# Burrendong Wind Farm

#### **Project Overview**

Epuron is preparing a development application for a new utility-scale wind farm, to be located east of Lake Burrendong in central western New South Wales. This overview provides information about the project.

#### Why this location?

The site proposed for Burrendong Wind Farm is in the NSW Central-West Orana Renewable Energy Zone (CWO REZ), an area identified as optimal for new renewable energy projects to support the state's renewable energy transition. The project area has an excellent wind resource and is close to the transmission network.

For more information on the CWO REZ visit energy.nsw.gov.au/renewables/renewable-energy-zones or scan the QR code right:



## **Planning and assessment**

Wind farm developments in NSW are considered State significant development and subject to a rigorous assessment process managed by the Department of Planning, Industry and Environment (DPIE).

Based on Epuron's Scoping Report, DPIE has issued Planning Secretary's environmental assessment requirements (SEARs) for the project, to outline the general and technical assessment requirements for the project's Environmental Impact Statement (EIS).

Key matters to be addressed in the EIS include landscape and visual impact, noise and vibration, biodiversity, traffic and transport, hazards and risks, heritage, water and soils, waste, and social and economic impacts and benefits.

The proposal has also been determined a 'controlled action' under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) by the Australian Department of Agriculture, Water and the Environment. This means it must also be assessed and approved under the EPBC Act. This will be done by DPIE under the bilateral agreement between the NSW and Commonwealth Governments.

The assessment work is being done by independent specialists in consultation with expert stakeholders.

The EIS will include formal assessment reports for the key matters identified in the SEARs which also includes associated matters such as aviation, health and bushfire. It will also include assessment documentation required for the project's assessment under the EPBC Act.

The project's SEARs and other planning documents are available on the NSW Major Projects planning portal at planningportal.nsw.gov.au/major-projects/projects or scan the QR code right:

The project's referral and determination under the EPBC Act is available on the EPBC Act - Public notices portal at <u>epbcnotices.environment.gov.au/publicnoticesreferrals</u> or scan the QR code right (Referral 2021/8916):





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# Planning and assessment Site selection Initial concept and consultation Scoping Report submitted to the NSW **Department of** Planning, Industry and **Environment (DPIE)** Secretary's Environmental Assessment Requirements (SEARs) for Environmental Impact Statement (EIS) issued by DPIE **Referral to the Australian** Department of Agriculture, Water and Environment (DAWE) for review under the **Environment Protection and Biodiversity Conservation Act** 1999 (EPBC Act) Decision: controlled action. assessment under bilateral agreement finalising site design Development application (DA) and **EIS lodged with DPIE** DA and EIS on public exhibition Responses to public submissions **Assessment by DPIE Report and** 10 recommendation prepared for DAWE

Determination





## Landscape and visual impact

A detailed landscape and visual impact assessment is a requirement of the EIS and has been done by an independent specialist.

As part of this photomontages have been produced using specialist industry software and based on precise distances and wind turbine dimensions. These show what the wind farm would like from example public viewpoints where wind turbines would be visible. The example above shows the view from Burrendong Dam Road. The full assessment will be included in the EIS.

## **Cultural heritage**

Epuron recognises the continuing connection that Aboriginal peoples and that a site's Traditional Custodians are important stakeholders for new renewable energy projects. Representatives are involved in the planning and assessment process, including participation in site investigations and consultation to ensure the protection of cultural heritage on the site and respect to traditional values and culture are upheld.

## Health

The relationship between operating wind turbines and effects on human health has been the subject of extensive review by independent medical and research organisations including the National Health and Medical Research Council (NHMRC) and the Australian Medical Association.

To date there is no evidence that wind turbines cause adverse health effects. The NHMRC concludes: "There is currently no consistent evidence that wind farms cause adverse health effects in humans" and "There is no direct evidence that exposure to wind farm noise affects physical or mental health".

## **Ecology and biodiversity**

Developing new renewable energy projects and protecting local wildlife are both critically important and achievable with careful planning and management.

Avoiding and minimising ecological impacts is a priority for wind farm proponents, communities and decisionmakers alike.

A thorough and comprehensive biodiversity assessment is a requirement of the EIS and is being done by independent ecology specialists in accordance with state and federal requirements.

Ecological assessment involves investigating flora and fauna species and habitats through field studies and surveys over multiple seasons, and risk modelling to assess and mitigate potential impacts.

#### Noise

Modern wind turbine technology aims to reduce noise and noise generated by operating wind turbines can be accurately predicted.

A comprehensive technical noise assessment based on predictive noise modelling and using the methodology prescribed in the NSW Government's Noise Assessment Bulletin is required for the EIS.

Compliance with strict noise limits must be demonstrated before approval is granted and via a noise monitoring program during operation. NSW has the strictest noise limits for wind farms in Australia.

The noise limit at surrounding residences is 35 decibels (dB) or the existing background noise plus 5dB, whichever is greater. The diagram below shows familiar sounds for reference.

The noise assessment is being done by leading independent acoustic specialists and the monitoring results and full report will be available in the EIS.



## Livestock

Wind farms and grazing are complementary land uses. There is no evidence that wind turbines have any adverse effects on domestic animals and livestock. Livestock appear to be unaffected by the presence of wind turbines and will often graze beneath them and use the posts for shelter and shade.



## Fire

Wind turbines are designed to mitigate fire risk. They are constructed with fire resistant materials and operated by sophisticated monitoring systems that automatically follow shutdown procedures in response to operational issues and can be remotely shut down in the event of fire in the area. Wind turbines also provide a safe path to ground for lightning strikes and access tracks act as natural fire breaks.

A comprehensive bushfire management plan for the site will be developed in consultation with the Rural Fire Service (RFS). RFS would manage firefighting on the site in the same way as any other area, using ground- and airbased resources subject to prevailing weather conditions and avoiding wind turbines in the same manner as any other obstructions such as buildings or power lines.

# **Roads and traffic**

Preparing for construction may require upgrades to access roads. The development application will include a planning report and design demonstrating compliance with the relevant access, manoeuvring and parking policies of the local government planning scheme.

# **Property values**

Property prices are influenced by many factors however there is no evidence to suggest that proximity to a wind farm is one of them or to support any correlation between property values and wind farms.

Many wind farms have been built on or close to private land. The potential for a wind farms to impact the value of properties in the surrounding area has been the subject of two separate studies by the NSW Government, one by the NSW Valuer General (2009) and one by Urbis on behalf of the NSW Office of Environment and Heritage (2016). These studies reviewed property transactions before, during and after the construction of nearby wind farms and analysed sale prices in the context of broader market trends. Both found there to be no link between wind farms and property values.

# Construction

Preparation for construction can only commence after the proposal has been approved and detailed engineering design has been completed.

A comprehensive management plan will cover all aspects of construction consistent with standard working hours, noise, traffic and dust management.

# **End of operation**

Wind turbines have an operational life of approximately 25 years. Options at the end of this period include extending the life of the wind farm, repowering the site with new infrastructure or decommissioning.

If the operator decides not to extend or refurbish the wind farm it will be decommissioned, probably within 12-18 months of ceasing operation.

Decommissioning would involve the establishment of a decommissioning fund by the operator and the removal of above ground infrastructure including wind turbines, electrical infrastructure and maintenance buildings. The site would then be returned to its former state as much as practicable.

# **Project benefits**

JOBS - The project would provide hundreds of jobs during the construction period and a number of ongoing jobs for operation including technical work, administration and landscaping.

ECONOMIC BOOST - Construction would provide work for local and regionally-based contractors and provide a significant boost to the local economy including for surrounding accommodation, retail, service and hospitality businesses.

COMMUNITY FUND - The project would involve a community fund that would provide a significant annual contribution for community projects and initiatives over the life of the wind farm.

CLEAN ENERGY - Renewable sources of energy are the most efficient and cheapest sources of bulk energy generation. Growth in NSW's renewable energy capacity will put further downward pressure on wholesale electricity prices and deliver clean, affordable and reliable electricity to households and businesses. Burrendong Wind Farm would contribute up to 446 megawatts of clean energy to the grid and support the NSW Government's renewable energy targets.

#### **Project updates**

Epuron is keen to keep members of the community and other interested parties up to date on the project and opportunities to provide feedback.

Updates are available by email or post.

For email updates please register at epuron.com.au/mailing-list-details

To receive updates via post please email your name, address and a request to be added to the mail list to info@burrendongwindfarm.com.au

#### Community Consultative Committee (CCC)

Burrendong Wind Farm has a Community Consultative Committee (CCC). The CCC has an important role in ensuring that local residents and stakeholders are:

- Kept informed of the status of the project,
- Consulted on plans and proposed changes, and
- Able to provide feedback on any issues that may arise.

Independent chair for the CCC, appointed by the NSW Department of Planning, Industry and Environment, is Garry West. The list of CCC members and CCC meeting minutes are available on the 'Community' page of the project website.

## **Online feedback form**

The Burrendong Wind Farm project team welcomes input from members of the community and other interested parties. This feedback is important to help identify priorities and shape the project. A feedback form is available on the website at <u>burrendongwindfarm.com.au</u>

#### **Questions and comments**

Questions and comments are welcome at any time and can be sent to the project team via:

- info@burrendongwindfarm.com.au
- CCC members
- The online feedback form





The project site is east of Lake Burrendong. The proposal involves up to 72 wind turbines and associated infrastructure, with powerline connection to be determined.

#### **About Epuron**

Epuron is one of Australia's longest operating and most experienced renewable energy companies. It specialises in the design of utility-scale wind and solar energy generation facilities and guiding proposals through the planning and assessment process. Epuron has been a leader in the growth of Australia's wind energy generation capacity for the past two decades. The company is a founding signatory to the Clean Energy Council's Best Practice Charter for Renewable Energy Projects, a commitment to engage respectfully with communities, be sensitive to environmental and cultural values, and make a positive contribution to the regions in which it operates.

#### Thank you

Thank you to all those who have engaged with us for this project so far. Epuron looks forward to working with members of the local community and where practicable incorporating community input to improve project outcomes and deliver lasting benefits.

Website: <u>burrendongwindfarm.com.au</u> or scan QR code right



Project contact: Andrew Wilson, General Manager - Development NSW