

CULCAIRN

SOLAR FARM & BATTERY

Construction Information

September 2026



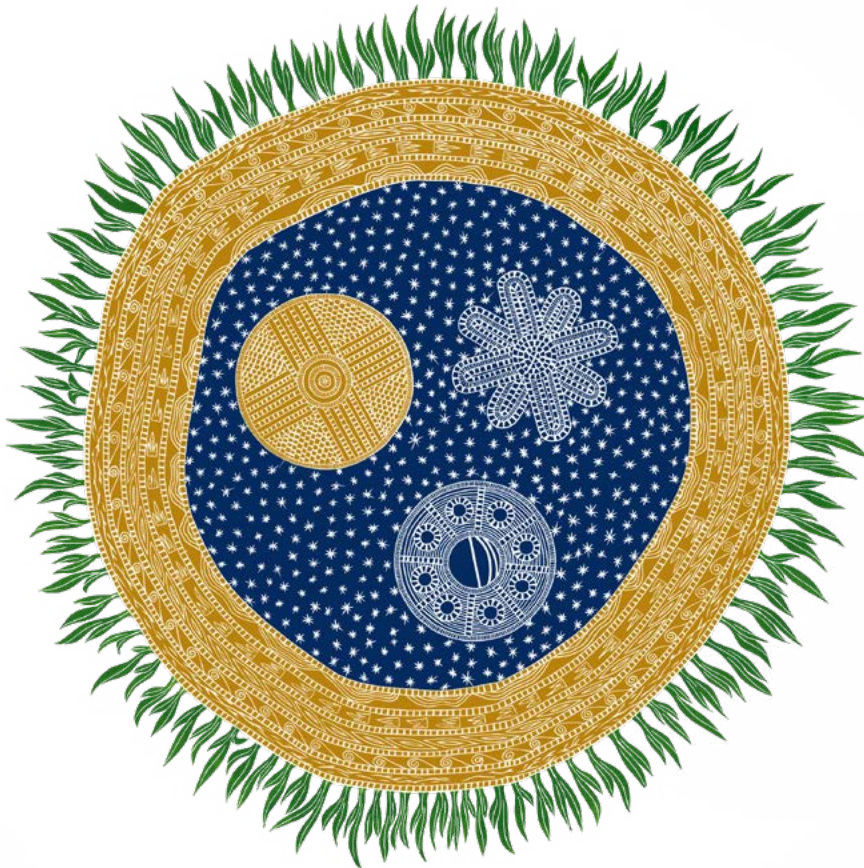
NEOEN

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 Wiradjuri people, Traditional Owners of the lands on which we are developing the Culcairn 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.

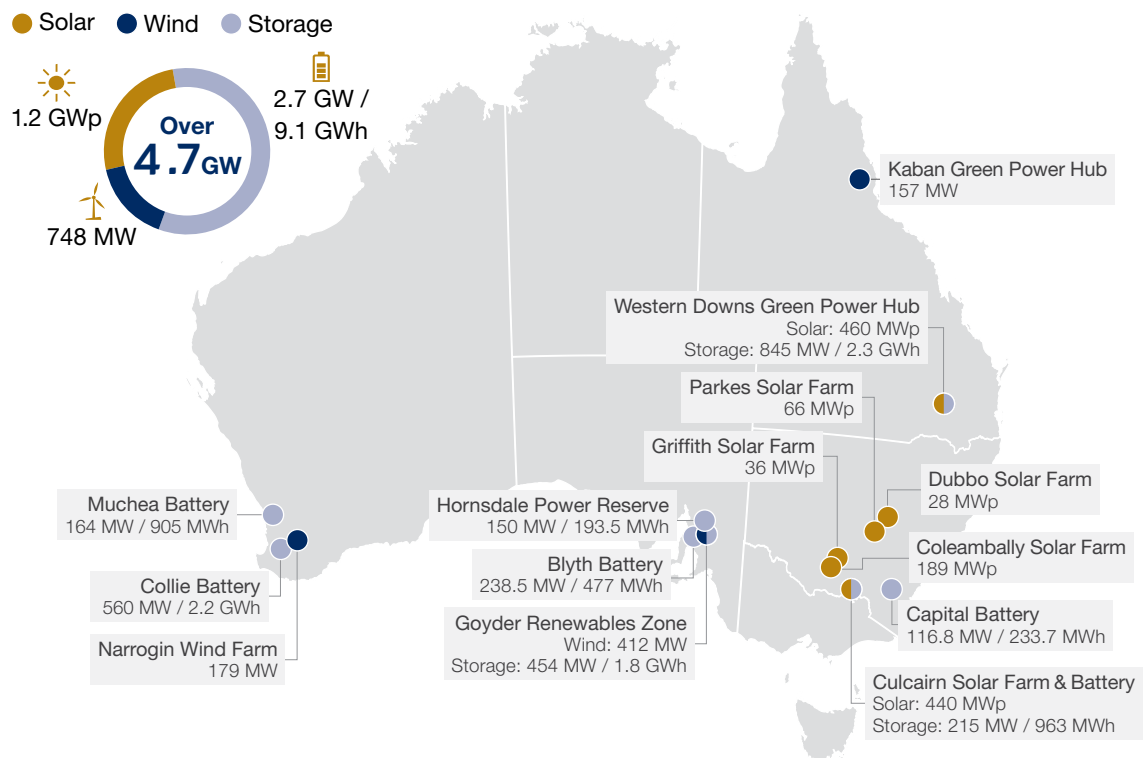
GLOBALLY

Neoen has a presence in 15 countries with over 10.2 GW of assets in operation, under construction or under management worldwide.



IN AUSTRALIA

Neoen has a high-quality portfolio of wind, solar and battery assets with a total capacity of over 4.7 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 \$9 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 SUPPLIER

Neoen is a trusted energy 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 innovative solutions for the market, the grid and 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.



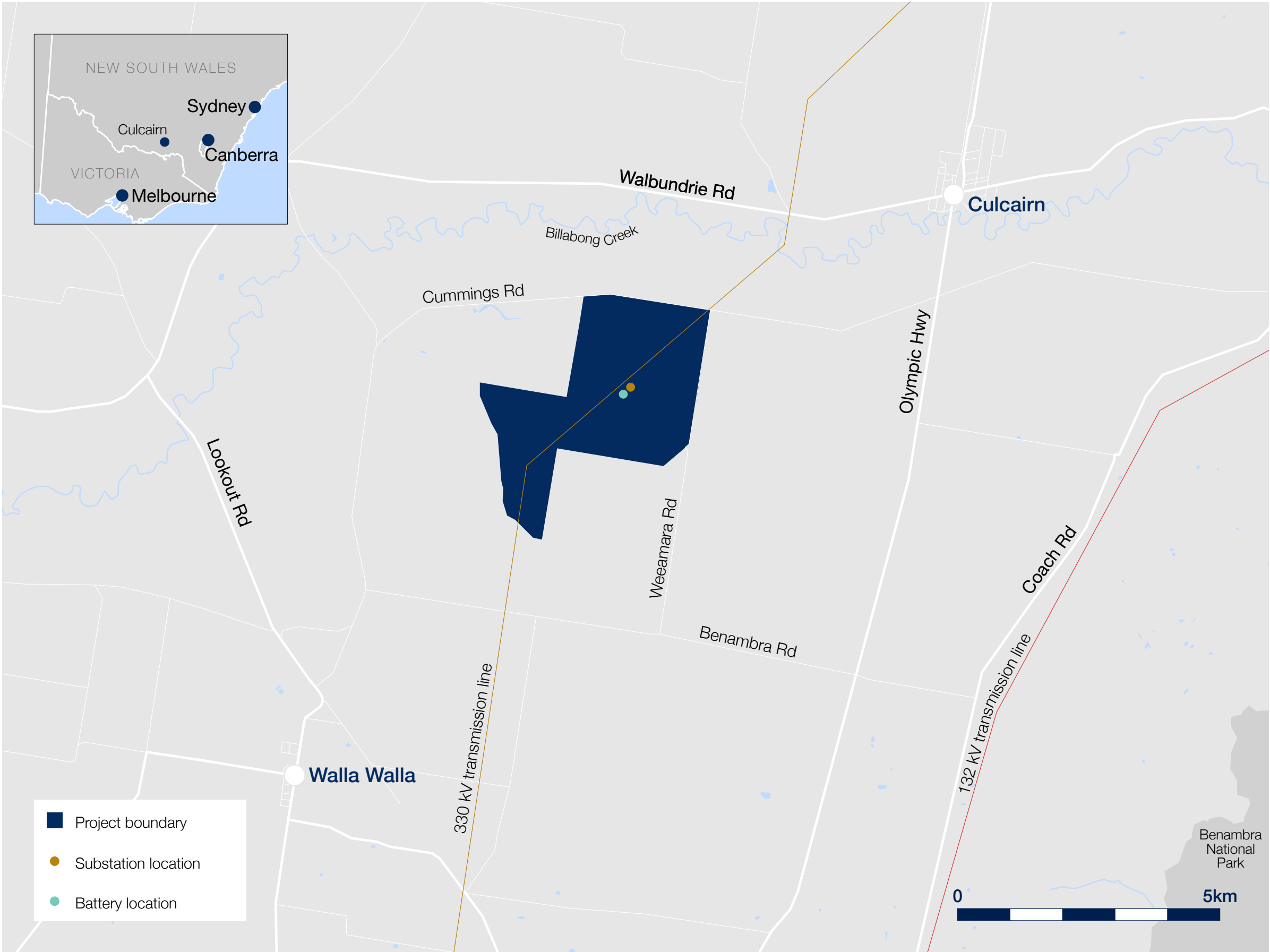
About the project

Culcairn Battery

-  **215 MW / 963 MWh**
-  Located within the Solar Farm in the South East Riverina Region
-  Connection via existing Transgrid 330 kV overhead transmission line
-  Powering homes during the state's evening peak and provide grid stability and reliability services

Culcairn Solar Farm

-  **440 MWp (350 MW AC)**
-  One of the largest solar farms in NSW
-  Fully built and operational since April 2026
-  760,000 panels powering 160,000 NSW homes
-  Distributing \$300,000 annually in community benefit-sharing



What to expect during construction



Regular community updates



Updates provided via email and newsletters, even during operations

 EARLY WORKS 3–6 months	 FOUNDATIONS & INSTALLATION 6–8 months	 CIVIL CONSTRUCTION 4–6 months	 ELECTRICAL WORKS 6–8 months	 TESTING & ACCREDITATION 6 months	 OPERATIONS 20+ years
Minimal site activity such as Geotechnical studies & Dilapidation survey Contractors are tendering work package Establishment of the temporary construction compound & internal fencing	Bulk earthworks to complete bench, retention pound and laydown areas More project and construction staff around town, local services will see an increase in business	Excavation/foundation pouring for battery and equipment Batteries will be delivered from mid 2027 Cranes will lift batteries into place O&M Building and Warehouse will be built	Capacity increase works inside the existing Substation Installation of cables from batteries to the switchrooms	The workforce will begin to reduce Main construction activities are completed The battery undergoes testing and connects to the grid	The battery is ready to charge and discharge at full capacity Site is handed over to the operations team Community celebration and benefit-sharing program begins

Construction

The workforce is expected to fluctuate during project phases, and peak at around 100 workers

Typical work hours are 7am–6pm Mondays to Friday and 8pm–1pm on Saturdays, excluding Public Holidays.

Works may occur outside these hours such as Electrical outage works or battery installation.

We are here

Sep 2026

~100 workers

May 2027

Operations workforce

Around 15 permanent roles will be required during the project's 30+ year lifespan.

Our team

NEOEN

Developers, Owners & Operators

Construction Project Manager

Benjamin Benfredj
1800 966 122
contact@culcairnsolarfarm.com.au

Community Liaison Officer

Ruth Davys
ruth.davys.ext@neoen.com



Engineering, Procurement & Construction (EPC) Contractors

Overall control of the site, managing deliveries of equipment and design of the battery.

Project Manager

Rami Aed
rami.aed@nhqa.energy

Project Director

Mathieu Potier
mathieu.potier@equans.com

Community Engagement & Social Procurement Manager

Sarah Craven
s.craven@bouygues-construction.com



Electrical Subcontractor

Electrical installation of AC and DC cable systems and electrical equipment.



Civil Subcontractor

Site establishment, road and drainage works.

Work opportunities

Jobs, goods and services expected to be procured through our EPC Contractors:

JOBSEEKERS



Electrical

Electricians
Electricity Installation
Electrical Trade Assistants

Civil & Mechanical

Civil
Concreters
Dump Truck
Excavator
Foreman / Supervisor
Forklift and/or Telehandler
General Labour

Grader
Loader
Mechanical Fitter
Roller
Trucks
Watercarts

Substation

Administration
Equipment Maintenance

SUPPLIERS



Accommodation
Cleaners
Crane (minor lifts)
Concreters
Concrete supply (offsite supply)
Earthworks plant (wet and dry hire)

Fencing and gates
Food & catering service
Freight
Fuel
Material testing
Mechanical fitter/maintenance

Operation & maintenance facility construction
Quarry products
Safety Products (local)
Septic pump out services
Small equipment hire

Transport (minor)
Waste management (liquid and solid)
Water (construction & potable)
Welding & engineering fabrication (site services)

LOCAL BUSINESS



Accommodation
Bakeries
Butcher
Chemists

Cafes
Gyms
Hardware stores
Hotels

Mechanics
Motels
Newsagents
Restaurants

Rural supplies
Service stations
Supermarkets
Tyres repairs

Interested in working on the project?

Scan the QR code below:



Local benefits

COMMUNITY BENEFIT-SHARING PROGRAM

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 Culcairn Solar Farm, we are distributing \$300,000 per year across the following three Funds to support short and long-term initiatives in the Greater Hume Shire. Additional funding will be allocated to this program once the Culcairn Battery becomes operational.



First Nations Fund

\$35,000 annually to charities and not-for-profits supporting First Nations Peoples from an open and competitive grant process.



Community Benefit Fund

\$105,000 annually to charities and not-for-profits from an open and competitive grant process.



Council Contributions

\$150,000 annually towards the Voluntary Planning Agreement with the Greater Hume Shire Council.

Applications will open annually for six weeks between June – July.

Funding will be awarded to eligible projects following a review by a Local Advisory Committee established for each Fund. The committee is made up of a Neoen representative and members of the local community living in Greater Hume Shire region. Selection was made based on the depth of experience, expertise and background as well as diversity of representation from different towns/areas that members brought to the committee. The committee will award grants to projects that demonstrate meaningful benefits to people living near the Culcairn Solar Farm in one or more of the following growth areas:



Arts, culture & events



Disaster relief & emergency services



Education & Training



Energy efficiency & environment



First Nations Initiatives



Health & Wellbeing

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.



Case study

Blyth Mosaic, South Australia; mural at the town cafe, 2025.

For our 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 INITIATIVES

We are committed to supporting local, environmental initiatives that bring benefits to the areas surrounding our project sites. We welcome ideas from the communities on a valuable conservation and/or biodiversity protection initiative that can be supported through the Culcairn Solar Farm & Battery.



Case study

Worlds End Gorge, South Australia

For our Goyder Renewables Zone, the project team gifted 1,000 hectares of the iconic Worlds End Gorge to the Government of South Australia, paving the way for a new national park in the state's Mid North region. Watch the video on the project website to learn more.

Bushfire prevention

Neoen prioritises fire safety and risk mitigation across all projects.

As a long-term renewable energy owner and operator, we work with rural fire authorities from development through construction and operation. We aim to ensure new infrastructure does not place unnecessary pressure on local firefighting resources or create unmanaged risks for nearby communities and the environment.

We have worked closely with local authorities over the past decade:



WHAT TO EXPECT



Development

We consult rural fire authorities and community volunteers when designing each project. Their advice helps shape:

- emergency access, gates, fencing and firetruck routes,
- high-risk areas, terrain and construction traffic,
- water supply and hose compatibility,
- local bushfire history and vegetation management,
- on-site personnel, equipment and communication procedures,
- work restrictions during hot weather and total fire bans.

The site design also considers constructability, insurance, battery manufacturer/supplier design and other equipment (like the transformer). This determines the spacing between the infrastructure which can also be a fire break.



Construction

Site infrastructure is designed to meet local and state fire authority requirements. New access tracks provide additional emergency routes.

Contractors carry appropriate PPE and basic firefighting equipment, and all workers are trained in emergency procedures.

Fire crews will visit the site to review access and maps. Local volunteers can participate in emergency response drills with role playing scenarios on site.



Operations

On-site service teams, CCTV and the battery's early warning sensors provide additional monitoring in remote areas, supported by a 24/7 on-call operator. Modern batteries are modular and designed to withstand high external temperatures for extended periods. Each include thermal barriers, smoke detectors and cooling systems that can detect and prevent a thermal runaway. Vegetation is managed to reduce fuel loads and Asset Protection Zones can act as fire breaks.

We will regularly meet with fire authorities to review responsibilities, access, water supplies, rescue procedures, equipment needs and response times.

 In coordination with the local fire authority, Neoen will implement and regularly update the *Bushfire Management Plan* and *Emergency Response Plan* throughout the project's life.

FREQUENTLY ASKED QUESTIONS

Do big batteries pose a fire risk to surrounding communities?	Big batteries are critical to Australia's energy transition through grid stability, strength and reliability. Like all electrical infrastructure, they have some fire risk. In Australia, there have been two fire incidents at large-scale battery storage sites: the Victorian Big Battery in 2021 and the Bouldercombe Battery in 2023. Both fires were contained within the site with help from local fire authorities and did not spread to the surrounding areas.
	Clean Energy Council research shows one of the biggest risks is a “thermal runaway” which is overheating that causes battery failure and a potential risk. This can happen from overcharging, physical damage, electrical faults, external heat 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 big batteries including vegetation control and adequate water reserves. Neoen ensures its projects meets all safety requirements from the local and state government fire authorities.
Can big batteries explode?	Batteries may explode if they are not well maintained, incorrectly stored or protective casings are punctured. While this can be an issue with batteries in our mobile devices, it is not considered a significant risk for big batteries as they are stationary assets that are routinely inspected and maintained. Big batteries also have vents, rupture panels and sparker systems to prevent pressure building individual units and to mitigate the risk of an explosion.
What happens if there is a fire?	While fire risk is low, in the event of an emergency, Neoen would disconnect the big battery from the electricity grid and stop all operations to prioritise the safety of everyone in close proximity of the site. We would activate our <i>Emergency Response Plan</i> and work with local emergency authorities and team on the ground to contain the fire. Host landowners, neighbours and other stakeholders would be notified to be alert, safe and taking preventive measures (if any) as per advice from the emergency authorities. We would investigate the cause and identify any lessons that can be applied to future or existing projects.
How can big batteries prevent a fire risk?	Asset Protection Zones around the big battery act as a fire break in both directions. On-site water tank(s) guarantee reserves for fire fighting. Additional eyes, CCTV and monitoring on the project site can detect and raise alarms during an emergency. Neoen also will also provide additional funding opportunities for local fire fighting volunteers and authorities.

Case study
Collie Battery, Western Australia
Our Collie Battery is located in a bushfire-prone region. Per government approval, we have on-site water tanks, bushfire and emergency response plans, local fire authority site visits and fire response training and knowledge-sharing for all site staff. Additionally, we are:

- regularly updating our *Fire and Emergency Response Guide* with the latest facility layout
- proactively engaging on local authority requirements for back burning
- and funding equipment/training to the Collie Volunteer Brigade through our Community Benefit-Sharing program.



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.

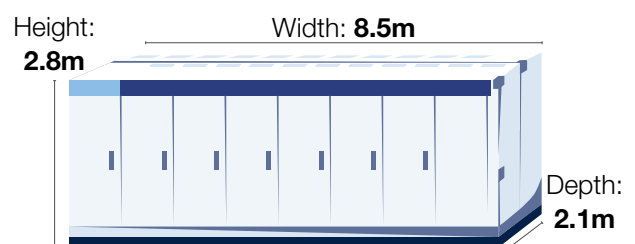
Firming renewables

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 Culcairn 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.



Case study

Futureville

In partnership with the Canberra Institute of Technology, Neoen recently launched Futureville, an online game to help students find their ideal career in renewable energy.

Designed for Years 9–12, Futureville advocates for the diversity of jobs needed and available.

We encourage you to use and share this free resource now available via neoenlearning.com.





The project

How long is construction and operations?

Construction will take around 18-30 months. 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.

What technology is used?

The Culcairn Battery will use 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.

Where will it be located and why?

The Culcairn Battery will be co-located next to the 330kV high-voltage substation inside the Culcairn Solar Farm and adjacent to the 330kV high-voltage Transgrid transmission line spanning from Walla Walla to Wagga Wagga. The land was selected because it is flat, close to the electricity network and in the centre of the solar farm.

What happens 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.

Economy

Who will pay for it?

The project will be privately financed by Neoen.

How is the battery reducing costs for consumers?

The 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
- and helping to avoid blackouts and the associated costs.

Will local jobs be created?

It is expected that the Culcairn 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 opportunities for jobseekers, suppliers and training/apprenticeships.



Health & culture

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.

What approvals are required for the project?

The Culcairn Battery received a development approval from the NSW Government on 25 March 2021 as a component of the Culcairn Solar Farm. Neoen has identified an opportunity to deploy the battery as a hybrid asset to provide services and optimise the solar farm's electricity generation to the national electricity market.

Are there any health risks?

The Culcairn 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.

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.

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 project website home page: culcairnsolarfarm.com.au.

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