

Boomer Range Wind Farm

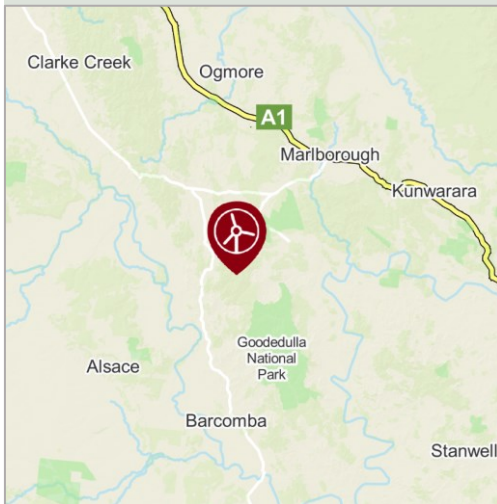
Project Overview

March 2022



Photograph of the project area

Location



The site proposed for the Boomer Range Wind Farm is approximately 100 km north-west of Rockhampton and 30 km south-west of Marlborough in central Queensland.

It is in the Central Queensland Renewable Energy Zone, an area identified by the Australian Energy Market Operator as optimal for new projects to support the state's renewable energy growth and clean energy transition.

The site has an excellent wind resource, is used for cattle grazing, which is complementary to wind farming and is close to the transmission network, making it an ideal location for a wind farm.

Planning & assessment

The proposal for Boomer Range Wind Farm will be subject to a rigorous and comprehensive assessment process.

State assessment

The development application and accompanying assessment reports will be assessed by the Queensland Government's State Referral and Assessment Agency (SARA).

SARA delivers a co-ordinated, whole-of-government approach to assessment of wind farm applications and the framework is provided by the State Development Assessment Provisions' (SDAP) *State code 23: Wind farm development*.

State code 23 outlines matters to be assessed and prescribes the methodology for technical assessments, minimum actions and acceptable outcomes to demonstrate compliance. It aims to make sure that a wind farm is appropriately located, sited, designed, constructed and operated to ensure:

- Safety, operational integrity and efficiency of air services and aircraft operations.
- Risks to human health, wellbeing and quality of life are minimised by ensuring acceptable levels of amenity and acoustic emissions at sensitive locations.
- The development avoids, or minimises and mitigates, adverse impacts on the natural environment (fauna and flora) and associated ecological processes.
- The development does not unreasonably impact on the character, scenic amenity and landscape values of the locality.
- The safe and efficient operation of local transport networks and road infrastructure.

Commonwealth assessment

The project will also be referred to the Australian Department of Agriculture, Water and the Environment (DAWE) for review under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). DAWE will then determine whether the project will require assessment and approval under the EPBC Act and prescribe the assessment pathway for that process.



Example of a photomontage showing what wind turbines would look like.

Ecology

Increasing renewable energy capacity with new projects and protecting local wildlife are both critically important and can both be achieved with careful planning, management and the right approach.

The proposal will require rigorous and comprehensive assessment of potential ecological impacts by both the Queensland and Australian governments.

The ecological assessment work will be done by independent ecology specialists and scientists. It will involve investigating plant and fauna species and habitats within the project boundary, over multiple seasons through field studies and surveys.

As the ecological work is done Epuron will work with specialists and stakeholders to modify the design to avoid, minimise and mitigate ecological impacts.

Aboriginal cultural heritage

Epuron recognises the continuing connection that Aboriginal and Torres Strait Islander Peoples have to their land and acknowledges that the Boomer Range Wind Farm project area is Barada Kabalbara Yetimarala Peoples country.

The project team is engaging with the Traditional Owners and will work with them to establish an agreement that ensures respect to traditional values and culture are upheld.

Landscape and visual impact

After the wind turbine layout has been established photomontages can be used to show what the project would look like from selected public viewpoints where it could be seen.

These are done by combining location photographs with a technical digital representation of the wind farm called a wireframe. Wireframes are produced using specialist industry software and based on precise distances and dimensions of the proposed wind turbine model to provide an accurate and correctly scaled representation.

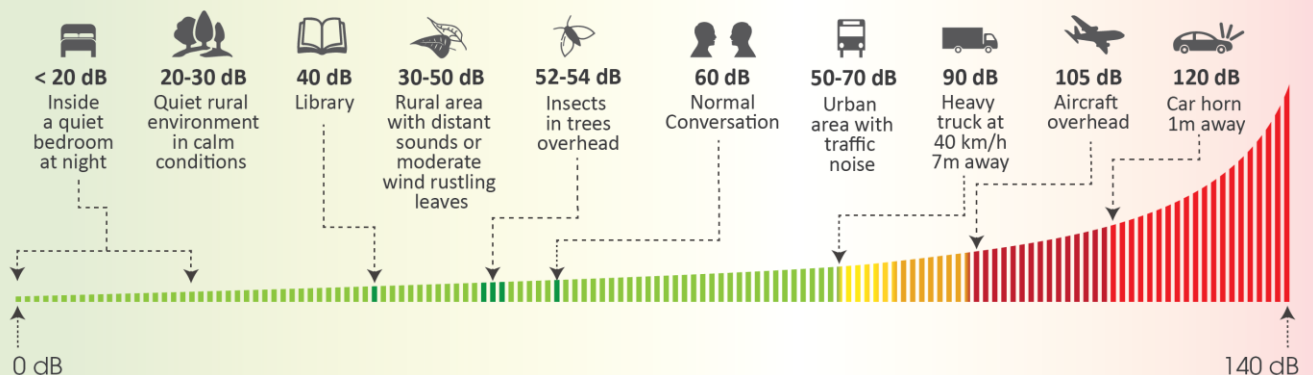
The photomontage above is an example from another project, the Lotus Creek Wind Farm, proposed for a site west of St Lawrence.

Noise

Wind turbine noise can be predicted by acoustic modelling and a comprehensive technical noise assessment is required for the application.

For host lots the noise level at a residence must not exceed 45 dB or the background noise by more than 5 dB at night (10pm-6am). For non-host lots it must not exceed 35 dB or the background noise by more than 5 dB at night (10pm-6am) and 37 dB or the background noise by more than 5 dB during the day (6am -10pm). The diagram below shows noise levels in decibels (dB) of familiar sounds for reference.

Compliance with the limits must be demonstrated before approval is granted and through a noise monitoring program when the wind farm is operating.



Construction and traffic

The project would require comprehensive construction management and traffic management plans compliant with Queensland Occupational Health & Safety legislation and the local government planning scheme. These would cover all aspects of construction including working hours, noise, traffic and dust management.

Livestock

Wind farms and cattle grazing are complementary land uses. Livestock appear to be unaffected by wind turbines and will often stand under them and use them for shelter or shade.

Fire safety and management

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 for lightning strikes to the ground and access tracks serve as natural fire breaks.

A comprehensive bushfire management plan for the site would be developed in consultation with Queensland Fire and Emergency Services (QFES). QFES would manage firefighting on the site in the same way as any other area, using ground and air based resources subject to prevailing weather conditions, and avoiding wind turbines in the same manner as any other obstructions such as buildings or powerlines.

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 via refurbishment, repowering the site with new infrastructure or decommissioning.

If the operator decides not to extend or refurbish the facility it will be decommissioned, usually within 12 months of ceasing operation. Decommissioning would involve the establishment of a decommissioning fund by the operator, the removal of above ground infrastructure including wind turbines, electrical infrastructure and maintenance buildings, and returning the site to its former state where practicable.

Project benefits

JOBS - The project would provide jobs during the construction period and require some ongoing full-time jobs for maintenance and operation.

ECONOMIC BOOST - Construction would generate significant direct and indirect expenditure within the local, regional and Queensland economy including work for contractors and increased patronage for surrounding accommodation, retail, service and hospitality businesses.

CLEAN ENERGY - Growth in Queensland's renewable energy capacity will continue to put downward pressure on electricity prices and deliver affordable, clean, reliable electricity to households and businesses.

Planning and assessment

Queensland Government

1 Site selection, initial concept and preliminary investigations

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ARE
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Pre-lodgement meeting with State Assessment and Referral Agency (SARA)

3 Studies and assessments (prescribed by SARA State code 23)

4 Application and assessments submitted to SARA

5 Assessment

6 Determination

Commonwealth

1 Referral to the Australian Department of Agriculture, Water and the Environment for review under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*

2 Referral decision

3 *Assessment pathway to be advised ...*

Newsletter updates

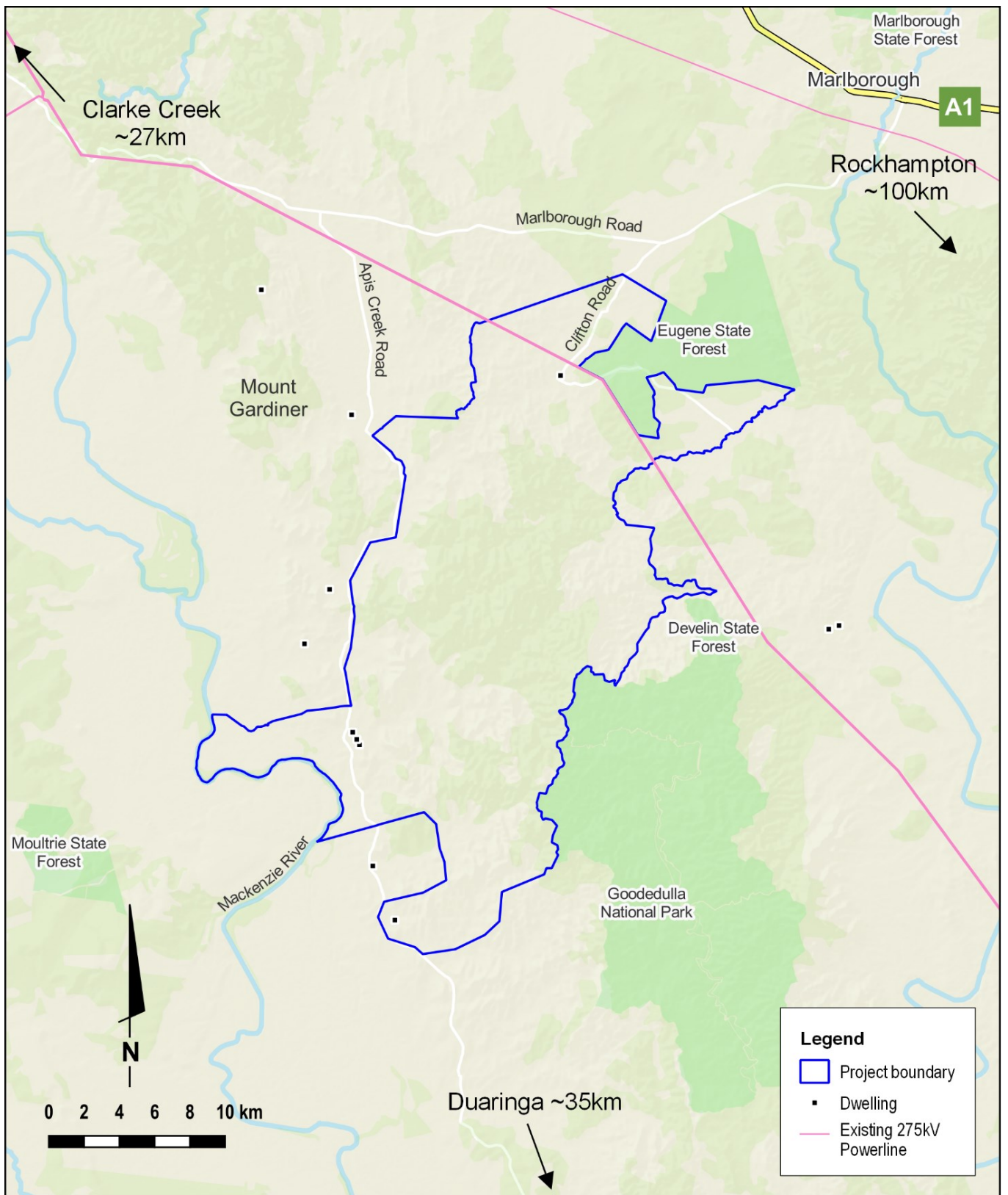
Update newsletters will be issued as the project progresses through the planning and assessment process and to notify community members of local information sessions when these are scheduled.

These are available by email and mail.

To receive email updates please register online and tick 'Boomer Range WF' at: epuron.com.au/mailling-list-details

To receive update newsletters by post please send your postal address and a request to be added to the mailing list to: info@boomerrangewindfarm.com.au

We respect your privacy and your details will only be used for this purpose.



The project area proposed for Boomer Range Wind Farm, south-west of Marlborough.

Questions and feedback

Questions and feedback are welcome at any time and can be sent to the project team via email to info@boomerrangewindfarm.com.au or the website's online feedback form.

For more information visit boomerrangewindfarm.com.au or scan the QR code

