three years**

~\$400,000 starting 2027

Funding for multi-year projects to support long-term development in the region.



Future Fund **Annual**

Remaining contributions growing for 30 years

An investment accruing interest to fund this program beyond our wind farm's lifetime.



ARTWORK COMMITMENT

We commit to create an artwork on all projects with a capacity of over 50 MW. The artwork celebrates renewable energy and local culture.

For Blyth Battery, after community consultations in 2023, we discovered the town wanted a mosaic celebrating local life. We delivered our artwork initiative by funding this community project in partnership with the Blyth Progress Association.

ENVIRONMENTAL ABOVE & BEYOND INITIATIVE

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.

Jaki Ina – World's End Gorge National Park

Under the Goyder Renewables Zone, Neoen has transferred ownership of 1,000 hectares at the iconic World's End Gorge to the Government of South Australia, paving the way for a new national park in the state's Mid North. In 2025, the park was co-named with the Ngadjuri Nation, the Traditional Owners on the lands on which our project and this park is located. The new national park will protect several threatened species of flora and fauna such as the Pygmy Blue Tongue Lizard and the Flinders Ranges Worm-lizard.

This initiative resulted from close collaboration between and holds significance for the Ngadjuri peoples, the former landowners, Neoen's project team, Regional Council of Goyder, South Australia's Department of Environment and Water and the local community.

Learn more at goyderenergy.com.au/environment



"We lived on this land for a very long time before settlement. But after the settlement, we were taken off. When I look at this country, it makes me feel like I am home. It gives me the connection – the link to my spiritual place.

We, the Ngadjuri Nation, hope that we can share the responsibility of this land with the landowners, with Neoen, and with the Parks people, and that we work in partnership with each other to open up this area."

– Pat Waria-Read, Ngadjuri Nation



Bushfire prevention

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.

How big batteries can be beneficial:

- 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 avoid and minimise fire risk from its wind, solar and battery projects across Australia:



Do big batteries pose a fire risk to surrounding communities?

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.

 According to research by the Clean Energy Council, one of the biggest risks is a “thermal runaway” – a chain reaction in which overheating can lead to battery failure and a potential risk. This can happen due to overcharging, physical damage, electrical faults, external heat sources or environmental factors. Liquid cooling solutions inside a battery module is often used to prevent this reaction. Read more on their website: energyfactcheck.com.au

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.

Can big batteries explode?

Batteries may explode if they are not maintained properly, incorrectly stored or if their protective casings are punctured. While this can be an issue with batteries inside our mobile devices and portable electronics, it is not considered a significant risk for big batteries that connect into our grid.

Big batteries are stationary assets that are routinely inspected and maintained, and as such the risk of explosion is low. They also include vents, rupture panels and sparker systems to prevent the building up of pressure within individual battery units and to mitigate the risk of an explosion.

What happens if there is a fire at our big battery?

While the risk of fire is low, in the event of an emergency, Neoen would disconnect its big battery from operating in the electricity grid and stop all operations to prioritise the safety of everyone within close proximity of the site. We would activate our *Emergency Response Plan* and work closely with all local emergency authorities as well as our project team on the ground to ensure that the fire is contained and does not pose a risk to the surrounding region or communities.

We would notify our host landowners, near neighbours and other key stakeholders to ensure that everyone was alert, safe and taking preventive measures (if any) as per advice from the emergency authorities. We would also undertake a detailed investigation and identify any lessons learnt that can be applied to future projects or our existing operations.



Bushfire prevention: what to expect



DEVELOPMENT

We meet with the rural fire service authority (the fire authority) and community volunteers to seek feedback on our project designs and plans. We value their input on:

- Site entry/exit points including fencing and gates
- Vehicle access limitations for construction traffic management
- On site water storage requirements
- Bushfire history in the region
- Capabilities of the personnel and equipment needed on site vs at the fire authority
- Fire emergency plan/map location
- Low fire risk plant species for vegetation management
- Works that can occur on total fire ban days versus hot days
- Drills and channels for communicating during emergencies
- Management and capture of any potentially contaminated material from response to a fire emergency on site.

Our site layout also takes into consideration various constructability and insurance factors as well as the design of the technology (differences in battery units depending on their manufacturer/supplier) and other equipment like the transformer. This knowledge determines the amount of spacing between individual battery units, around groups of battery units and around the transformer that gets established on site and which can also act as a fire break in the event of an emergency.



CONSTRUCTION

We design infrastructure on site in consultation with the local and state fire fighting authorities.

We construct high-quality access tracks in and around our project site. This means that the fire authority gains access to new fire trails in the event of an emergency.

Our contractors are equipped with appropriate personnel protective equipment (PPE) and basic fire-fighting equipment.

Anyone working on site is trained to follow the *Emergency Response Plan* and contact the fire authority in the event of an emergency.

We host the fire authority on site multiple times to ensure they are familiar with the layout and our latest maps.

We offer the opportunity for local volunteers to participate in emergency response drills with role playing scenarios on site.

Following a rigorous risk assessment process, we develop and implement a *Bushfire Management Plan* and/or *Emergency Response Plan* which typically provides advice on:



Bushfire prevention and mitigation strategies



Training, resources and remote monitoring



OPERATIONS

A big battery site allows for additional eyes in an otherwise remote area. Neoen has a skilled team on site throughout the week that can alert and assist the work of the fire authority. We also have CCTVs installed at our substations and at our battery site.

Modern batteries are modular in design, with each unit designed to withstand high external temperatures for extended periods to prevent the spread of fire between individual units. Designs have evolved to include early warning sensors, thermal barriers, passive and active cooling systems that can detect and prevent a thermal runaway.

We have requirements to keep vegetation below certain levels to manage fuel loads. We also establish and maintain *Asset Protection Zones* around the big battery and around associated infrastructure like our substation, which act as a fire break in both directions during an emergency.

We host the fire authority on site to assess any new risks or opportunities and revisit topics like:

- Expectations from Neoen and the host landowner during a fire emergency
- Fire break management
- Addressing any equipment shortcomings on site or with the fire authority
- Location of water tank(s) and adequacy
- Access maps and master key to entry/exit gates
- Response times, including out-of-hours protocol.



Fire detection and notification systems



Fire response and suppression procedures

CASE STUDY

Collaborating with local fire authorities during construction of Collie Battery

Our 560 MW / 2,240 MWh big battery is located in the bushfire-prone region of Collie in Western Australia.

Neoen is delivering a range of activities to mitigate the risk of any fire emergencies. For example, **work done in accordance with our government development approval** includes:

- ✓ Provision of 2 x 290kL water tanks along with hydrants on site for fire fighting purposes
- ✓ Implementation of the *Bushfire Management Plan* and *Emergency Management Plan*
- ✓ Facilitated site visits for the Department of Fire and Emergency Services and the Collie Volunteer Brigade to ensure they are familiar with the site and its layout
- ✓ Supported training and knowledge-sharing on how to respond to fires at a big battery site.

Example of **activities being delivered in addition** to state requirements in lieu of prioritising safety in the region:

- ✓ Ensuring Neoen's Fire and Emergency Response Guide logged in the Department's system is up to date with the latest facility layout, showing the locations of key firefighting infrastructure on site
- ✓ Proactive engagement with the Department on planned prescribed back burning, ensuring vegetation control and minimising the risk of a fire spreading in the surrounding areas
- ✓ Dedicating a large portion of the project's community benefit-sharing to build the capability and capacity of the local fire authority. We are currently engaging with the authority to identify equipment and training requirements that can best support the Collie Volunteer Brigade in the immediate and the long-term.

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

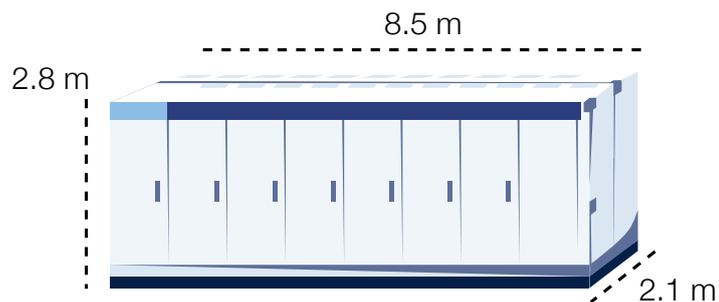
Along with wind and solar, batteries firm varying renewable energy. Batteries are an essential component in the stable transition to clean electricity and achieving emissions reduction targets.

What's inside?

Goyder Battery will have lithium-ion batteries enclosed in steel cabinets, similar to shipping containers.

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.

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



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.



Who will pay for it?

The project will be privately financed by Neoen.

How is the battery reducing costs for consumers?

The Goyder Battery can reduce costs for consumers in three ways:

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

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 managing these to minimise them as much as possible. Following installation, the battery will be visible at the site and will look like an enclosure of white containers.

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.

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.

Are there any health risks?

The Goyder Battery is using similar technology to the batteries that are being increasingly installed in homes, just on a larger scale. There are no known health risks associated with properly maintained large-scale battery installations.

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