November 2025

Frequently Asked Questions

Why are wind farms being built here?

Following the amendment to the *Forestry Act 2012* by the NSW Government in 2021, Forestry Corporation of NSW (Forestry Corporation) ran a commercial process where a select number of softwood pine plantations were identified as potential locations for hosting renewable energy assets. Pine plantations are well suited to host wind farms because they:

- Are located in windy areas - providing a world class resource opportunity.
- Offer large tracts of land for strings of turbines - minimising connection infrastructure and maximising generation potential.
- Are located away from residential areas - minimising impacts on communities.
- Have existing roads and transmission infrastructure - minimising need for significant ground works and additional infrastructure.

Iberdrola Australia was awarded an Investigations Permit for the Mullions Range and Canobolas softwood pine plantation state forests in the Orange area, allowing community consultation and a series of investigative studies to be initiated. If the potential Project is deemed feasible, we will continue to develop the Project and obtain the necessary planning approvals through the NSW Department of Planning, Housing and Infrastructure (DPHI) and grid connection through the relevant network service provider.

How much wind is needed to generate renewable energy?

Wind turbines do not need much wind to start spinning. They start to operate at wind speeds of 10 to 15 kilometers (km) per hour. To minimise safety risks, they stop operating during very high wind speeds of about 90 km per hour.

Why are the turbines not spinning/generating energy at all times?

There are a number of reasons why individual wind turbines may not be turning. This includes wind conditions and the safe operating parameters of the wind turbines, scheduled or unscheduled maintenance, and export constraints imposed by the Australian Energy Market Operator (AEMO) or the Transmission Network Service Provider. Just because they are not spinning does not mean the wind farm is not viable.

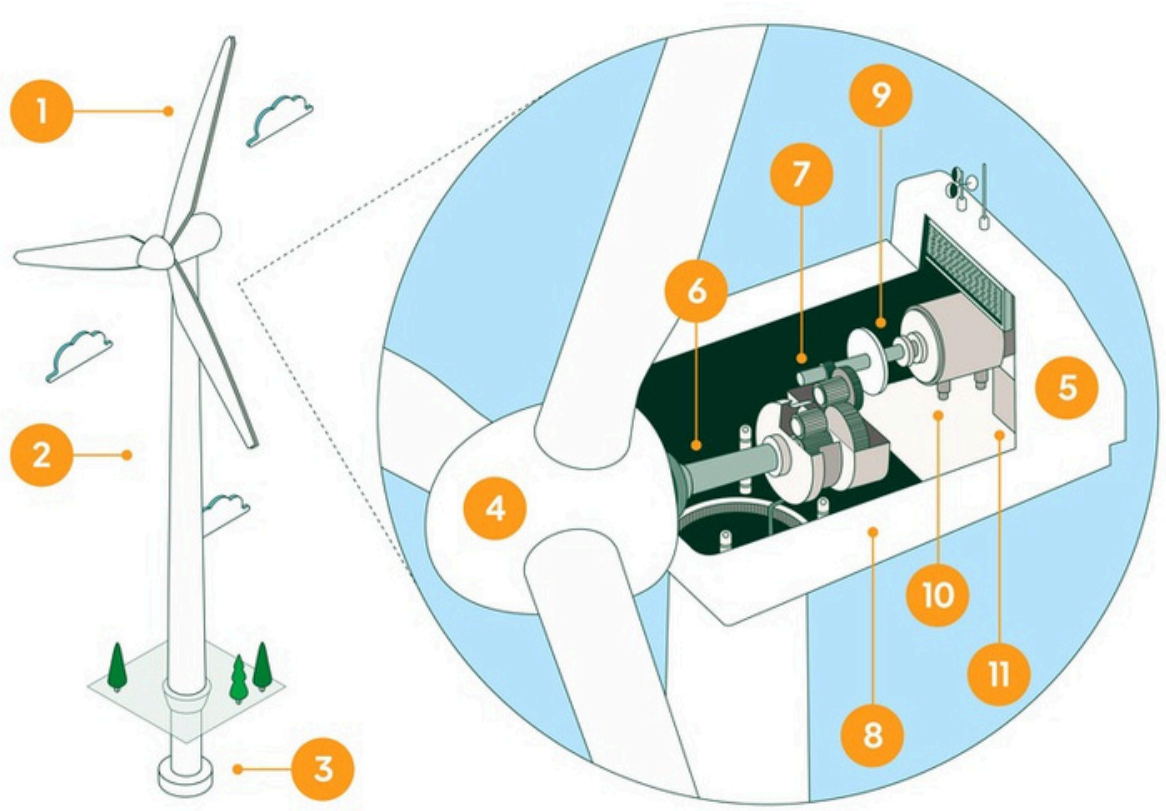
Is wind energy affordable?

Solar and wind continue to be the cheapest source of newly built energy in Australia, as reconfirmed in the latest GenCost report from the CSIRO (May 2024).

Renewable energy, firmed with storage and backed up by gas-powered generation, is the lowest-cost way to supply electricity to homes and businesses as Australia transitions to a net zero economy, according to AEMO. This was confirmed in the 2024 Integrated System Plan by AEMO.

How do wind turbines work?

A wind turbine is made up of a number of components including blades, a nacelle, gearbox, generator, tower and foundation. As the wind turns the blades, it drives a generator that converts the mechanical energy into electrical energy. This electricity is transmitted to the grid which is then delivered to consumers.



1. Blade
2. Tower
3. Base
4. Rotor
5. Nacelle
6. Rotor hub
7. Low-speed shaft
8. Gearbox
9. High-speed shaft
10. Generator
11. Control system

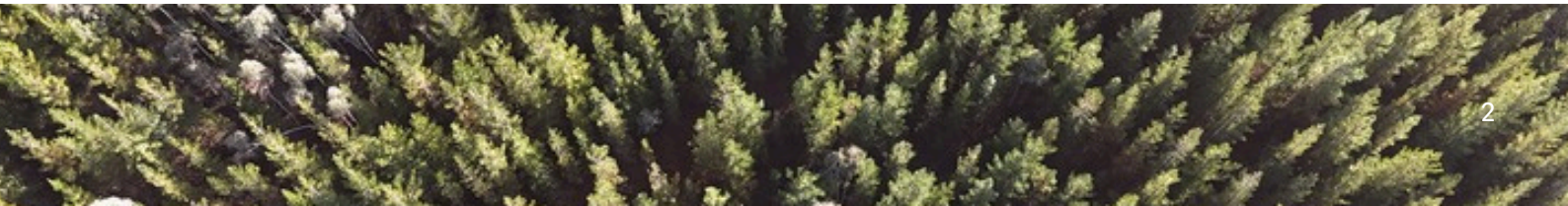
What is the carbon footprint of a wind turbine?

One of the global wind turbine manufacturers, Vestas, calculated the amount of time that wind turbines need to operate in order to payback the energy used in their manufacture. 'Energy payback' is the time required for a wind farm to produce as much energy as it consumes over the full lifecycle of the plant, considering the manufacturing of components, transport, construction, operation and decommissioning.

A typical wind turbine repays its carbon footprint in less than 12 months, and will generate pollution-free electricity for the remainder of its approximately 30-year operating life. For comparison, solar photovoltaic panels are 1 to 2 years and hydro-electric power plants are 9 to 13 months on the same metric. A coal-fired power station always consumes more energy than it generates and never achieves an energy payback or emissions avoided.

How long do wind turbines last?

A wind turbine is usually operational for 30 years. At the end of its service life, these will be either decommissioned or repowered.



Where does the power generated by the wind farm go?

The power generated by the wind farm is fed into the electricity grid via a connection point, supplying homes, businesses, and industries across the state and other parts of Australia. This contributes to Australia's overall energy mix, helping reduce reliance on fossil fuels and supporting the transition to cleaner, renewable energy sources.

We don't have control on where the individual electrons go, but rather the electricity market operator AEMO manages the overall supply and demand of the electricity grid through the National Electricity Market (NEM) to ensure safe, reliable and affordable energy for all Australians.

What other infrastructure other than the wind turbines is planned for the wind farm?

In addition to wind turbines, typical infrastructure includes access roads, underground and overhead electrical cabling, substations, operations and maintenance buildings, and transmission line connections to the electricity grid. Temporary facilities such as construction compounds and laydown areas may also be established during the construction phase. The NSW DPHI Wind Energy Guideline (2024) ensures the infrastructure minimises land use impacts, protects biodiversity, and local communities and stakeholders have been consulted throughout the planning and design process.

- Access roads
- Operations and maintenance building
- Electrical cabling
- Transmission line
- Substation
- Temporary construction compound and laydown area

How tall will the wind turbines be?

The proposed Project is currently utilising a 250 meter (m) tip height for the preliminary design. This is subject to change as the feasibility studies, community consultation and planning approvals progress.

Dimensions change over time and newer wind turbine generators have historically increased in size, due to improvements in technology.

A number of investigations and studies are yet to be completed to finalise this figure for the proposed Project.

What are we doing now?

We are in the early stages of the investigations phase of the proposed Project. It will take approximately 4 to 6 years to complete. During this period, we are conducting extensive community and stakeholder consultation, environmental and technical feasibility studies. This includes, but is not limited to:

- community and stakeholder consultation;
- preliminary environmental studies; and
- collecting wind data through site monitoring equipment.

How has the proposed Project engaged with the community?

Iberdrola Australia seeks to establish meaningful and long-lasting relationships with members of the local communities in which we operate.

Since being awarded the Investigations Permit in late May 2024 and starting the development phase, Iberdrola Australia has been actively engaging with the local community through a number of different avenues in this initial phase of consultation.

Iberdrola Australia has:

- engaged with about 500 residents and stakeholders in the local area through various channels including phone calls, one-to-one and face-to-face meetings, door-knocking, newsletters, letter drops and community drop-in sessions;
- held 6 drop-in sessions between August and September 2024 across multiple locations including Molong, Mullion Creek, Spring Hill and Millthorpe;
- advertised community drop-in sessions via post, radio and print media;
- conducted multiple stakeholder meetings with key community and interest groups, including local councils, Orange Local Aboriginal Land Council, Rural Fire Service (RFS), Landcare, Voice for Cabonne, Springside Progress Association, Millthorpe Village Committee, Save Mount Canobolas, Central West Forestry Hub, and Re-Alliance; and
- participated in community events including Orange Sustainability Living Expo and Australian National Fields Day.

Numerous consultation methods were utilised in 2024, including:

- Project email and website updates.
- Radio and print advertisement, inclusive of interviews.
- 6 drop-in sessions between August and September 2024 across multiple locations including Molong, Mullion Creek, Spring Hill and Millthorpe. Invitation to these community sessions were sent out via registered post to an area 8 km from the proposed Project area.
- Newsletters distributed via post to an area 8 km from the proposed Project.
- A series of door knocks to people within 5 km of the proposed Project, including letter drops for instances where people were not home.
- Facilitated individual face-to-face meetings with interested local community members and interest groups.
- Attended community events such as the Orange Sustainability Expo and the National Fields Day at Borenore.

Community members can reach out and get in contact with the Project Team via **1800 917 372** (which is available 24/7), or email **fourmilecreekwindfarm@iberdrola.com.au** or **mullioncreekwindfarm@iberdrola.com.au**.

How will the Project be assessed?

Large scale wind farms in NSW are assessed through a rigorous planning approval process at both the state and federal level through a bilateral agreement. Please refer to Section 2.3 *Process for assessing wind energy projects* in the NSW DPHI Wind Energy Guideline (2024). The first step of this process is to prepare a Scoping Report, which we are looking to finalise and submit this year. This report documents the process and outcomes of the scoping phase undertaken for the proposed Project in relation to visual, noise, biodiversity, Aboriginal and historic heritage, social, economic and benefit-sharing and others as required.

It then forms part of the proposed Project's Request for Secretary's Environmental Assessment Requirements (SEARs) lodged with the NSW DPHI, as part of the proposed Project's State Significant Development (SSD) application under Part 4 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). Following the receipt of SEARs, we would take the project-specific requirements provided by the various departments and address these in the Environmental Impact Statement (EIS) phase. These processes include advice and rigorous assessment from government agencies and independent technical experts.

Please refer to the following guidelines for your reference:

- NSW DPHI State Significant Development Process (2024).
- NSW DPHI Wind Energy Guideline (2024).

In addition to the state process, the proposed Project will be referred to the Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW) for assessment and approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

How will the local environment be protected?

We will be developing a Biodiversity Development Assessment Report as part of the EIS. In the coming years we will be surveying the investigations area to identify key flora and fauna, including birds and bats.

Biodiversity surveys need to be conducted every season and across multiple years to ensure the potential impacts to vegetation, habitat, flora, fauna and migratory species are understood. The biodiversity assessment will guide the design process and explore avenues to minimise impacts.

The *Forestry Act 2012* legislates that the wind farm footprint uses less than 0.7% of Forestry Corporation's softwood plantation land. Any land used would be replaced by an area at least twice as big as the development, which would be established to plantation.

Iberdrola Australia is dedicated to preserving and enhancing the area's natural ecosystem and unique character. For this proposed Project, we will be establishing an Environmental Benefit Fund dedicated to delivering initiatives that positively contribute to the biodiversity of the region where our projects are located.

Will I be able to see the wind turbines from my property?

Iberdrola Australia has engaged a specialised consultant to conduct visual impact assessments as required for the Scoping Report. Iberdrola Australia considered a 2 km dwelling setback in the early design process to minimise impacts to adjacent properties. Simple visual assessments have been completed. Following those results, Iberdrola Australia completed further intermediate assessments to better understand potential impact. Next year during the EIS phase, detailed assessments will be undertaken to better understand possible impact and mitigation strategies. Specialist photomontages will be included in this EIS process.

We have an iPad-based augmented reality software to show you what the proposed Project will approximately look like from your property. If you are interested, please contact the Project Team on **0448 293 899** or **mullioncreekwindfarm@iberdrola.com.au** or **fourmilecreekwindfarm@iberdrola.com.au** to arrange a time to meet.

Will I be able to hear the wind turbines?

There are many factors that contribute to our perceptions of noise and its impact on us. Describing sound levels can be complex as a person's perception is influenced by factors like distance, topography, temperature, wind speed, and can differ from person to person. While wind turbines do make noise, they are quieter than most people expect. You can have a conversation under a turbine without having to raise your voice.

There are two noise sources from a wind turbine:

- Mechanical sound is the sound emitted from the nacelle, gearbox, and generator.
- Aerodynamic sound is the swoosh of the blades as they rotate past the tower.

Wind turbines are subject to strict noise criteria under the NSW DPHI Wind Energy Guideline (2024), which helps to ensure the protection of human health and residential amenity. Based on NSW guidelines, noise from turbines should not exceed 35.0 dB(A) or be 5 dB(A) above the background noise levels.

How will the wind farm impact human health?

A number of peer reviewed, scientific studies have been conducted to understand the impact of wind farms on human health. The Clean Energy Council (CEC) has shared these studies on their website.

In summary, the CEC states that:

- There are no direct health effects.
- There is no consistent evidence that wind farms cause adverse health effects in humans.
- The Australian Medical Association and the National Health and Medical Research Council (NHMRC) have also concluded that there's no direct link between wind farms and health problems.
- Studies have shown that the levels of low-frequency noise from wind turbines are well below the threshold for human perception and negative health effects.
- The NHMRC suggests that any further health-based studies should be limited to close exposures (i.e. less than 1.5 km).

In addition to this, the NHMRC assessed the impacts of wind farms on human health, under the guidance of a reference group. The findings of this review informed the development of the NHMRC Statement: Evidence on Wind Farms and Human Health and the NHMRC Information Paper: Evidence on Wind Farms and Human Health released in February 2015.

Will the wind farm result in an increase to my insurance premiums?

There is no evidence to support an increase in premiums due to the proximity of wind farms.
A variety of considerations go into the calculation of insurance premiums including claims history, risk, business practices and cost of capital.

The Insurance Council (2024) of Australia states that:
"*Current information indicates that insurers generally do not have specific concerns related to a property hosting transmission lines or neighbouring energy infrastructure. At the time of writing, the Insurance Council is not aware of any instances where Insurance Council members have been unable to provide insurance or have increased premiums as a result of a farm (or a neighbouring property) hosting energy infrastructure*".

The Insurance Council reiterated this position in a statement to the ABC (2024):
"*The rising cost of cover has nothing to do with renewables. Premiums are rising because of the escalating costs of natural disasters, the increasing value of homes and vehicles making them more expensive to replace, and inflation pushing up building and vehicle repair costs*".

Will the proposed Project impact property values?

Studies in Australia and internationally that assessed property sale data over a 20-year period, before and after wind farm construction, show that wind farms do not change property prices. The CEC has collated a factsheet for ease of reference: CEC Fact sheet - Renewable Energy Property Prices and Insurance.

How are wind turbines transported?

Due to their large size, wind turbines are transported as separate components such as tower sections, blades, nacelles and hubs. These components are typically manufactured off-site and transported to the project location using a combination of road, rail and sea freight.

In NSW, most components arrive at a major port such as Port Kembla or Newcastle and are then moved by specialised heavy haulage trucks to the wind farm site. Transport usually occurs during off-peak hours and may involve temporary road modifications, such as widening corners or reinforcing bridges. Once all components have arrived at the wind farm site, cranes and heavy machinery are used to assemble the wind turbines.

How will Iberdrola Australia manage impacts to air quality during construction?

During construction of the proposed Project, Iberdrola Australia will implement a range of measures to minimise impacts on air quality, in accordance with relevant environmental standards. These measures are designed to protect the health and amenity of nearby residents, workers, and surrounding environment.

Activities such as earthworks and vehicle movements can generate dust and emissions, particularly on dry or windy days. To manage this, we will prepare a Construction Environmental Management Plan which will include specific air quality controls. These controls include using water carts to suppress dust on unsealed roads, covering material stockpiles, limiting vehicle speeds, and scheduling dust-generating activities to avoid excessively windy periods. Air quality monitoring may also be implemented in sensitive locations to ensure compliance with relevant standards.

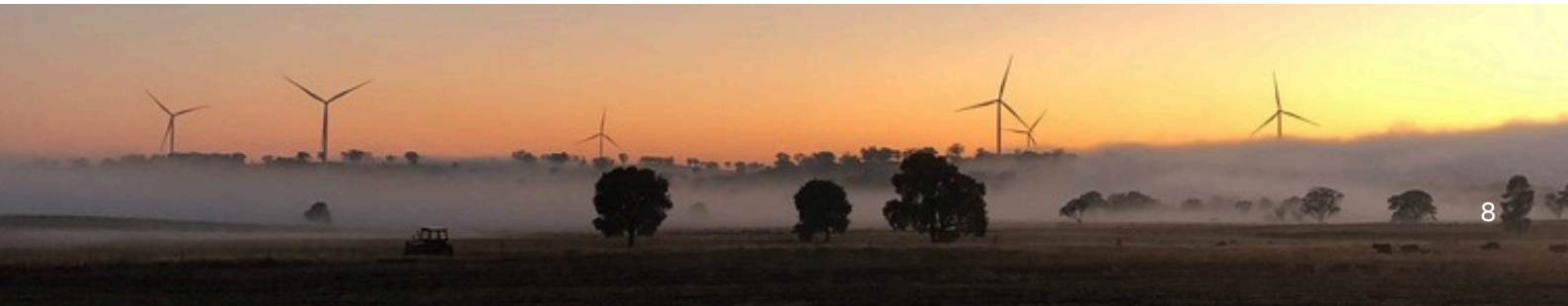
Is Iberdrola Australia responsible/liable for damage to roads during construction or is it partly council/state funding?

Iberdrola Australia is responsible for identifying and mitigating potential road and traffic impacts through extensive community consultation, traffic and transport studies, and consultation with local councils, transport authorities and Forestry Corporation.

Transporting wind farm equipment and infrastructure may require road upgrades, temporary hard stand areas and traffic signage. We will assess both the proposed Project and cumulative impacts of other major projects on the road network. Any potential impacts will be identified and addressed in the EIS.

If the current road network cannot accommodate the proposed transport equipment and movements, Iberdrola Australia will work with road authorities, Forestry Corporation of NSW and local Councils, as well as local communities, to propose upgrades.

If approved, and before construction begins, Iberdrola Australia will development a Traffic Management Plan to ensure the safe and efficient movement of traffic around the Project.



How will Iberdrola Australia ensure the wind turbines are not left behind once the wind farm reaches the end of its operating life?

Iberdrola Australia is one of the largest owners and operators of renewable infrastructure in Australia. We are committed to fully managing the decommissioning and rehabilitation of all of our projects.

Under NSW Renewable Energy Planning Framework, all wind farm developers are legally required to plan for and fund the full decommissioning of the project. This means that when a wind farm reaches the end of its operational life, the owner must safely remove infrastructure and rehabilitate the site—at no cost to the community.

The Clean Energy Council has summarised the expected decommissioning practices in their factsheet.

Will forestry operations be able to continue?

Throughout the project lifecycle, the proposed Project will coordinate activity and operations with Forestry Corporation to minimise any disruptions to industry. For every 1 hectare (ha) cleared for a wind farm, Forestry Corporation will be planting 2 ha to offset this impact.

Will the public still be able to visit NSW State Forests for recreational activities?

During the development phase, NSW state forest will be open to the public for recreational activities. There may be some temporary closures during the construction phase to ensure public safety and you will be notified in advance of any such closures.

It is important to Iberdrola Australia and Forestry Corporation to ensure that the forests are accessible for recreational use during development, construction and operation. Please find our contact details below to provide feedback on how you use the forest as well as to register for further information and Project updates regarding the design and planning approvals.

Does the wind farm increase the risk of fire in the forest?

1. Wind farms are unlikely to cause bushfires and may even reduce the risk of lightning starting a bushfire. As their height and material make them more conductible than the surrounding trees, lightning is more prone to hitting wind turbines. Wind turbines are fitted with lightning protection systems (certified to IEC 61400-24 international lightning protection standards) that allow any electricity from lightning strikes to be safely conducted down the structure to the earthing equipment in the ground at the base of the turbine.

2. Wind turbines are fitted with fire monitoring and fire suppression systems. Every wind farm also has an operations and maintenance facility within the wind farm with a dedicated local on-site manager and team of technicians who will receive fire management training. Iberdrola Australia turbines are monitored 24/7, 365 days per year via our Operational Control Centre (OCC) in Sydney. In the event that a fire or abnormal condition is detected, our teams can automatically issue corrective actions, such as a remote-stop of turbines, in addition to coordinating any emergency response efforts with our site teams and emergency services. This approach to continuous monitoring and response leads to improved fire management in the area.

3. Iberdrola Australia are considering a range of technological applications that could be used for wildfire detection, including CCTV and thermal cameras. Iberdrola Australia will be involved in fire prevention, suppression and management initiatives, such as Asset Protection Zones, following detailed consultation, advice and collaboration with Forestry Corporation, RFS and other fire-fighting authorities. In developing the proposed Project, Iberdrola Australia would need to develop Risk Management Plan(s) and a suitable Bushfire Emergency Management Plan to be reviewed once wind farm designs are progressed. This includes supporting Forestry Corporation in its bushfire prevention and firefighting capacity.

What would happen if a fire were to break out at a wind farm on Forestry Corporation land?

The RFS and other fire-fighting authorities have power to enter any land impacted by fire under section 23 of the *Rural Fires Act 1997* (Rural Fires Act). In the unlikely event of a fire at a wind farm on forestry land, the fire-fighting authorities would not need to wait for permission from Forestry Corporation or Iberdrola Australia, to suppress a fire.

The Rural Fires Act also makes provisions for fire-fighting officers to enter land to:

- inspect a fire; and
- for hazard management purposes.

All fire fighting authorities work closely together and communicate about fires by radio, phone and the ICON (Incident Control Online) operational management system.

In addition to this, Iberdrola Australia has considered a range of technology applications that could be used for wildfire detection, including CCTV and thermal cameras. Iberdrola Australia will be involved in fire prevention, suppression and management initiatives. In developing the proposed Project, Iberdrola Australia would need to develop Risk Management Plans to be reviewed once wind farm designs are progressed. This includes supporting Forestry Corporation in its bushfire prevention and firefighting capacity. We will also carry out a detailed fire risk assessment as part of the NSW Government's planning approval process and will work closely with the RFS and other fire-fighting authorities to manage any risks.

Iberdrola Australia will monitor the site 24/7, 365 days per year to ensure rapid response in the unlikely event of incident.

How might wind turbines impact the use of light aircraft and larger water bombers during firefighting operations?

In the event there is a fire detected within the plantation, all turbines would be shut down via our 24/7 control centre. The spacing between turbines would provide sufficient room for helicopters to operate.

Firefighting requirements are addressed through a Bushfire Emergency Management Plan, which Iberdrola Australia would develop alongside fire authorities in line with the NSW state planning approval process.

Contact Us

If you have any questions, feedback, local knowledge or suggestions, please reach out to the Project Team via the contact details below.

Visit our website:
www.iberdrola.com.au

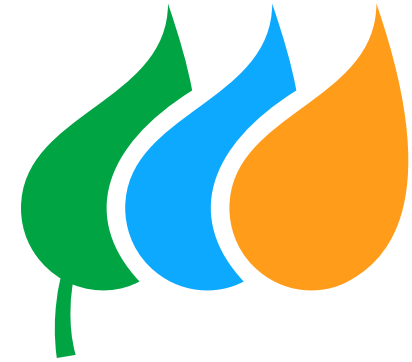
Email the Project Team:
fourmilecreekwindfarm@iberdrola.com.au or
mullioncreekwindfarm@iberdrola.com.au

Call the Project Team:
0448 293 899 or 1800 917 372

Visit the Community Information Hub:
119 Byng St, Orange
Tuesdays (9am-1pm) and Thursdays (1pm-5pm)

Acknowledgement of Country

Iberdrola Australia acknowledges the Traditional Owners, the Wiradjuri People, and their continuing values, culture and connection to land, waters and sky. We pay our respects to Elders past and present.



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