JANUARY 2026

Hexham Wind Farm

FACT SHEET

Noise and Vibration

The proposed Hexham Wind Farm (the project) is located between Hexham, Caramut and Ellerslie in the Moyne Shire in south-west Victoria. The project would incorporate up to 106 wind turbines with a total height of up to 260 metres from ground to blade tip. The project would also include an on-site terminal station and battery energy storage system (BESS) and other associated infrastructure such as access tracks.

As part of the Victorian Government's planning and approvals process for major projects, Wind Prospect has prepared an Environment Effects Statement (EES) for the proposed Hexham Wind Farm. An EES is a requirement under the Environment Effects Act 1978 and includes a detailed assessment of a wide range of environmental and social aspects such as biodiversity, ecology, historical heritage, Aboriginal cultural heritage, landscape and visual amenity, traffic and transport, noise, socioeconomic, and surface and groundwater.

Extensive research and community and stakeholder consultation has been carried out to avoid and mitigate any potential adverse effects on the environment and the social fabric of the community during construction, operation and decommissioning of the project. Wind Prospect recognises the value of the natural and built environment in which the project is based and understands and respects the community's desire to protect both the environmental and social landscape that has existed for many years.

Understanding noise and vibration

Noise can be described as what a person hears and vibration as what a person feels.

Noise is typically defined as a sound that is unwanted or disruptive and is measured in decibels (dB).

Vibration refers to the regular rhythm of movement of any object. Vibration can be measured in different ways such as acceleration, velocity, frequency and displacement.

Assessment

As part of the EES, Wind Prospect engaged Marshall Day Acoustics to prepare a noise and vibration assessment. The assessment has been prepared in accordance with the Victorian Government Planning Minister's scoping requirements for the EES, noise and vibration guidelines for developments in construction, and other relevant legislative and regulatory requirements.

The assessment demonstrates how potential noise and vibration impacts on sensitive receivers have been identified, and how these potential impacts would be managed and mitigated during the construction, operation and decommissioning of the project.

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How the assessment was carried out

A Preliminary Noise Assessment was completed in 2022, with further studies undertaken during the preparation of the EES to assess predicted noise from the proposed terminal station, wind turbines and BESS, temporary on-site quarry and concrete batching plant, and other associated electrical equipment across the lifecycle of the project.

The study area extends to five kilometres from the proposed locations of the wind turbines and associated temporary and permanent infrastructure. The assessment methods used to assess potential noise and vibration impacts include:

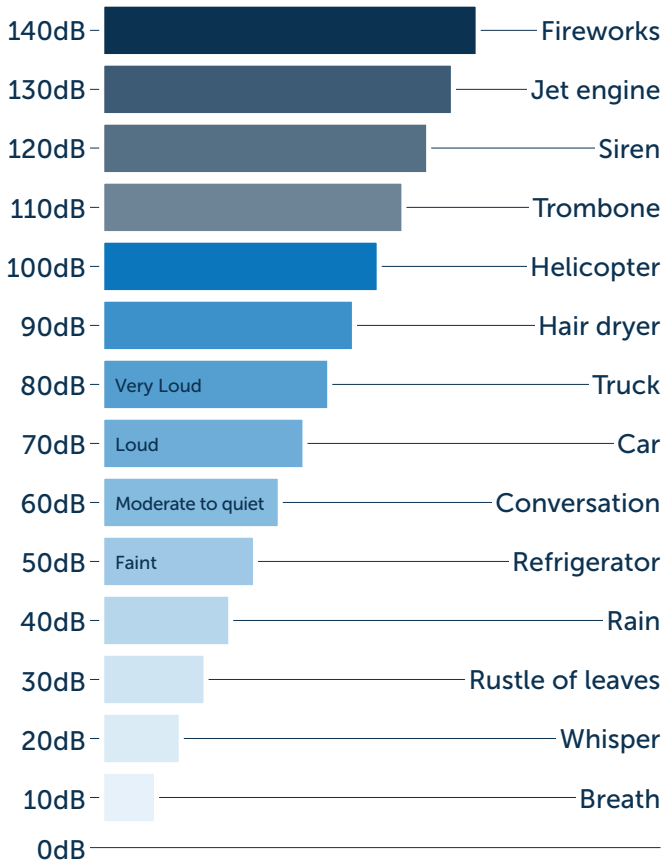
- gathering data on existing background (environmental) noise within the study area
- identifying noise sensitive receivers in the project's vicinity
- using predictive modelling to estimate potential noise and vibration levels during construction and operation
- considering cumulative impacts from project elements operating at the same time, as well as from nearby existing or approved developments
- undertaking a risk-based assessment of potential impacts during construction and operation.

Why is a New Zealand Standard being used?

The noise assessment for the proposed Hexham Wind Farm follows the *New Zealand Standard on Acoustics – Wind Farm Noise* (NZS 6808:2010), as required by the Victorian Government. This internationally recognised standard ensures a consistent and transparent approach to predicting and managing wind farm noise impacts.

Decibel scale

The following decibel (dB) scale provides examples of common sounds to help illustrate typical noise levels.



Source: SafeWork Australia, 2022, Noise hazards and sound levels.

Findings

The noise assessment showed that the project would comply with Victorian legislation and guidelines through the careful management of potential impacts on noise-sensitive receivers. With management measures in place, the assessment determined:

- Noise generated during construction can be controlled in accordance with relevant Victorian guidelines, including the EPA's *Civil Construction, Building and Demolition Guide*. During construction, noise levels are predicted to be up to 45dB at some times during the day at some neighbouring dwellings.
- Predicted operational wind turbine noise levels are below the noise limits set under the *New Zealand Standard on Acoustics – Wind Farm Noise*. Applicable noise limits are 40dB or background + 5dB, whichever is greater.
- Predicted operational noise levels from the project's on-site terminal station and BESS are below the noise limits determined in accordance with the *Noise Protocol for the Environment* (EPA Victoria, 2021). Applicable noise limits are 45dB during the day and 34dB at night.
- Noise generated during decommissioning can be controlled using similar measures to those applied during construction.

Working with the Community

Noise and vibration during the construction, operation and decommissioning phases of any project can cause disruption for local communities. As part of the EES preparation, the project team consulted with near neighbours – particularly those identified as sensitive receivers – to share the results of the noise and vibration assessment and to discuss potential mitigation measures, if required.

Measures to mitigate potential noise impacts

Based on the assessment findings, a range of mitigation measures will be implemented to manage noise and vibration associated with the construction and operation of the project. These measures include:

- Preparation and adherence to a construction and operational noise and vibration management plan in accordance with Environmental Protection Regulations.
- Ensuring the concrete batching plants are designed and located in an area that avoids or minimises potential noise impacts to sensitive receivers.
- Selection of equipment and machinery with low sound power levels to reduce noise at the source.
- Installation of temporary noise mitigation treatments, such as acoustic barriers or noise walls, to reduce the level of potential noise impacts to near neighbours.
- Only carrying out noisy construction activities during standard construction hours.
- Early testing of installed turbines to verify that any noise is consistent with the pre-construction noise assessment.
- Ongoing consultation with near neighbours and residents, before and during construction activities, and during any noisy work periods.

In line with the *Victorian Government Planning Guidelines for Development of Wind Energy Facilities*, wind turbines are not permitted to be located within one kilometre of an existing dwelling, unless agreed to in writing by the owner of the property.

For the proposed Hexham Wind Farm, all wind turbines are located at least 1.5 kilometres from most neighbouring dwellings. This setback helps to reduce potential noise and vibration impacts for people living near the proposed development during both construction and operation.

What to expect during construction and operation

The noisiest activities associated with the proposed Hexham Wind Farm are expected to be temporary and occur primarily during the construction phase, either on-site or off-site. During operation, the main source of noise is the aerodynamic sound produced as turbine blades pass through the air.

The main sources of noise during construction and operation are outlined below:

Construction (temporary)

- Construction of access tracks and infrastructure to connect the wind farm to the electricity network
- Construction of turbine foundations and installation of each wind turbine
- Heavy vehicle transportation of construction materials and infrastructure to and from the site
- Noise associated with the proposed temporary on-site quarry such as excavation and rock crushing
- Operation of the proposed temporary on-site concrete batching plants, including mixing and processing activities

Operation

- Noise generated from turbine blades turning
- On-site terminal and BESS
- Minor noise associated with routine maintenance and inspections of the site
- Minor noise associated with overhead power lines

Construction hours

The majority of construction activities for the project are proposed to occur during standard working hours, in accordance with the Victorian EPA's *Civil Construction, Building and Demolition Guide*:

Monday to Friday: 7am to 6pm
Saturday: 7am to 1pm

In accordance with the EPA guideline, construction activities that are low-noise impact, managed impact or classed as unavoidable works may occur outside normal working hours.

Unavoidable out-of-hours works may include:

- Delivery of oversized turbine components (such as blades), timed to minimise traffic disruption and as part of road access approvals granted by the Moyne Shire Council and neighbouring councils, as required
- Foundation concrete pours during hot weather to enable the concrete to set
- Installation of turbine components, such as rotors, when sensitive to weather conditions and to meet safety requirements

The community would be notified in advance of any unavoidable works scheduled to occur outside normal construction hours.

Next steps

The Noise and Vibration Impact Assessment has been submitted as part of the EES documentation. The EES and all technical assessments will be placed on public exhibition for a period of 30 days. You can review the EES and technical reports on the Resources page of the Hexham Wind Farm website at: hexhamwindfarm.com.au/ees

Formal submissions received from the community during the public exhibition period will be summarised in a Submissions Report and considered as part of the Minister's Assessment of the project.

Have your say

During the public exhibition period, you have the opportunity to provide a formal submission on the proposed Hexham Wind Farm. There will be opportunities to meet the project team and hear from technical experts about the proposed project, the EES and technical studies.

Visit the Community page (hexhamwindfarm.com.au/community) of the website for more information on our upcoming in-region engagement activities and ways to get in touch.

Wind Prospect respectfully acknowledges the Traditional Owners of the land on which our office and each of our projects are located. We also acknowledge and uphold their continuing relationship to the land and pay our respect to their Elders past, present and emerging.

Contact

If you need an interpreter, please call 13 14 50. If you are deaf and/or find hearing or speaking with people on the phone difficult, please contact the National Relay Service on voice relay number 1300 555 727, TTY number 133 677 or SMS relay number 0423 677 767.

PO Box 110
Fitzroy VIC 3065

1800 934 322

info@hexhamwindfarm.com.au

hexhamwindfarm.com.au

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