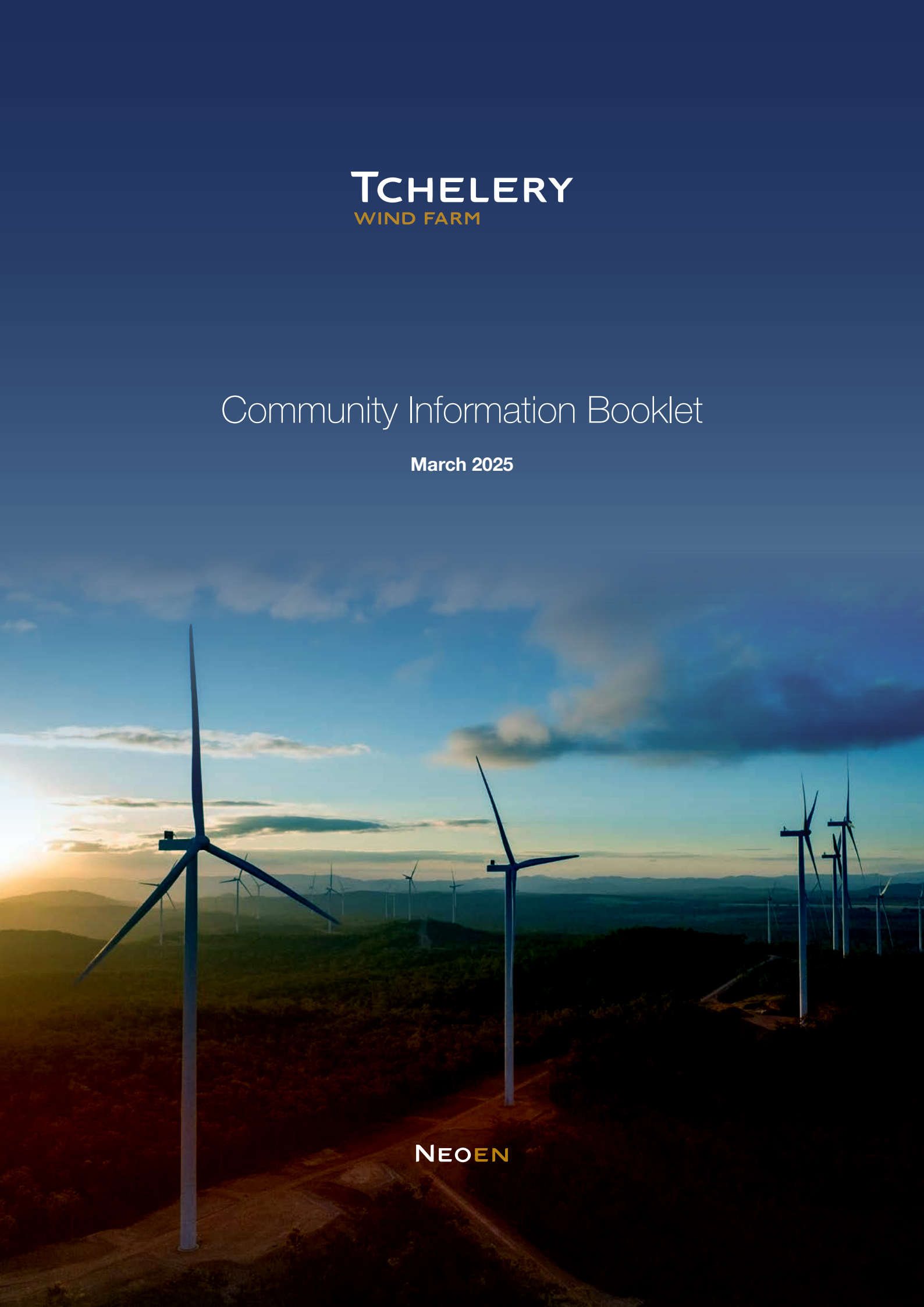
# TCHELERY
WIND FARM

# Community Information Booklet

**March 2025**



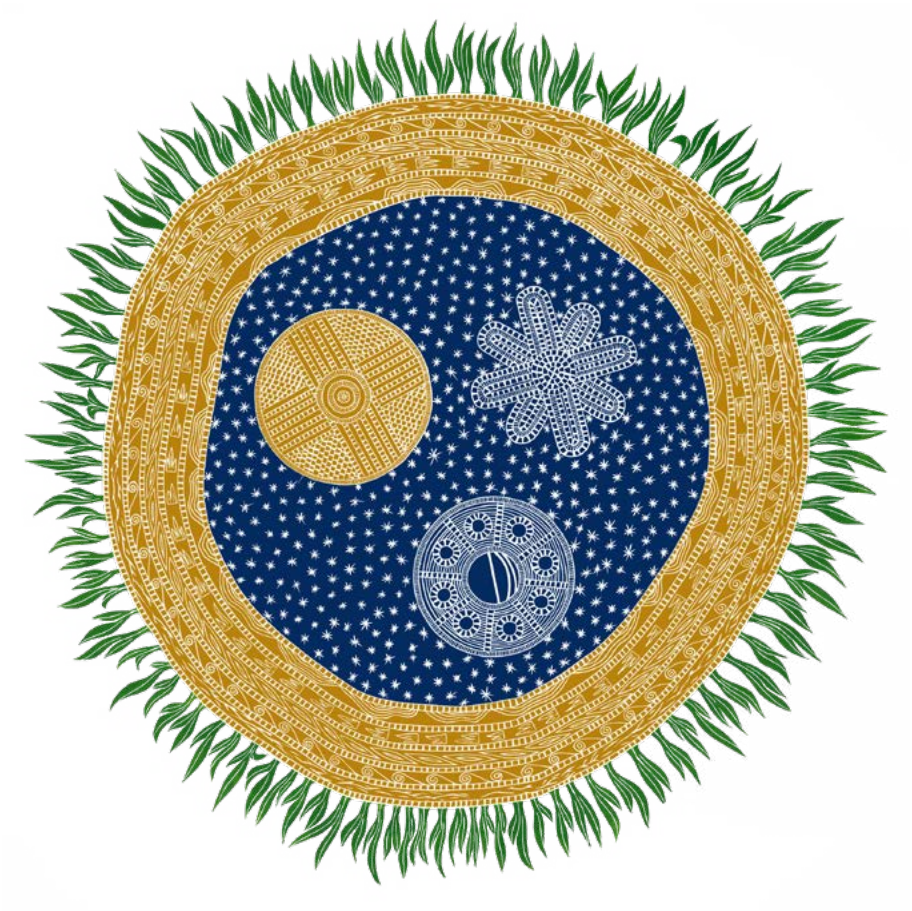
NEOEN

# 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 Wamba Wamba & Perrepa Perrepa people, on which Tchelery Wind Farm will harvest the energy of the wind.



## RAP ARTWORK

*Celebrating Renewal*

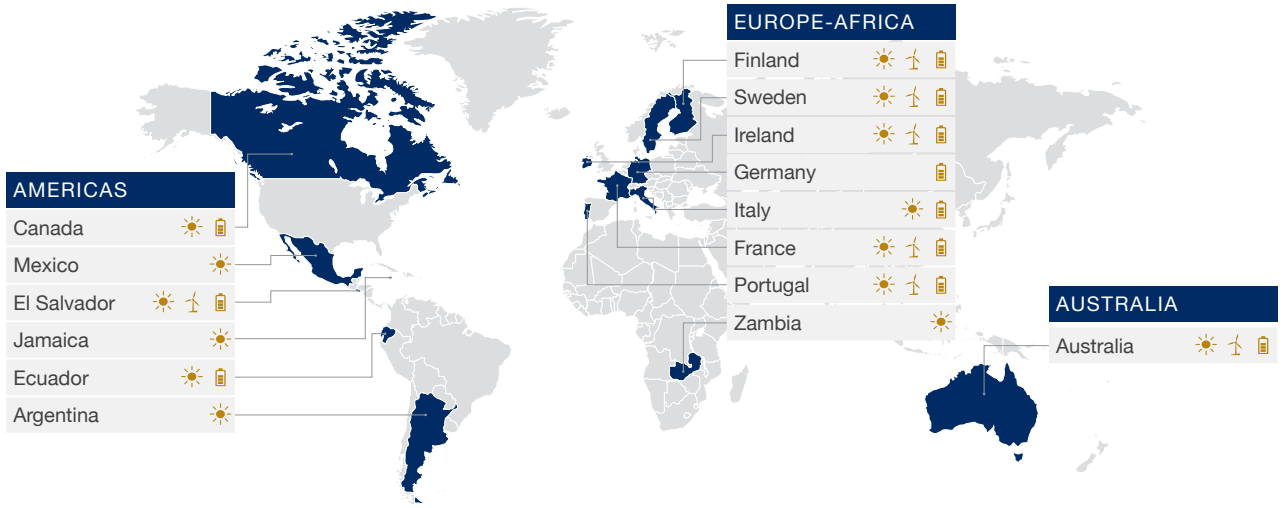
Teho Ropeyarn, 2022

# NEOEN

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

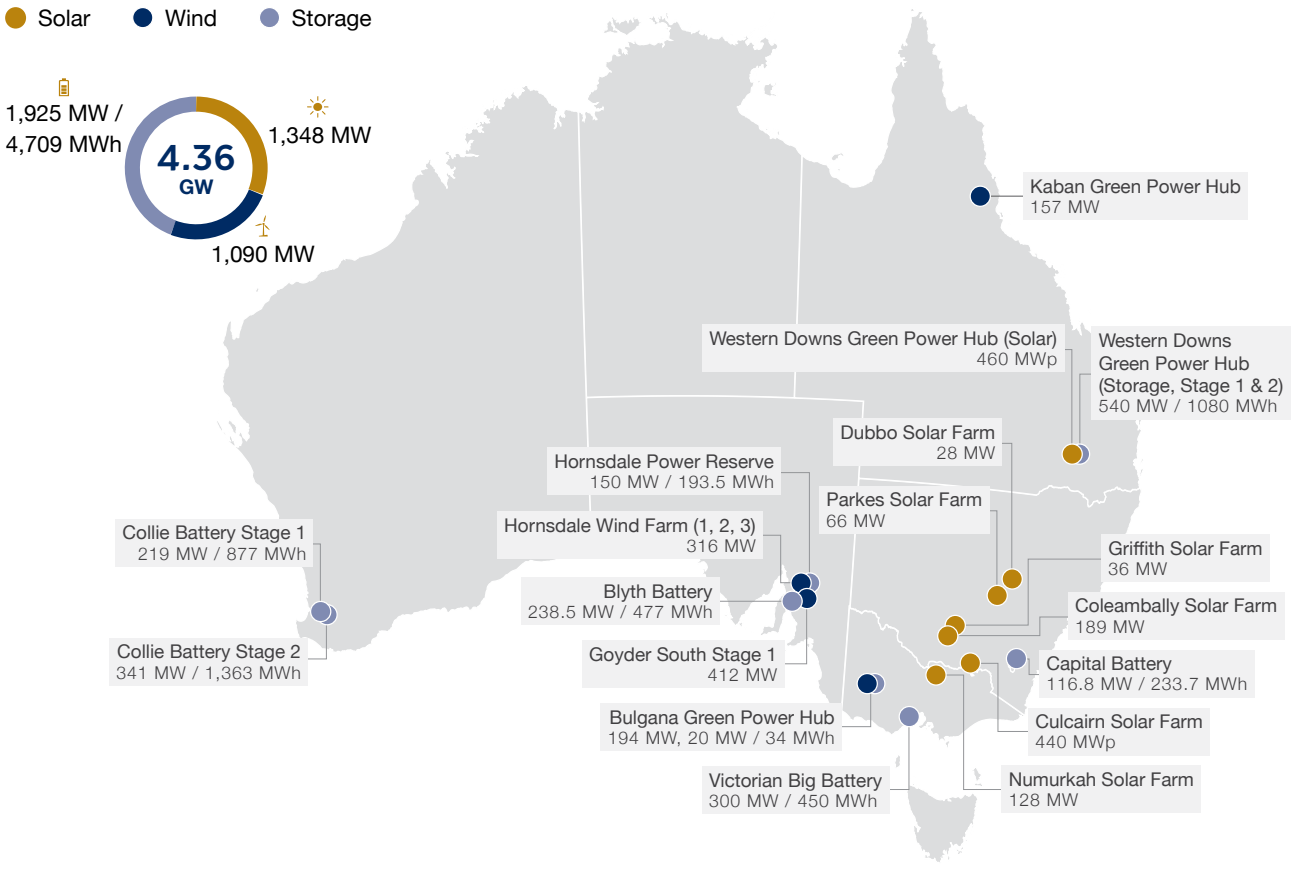
## Globally

Neoen has a presence in 15 countries with over 8 GW of assets in operation and under construction worldwide.




## In Australia

Since 2012, Neoen Australia has developed over 4.3 GW of projects across six states and territories.



# Australia's largest renewable energy company

### Long-term ownership

Neoen is a long-term asset owner of projects with a 30+ year lifespan.

We are looking to grow our portfolio to reach 10 GW globally by 2025.

### Mature player in Australia

Neoen is Australia's largest renewable energy company with 4.3 GW and more than $7 billion of assets either operating or under construction.

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, Victoria, New South Wales, Western Australia and 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.

# Leaders in the energy transition

### Hornsdale Wind Farm

**IN OPERATION SINCE 2017**

316 MW, South Australia

Distributed over $1 million in community benefit-sharing to people living in and around Jamestown.

### Kaban Green Power Hub

**IN OPERATION SINCE 2023**

157 MW, Queensland

Supplying 100% clean energy to CleanCo to help Queensland achieve a net zero future. One of the wind turbines on this asset has an artwork that celebrates the cultural heritage of its Traditional Owners.

### Goyder South Stage 1

**UNDER CONSTRUCTION**

412 MW, South Australia

Combined with output from our Blyth Battery, the wind farm will deliver a 24/7 green energy solution to BHP's Olympic Dam mine under an innovative baseload contract.

# Nearby Neoen projects

## Culcairn Solar Farm

UNDER CONSTRUCTION

440 MWp, New South Wales

Neoen's largest solar farm in NSW. The project has a focus on maximising local employment, particularly female and First Nations participation.

## Coleambally Solar Farm

IN OPERATION SINCE 2018

189 MW, New South Wales

One of twelve successful projects that received funding from the Australian Renewable Energy Agency (ARENA) in 2016. Coleambally helped demonstrate the feasibility of sustainable, affordable and reliable renewable energy from large-scale solar projects.

## Griffith Solar Farm

IN OPERATION SINCE 2018

36 MW, New South Wales

Over 112,320 panels spanning over 200 hectares with sheep grazing comfortably underneath to reduce dry grass.

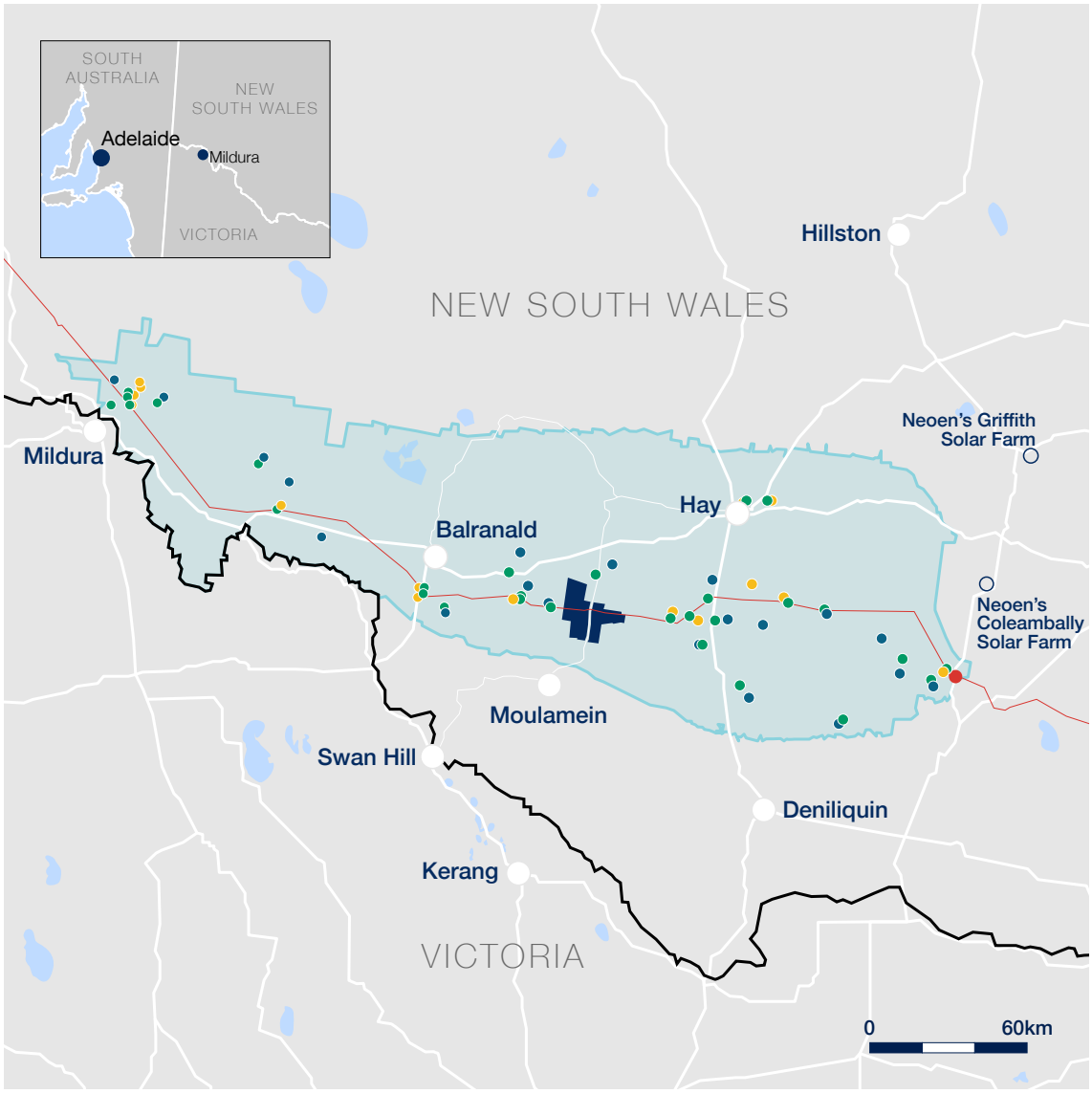
# Neoen & the South West Renewable Energy Zone

**The Tchelery Wind Farm will be located in the proposed South West Renewable Energy Zone (SWREZ), approximately 30 km north-east of Moulamein.**

There are about 19.8 GW of wind, 10.4 GW of battery and 6 GW of solar projects proposed within the SWREZ.

Tchelery Wind Farm, including ancillary infrastructure, is proposed to be located on freehold land titles with a total area of approximately 28,000 hectares. The turbines will be installed on the flat land of freehold properties.

- Project boundary
- South West Renewable Energy Zone (REZ)
- Project EnergyConnect route alignment
- Proposed Project EnergyConnect Dinawan substation
- Nearby Neoen project
- Nearby REZ wind farm
- Nearby REZ big battery
- Nearby REZ solar farm



# Tchelery Wind Farm

## The site

Up to
**74 turbines**

Electricity into the **new 330kV Project EnergyConnect** or the existing **220kV powerline**

Up to **350 MW / 1,450 MWh** battery storage

## Helping the climate

The proposed wind farm is expected to generate:

**2.12 GWh annually**
which is equivalent to:

**1,443,500 tonnes** of $CO_2$ emissions displaced

**375,000 homes** powered

**626,500 cars** off the road

**14 million trees** planted

# Project lifecycle

We are aiming to submit a Development Application to the Department of Planning, Housing and Infrastructure in April 2025. There will be a public exhibition period during which community members will be able to view our submission and express views on the project.

# Project layout

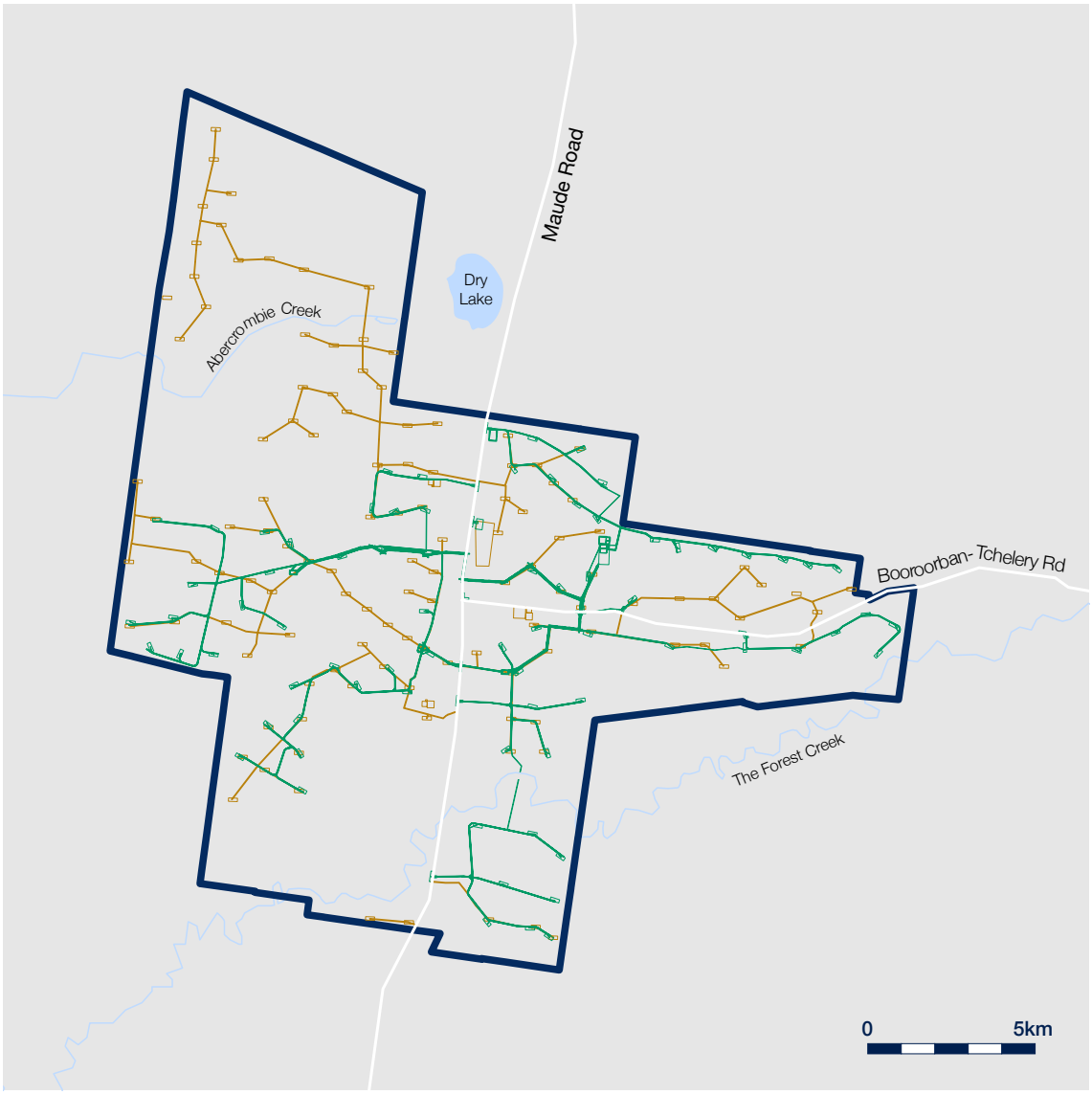
Over the past two years, we have completed surveys and studies to develop a preliminary design to minimise the project's impact on the environment and the community.

A meteorological mast was installed in 2022 and it has collected valuable data.

The design has been modified to improve overall outcomes from the project.

**Refined Layout for Development Application Submission**

Project site  Former layout  Current layout



# Project refinements

## Noise

Noise modelling has been undertaken to inform the design and ensure our wind farm complies with state and federal government regulations.

Background noise monitoring has been completed at the site and will be used for compliance testing once the wind farm becomes operational.

## Cultural Heritage

Several First Nations heritage sites were identified as part of the detailed studies over the last few years. Our project layout and design has been updated to avoid and/or minimise any impact on them, including on potential archaeological deposits.

## Ecological Surveys

Our surveys confirmed the presence of threatened flora and fauna, namely:

- Acacia melvillei Shrubland in the Riverina and Murray-Darling Depression bioregions and
- Sandhill Pine Woodland in the Riverina, Murray-Darling Depression and NSW South Western Slopes bioregions.

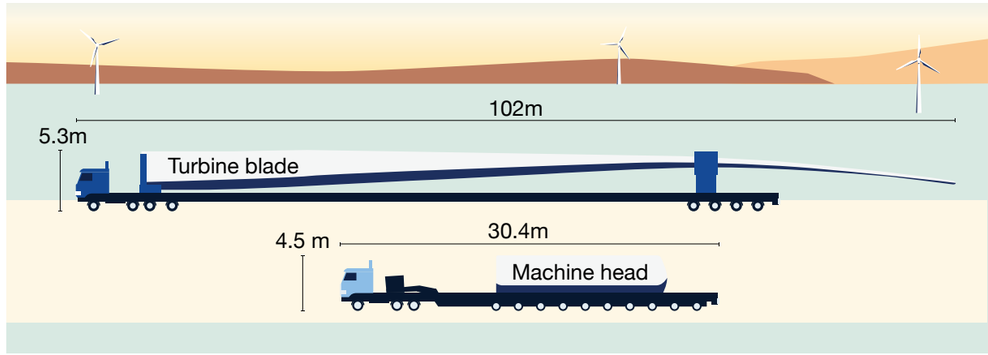
Potential impacts are currently being assessed by ecologists as part of preparing our Environmental Impact Statement which will meet the planning guidelines of the NSW Government.

# Proposed transportation route

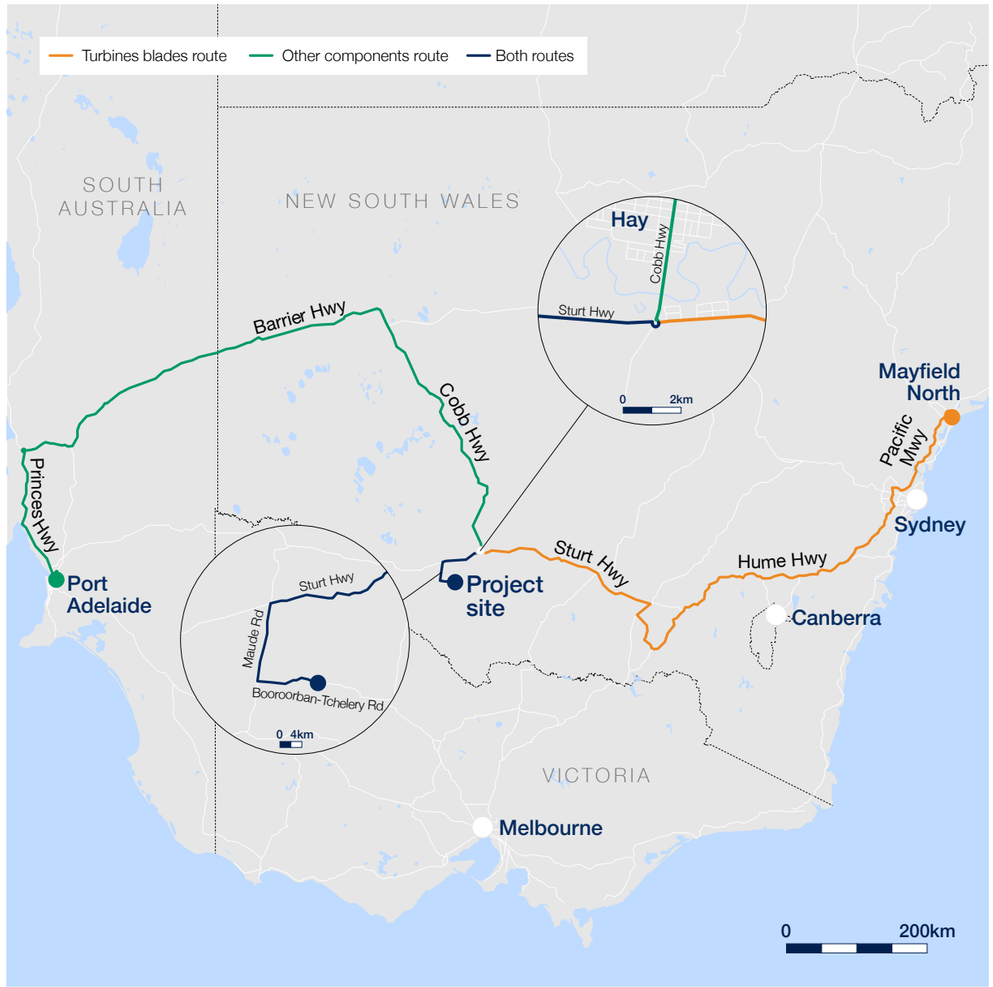
**Following consultations with key stakeholders, we are currently exploring options for transportation and the route from port to site. Currently, route options to site include either Mayfield North, NSW or Port Adelaide, SA.**

During construction, traffic would consist of both light vehicles for transporting workers and heavy/over-sized vehicles for delivery of materials, plant and turbine components. The project would generate increased local traffic volumes during the construction phase, with minimal traffic impacts anticipated during operations. During pre-construction and construction periods we will minimise disruption to local schedules and programs. The turbine components are oversized and heavy equipment, delivered by skilled and certified drivers with escort vehicles to ensure road safety as needed. Turbine components expected to be delivered include:

- Nacelles
- Hubs
- Generator / drive trains
- Blades
- Tower sections




Images of turbine components in transit



# Visual studies

We conducted a landscape and visual impact assessment using a range of desktop and field studies to assess and mitigate the potential impact of the proposed wind farm in accordance with the New South Wales Government's planning requirements.

Existing view south from Maude Road

Photomontage showing indicative location of the proposal

Existing view south from Booroorban-Tchelery Road

Photomontage showing indicative location of the proposal

# Construction workforce

The Tchelery Wind Farm is expected to create up to 530 jobs at peak construction and 20 new, permanent positions during operations.

## For job seekers

**Engineering, Procurement & Construction (EPC) Contractor**

| Electrical | Civil & Mechanical | | Substation |
|---|---|---|---|
| Electricians | Concreters | Plant Operator | Electricians |
| Electrical Apprentices | Construction Fitter | Surveyors | Electrical Apprentices |
| Electrical Engineers | Foreman / Supervisors | Traffic Controllers | Electrical Engineers |
| Electrical Trade Assistants | General Labour | Traffic Engineers | Electrical Trade Assistants |
| Wind Turbine Technicians | Mechanical Engineer | Truck Driver | Wind Turbine Technicians |
| | | Water Cart Driver | |

## For Suppliers

**Goods and services expected to be procured through our EPC contractor:**

| | | |
|---|---|---|
| Accommodation | Freight | Septic pump out services |
| Cleaners | Fuel | Small equipment hire |
| Crane (minor lifts) | Material testing | Transport (minor) |
| Concrete supply (off site supply) | Operation & maintenance facility construction | Waste management (liquid & solid) |
| Earthworks plant (wet & dry hire) | Quarry products | Water (construction & potable) |
| Fencing and gates | Safety Products (local) | Welding & engineering fabrication (site services) |
| Food and catering service | Security | |

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

In the pre-construction period, we will hold a Local Employment & Supplier Networking session.

# We monitor our assets 24/7

**The Tchelery Wind Farm will be monitored around the clock by our manned Operations Control Centre (OCC) in Canberra, which already oversees our operating assets across Australia.**

The OCC will coordinate with our Asset Manager in the Canberra/Sydney office as well as with the local maintenance team on site to ensure safe, effective and compliant operations of our proposed wind farm.

The OCC will manage Neoen's interactions with the National Electricity Market: a wholesale electricity market which spans the eastern and south-eastern coast of Australia. The NEM supplies electricity to homes and businesses in NSW.

Electricity retailers purchase electricity from generators, like Neoen, either directly or indirectly through the NEM. The market works as a pool or spot market, where power supply and demand are instantly matched via a centrally coordinated dispatch process overseen by the Australian Energy Market Operator (AEMO).

**1 ST**

Renewable energy generator chosen by AEMO to supply network stability services

# Local benefits

Neoen will make an **annual commitment** under the Community Benefit-Sharing Program to provide significant benefits to communities living around our Tchelery Wind Farm.

Funding will be available if 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

Aged care, health & well-being

Scan the QR code to submit your ideas

## 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.

### Case Study: New equipment for emergency support services

Coleambally Rescue Squad is part of VRA Rescue NSW. The squad has been active in the Murrumbidgee Shire since its formation in 1976.

Contributions from Neoen's Coleambally Solar Farm helped the Squad purchase new stabilisation equipment for their Light Rescue Vehicle.


## Resources for schools

Developed by Neoen, the Learning Hub is designed for students in Years 5 to 12 to learn the basics of electricity, the impacts of renewable energy sources and possible careers in the sector.

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

# About wind turbines

New turbine models are larger than their predecessors. Often during permitting, higher hub and tip heights will be requested to accommodate the next generation.

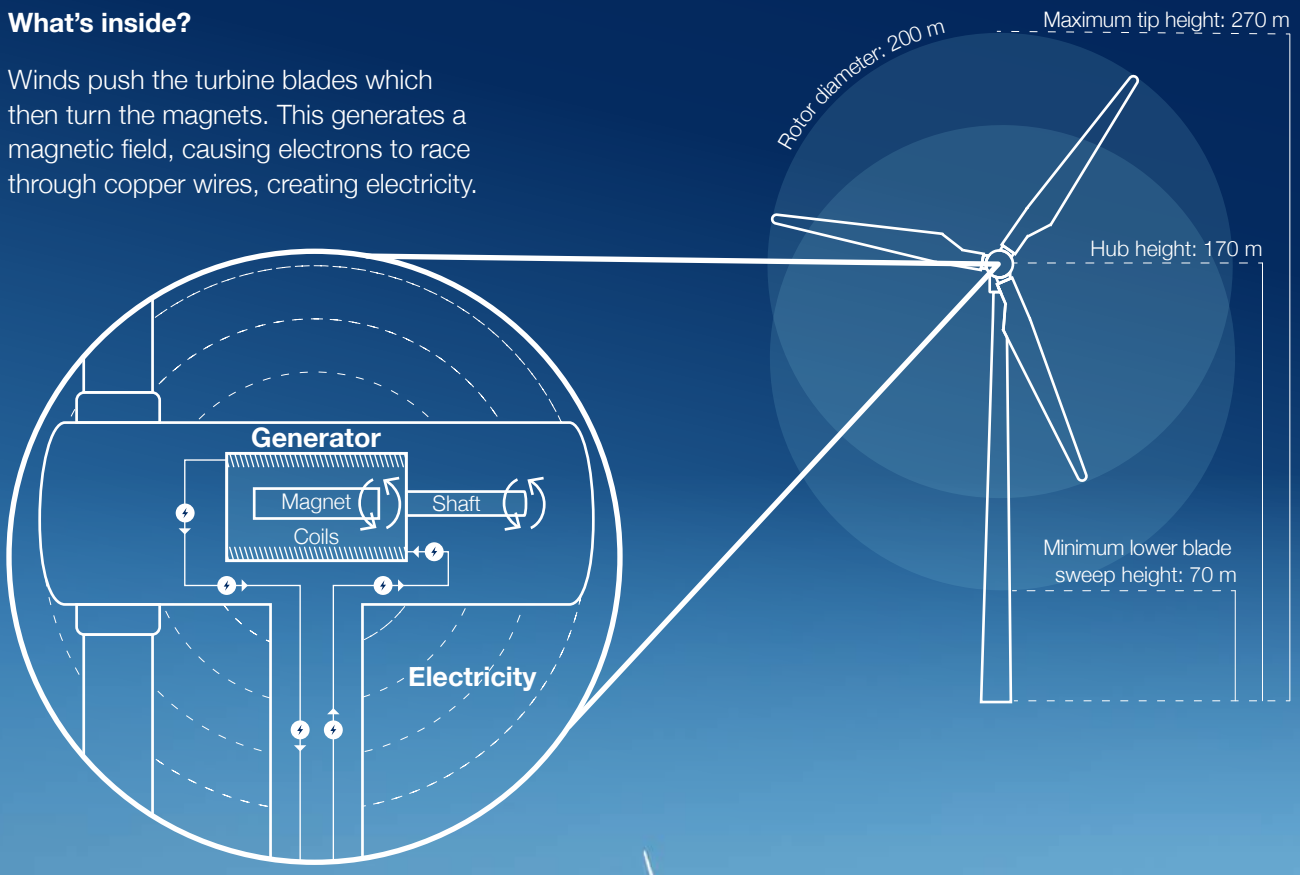
Larger turbines generate more and cheaper energy because they can access higher wind speeds at higher elevations. They are spaced further apart (approximately 500–1,000m depending on the project) and have lower rotational speeds than smaller turbines.

Larger turbines generate savings in civil and electrical costs because they require less concrete, roads and cables per unit of energy generated. This reduces carbon emissions, construction traffic, and vegetation clearance. Their blades are also above the flight paths of most birds, which greatly reduces the impact to avifauna.

To learn more, watch a video on the Learning Hub:

**What's inside?**

Winds push the turbine blades which then turn the magnets. This generates a magnetic field, causing electrons to race through copper wires, creating electricity.




# About big batteries

### What can a big battery do?

To maintain electrical grid stability, a big battery discharges electrical power into the network in response to frequency changes. The battery can lower the cost of these service markets which results in lower electricity prices for everyday consumers.

#### Inertia

Like a cruise control button in your car, inertia services are a way of maintaining stability of the grid. The advanced power inverters associated with a big battery can emulate the inertia services that are currently provided by an ageing fleet of fossil fuel power plants. This service is currently being used at our Hornsdale Power Reserve.

#### Transmission network support

Grid-scale batteries provide dynamic millisecond responses so existing transmission lines 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

Grid-scale batteries can store wind and solar energy, then discharge it when the wind isn't blowing and the sun isn't shining, ensuring renewables are always firmly reliable.

### Battery technology

- Custom designed, dust and waterproof cabinets made of galvanised steel (similar to shipping containers)
- White or light coloured to assist with heat management
- Each cabinet has its own internal thermal management system
- Meets all safety/bushfire risk requirements
- Industrial inverters are used to convert DC to AC power when discharging and AC to DC power when charging

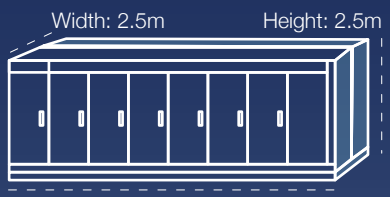
Proposed Tchelery Wind Farm battery:

Up to
**350 MW**
power capacity

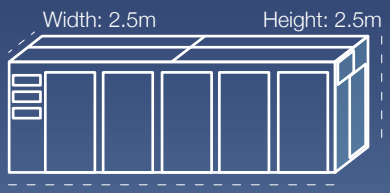
Up to
**1,450 MWh**
energy storage

**92,000x**
more capacity than a 13.5 kWh household battery

**Battery**




**Inverter**




# Bushfire prevention & management

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

As a long-term owner and operator of renewable energy projects, we work with the local rural fire service from the early stages of development to construction and operation.

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.

## Benefits of wind farms

- → The height of turbines, coupled with lightning protection systems, reduce the chance of lightning strikes on nearby trees which may otherwise start a fire
- → Wind turbines and meteorological masts can be fitted with cameras for smoke and fire detection in the forest - increasing visibility and early detection
- → Construction of additional high-quality roads/access tracks that can be used in a bushfire emergency
- → Asset Protection Zones around turbines and maintained roads act as additional fire breaks, helping slow fires down in an emergency
- → Water tanks are installed on site to guarantee reserves for fire fighting purposes only
- → On-site monitoring personnel are trained and can detect and be first responders to a fire event
- → Additional eyes on the ground to detect and raise alarms during an emergency
- → Neoen has committed to significant additional funding of fire prevention and management as part of the project's benefit-sharing program.

With over 22 assets in operation or under construction across six Australian states and territories, Neoen has a proven track record of collaborating with the following authorities:

| | |
|---|---|
| **Are wind turbines a fire risk and how will this be mitigated?** | All electrical infrastructure comes with a level of fire risk, but the risk from wind turbines is extremely low. Additionally, wind farms have requirements around keeping vegetation below certain levels to manage fuel loads, and offer benefits such as additional fire breaks, water reserves, fire trails and monitoring in remote areas of a region. Neoen ensures that our wind farms comply with all relevant requirements from the local and state government fire authorities.<br>Early detection and manned surveillance (with 24/7 monitoring) also help reduce fire risks from campfires and arson, improving security across the project area. |
| **How would the ability to fight fires in the area, using light aircraft and heavy water bombers, be affected by turbines?** | If there is a fire emergency, Neoen would stop all wind turbines and park the rotor blades to facilitate operation of fire fighting aircraft i.e., turbines will be locked in a "Y" position during the fire to make them safer to fly around. This has been carried out successfully and is a standard practice in other areas/jurisdictions.<br>Aircraft (likely helicopters) would need to avoid the wind turbines and follow relevant visual flight rules. There is also significant space between turbines which allows helicopters to fly between them. Pilots view turbines as no different from tall structures and hazards such as power lines, transmission towers, mountains and valleys. Any requirements associated with aerial fire fighting are included in the Bushfire Emergency Management Plan developed in consultation with the fire authorities and in accordance with the state government's planning requirements for wind farms. |
| **How can wind turbines prevent a fire risk?** | **1.** Turbine height, coupled with lightning protection systems, reduces the chance of lightning strikes on nearby trees and property which may start a fire.<br>**2.** Turbines are fitted with advanced smoke detection systems. When smoke is detected, an alarm shuts down the wind turbine for safety purposes and a signal is sent to our on-site technician who assess the situation as per our approved response protocols. They will alert the fire authority in the event of a bushfire risk or emergency. Turbines also have a fire suppression system which can activate an environmentally-friendly gas suppressant to cool a fire and remove oxygen to extinguish flames.<br>**3.** Asset Protection Zones around the site have vegetation maintained below certain levels and free of debris that pose a fire risk. |

TCHELERY
WIND FARM


tchelerywindfarm.com.au

Aniruddha Deshpande, Project Manager

contact@tchelerywindfarm.com.au

1800 966 030