JANUARY 2026

Hexham Wind Farm

FACT SHEET

Air Quality and Greenhouse Gas

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 Environmental 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 along with community and stakeholder consultation has been undertaken 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.

Assessment

As part of the EES, Wind Prosect engaged Jacobs to prepare an Air Quality Impact Assessment (AQIA) and Greenhouse Gas Impact Assessment (GHGIA) for the project. The assessments have been prepared in accordance with the Victorian Government Planning Minister's scoping requirements for the assessment of environmental effects and relevant Environment Protection Authority Victoria (EPA Victoria) guidelines.

The AQIA investigates the topography, local climate and meteorology, and existing air quality environment and greenhouse gas (GHG) emissions relevant to the project. The assessment studies potential air quality and GHG emission impacts associated with the construction, operation and decommissioning of the project and outlines mitigation and management methods to reduce or eliminate these impacts.

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Air quality impacts refer to local effects caused by dust generated as a result of project activities and consider the consequences on sensitive local receptors such as nearby dwellings.

Greenhouse Gas (GHG) emissions refer to the emissions projected to be released as a result of direct emissions (for example from the combustion of fuels for on-site power generation equipment) required for the project throughout its lifetime (Scope 1), indirect emissions (for example from the use of purchased electricity) required during the lifetime of the project (Scope 2), as well as embodied emissions associated with construction materials and waste (for example, emissions associated with the freight of raw materials or components (Scope 3).

How the assessment has been carried out

Relevant activities assessed for the Air Quality Impact Assessment include wind turbine site construction earthworks, use of access tracks, materials processing at the on-site quarry and operation of concrete batching plants.

These activities were classed as low risk by EPA Victoria, requiring a Level 1 impact assessment. This assessment included:

- A review of local meteorological and air quality conditions to identify any existing air quality issues and conditions that may influence air quality.
- Identification and assessment of potential air quality issues associated with the construction, operation and decommissioning of the project.
- Identification of measures to avoid, minimise or mitigate potential air quality impacts during the design, construction, operation and decommissioning phases.

Findings

Air quality

Air quality risks for the project include:

- Impact from generation of dust from construction activities such as materials handling, concrete batching activities and materials extraction, treatment and transport from the temporary on-site quarry. This is projected to be high without management and mitigation measures applied.
- Impact from dust generated by maintenance activities and from vehicle movements on unsealed access tracks during project operation, which is identified to be limited.
- Impact from exhaust emissions from the combustion of fossil fuels in vehicles, plant and equipment during construction, operation and decommissioning, which is identified to be negligible.

The assessment found that with appropriate management, overall air quality impacts were anticipated to be negligible for the majority of the time, increasing to moderate on rare occasions which may occur due to adverse meteorological conditions influenced by rainfall, wind speed and wind direction.

Greenhouse gas emissions

The proposed Hexham Wind Farm is predicted to result in overall GHG emissions of 1,324,393 tonnes of carbon dioxide equivalent (CO_2e) over the two-year construction period. Embedded emissions from the production of construction materials would form the majority of overall emissions, comprising approximately 93% of overall emissions during the construction period.

During the operation of the project, the overall GHG emissions are expected to be 1,705,821 tonnes of CO_2e. These emissions would predominately be Scope 2 emissions associated with the operation of the battery energy storage system, which is approximately 98% of the total operational emissions.

Decommissioning emissions would likely be similar to construction emissions, however with less scope 3 emissions as no manufacturing of elements or land-clearing would be involved.

GHG emissions are expected be paid back in six months through operation of the project. The project would supply around 2,559 gigawatt-hours of renewable electricity to the National Electricity Market each year, equivalent to the average electricity usage of around 515,000 Victorian households. As a result, the project would have an overall positive impact on GHG emissions.

Managing risks

Air quality

The following air quality impact mitigation and management measures were recommended in the assessment:

Implement an Air Quality Management Plan as a sub-plan of the Construction Environmental Management Plan, which would specify design and procedural requirements including use of water sprays.

Apply design and procedures to reduce impact to air quality though the Quarry Work Plan and the Operations Environmental Management Plan.

Develop a Decommissioning Plan with a dust management sub-plan, in accordance with legislative and policy requirements.

Routinely service and maintain plant, vehicles and machinery to mitigate vehicle emissions at the project site.

Greenhouse gas emissions

Recommended mitigation measures proposed to reduce GHG emissions associated with the project include development of a Sustainability Plan, sustainable design and materials selection and recycling of components at the decommissioning stage. Battery operation efficiency measures would also mitigate overall emissions.

Operational emissions, particularly of the battery, would decrease as the electricity grid continues to undergo decarbonisation. The operation of the project in generating renewable energy for the electricity grid is estimated to 'pay back' construction and decommissioning emissions in approximately half a year of operation.

Summary

With the implementation of a site-specific Air Quality Management Plan, air quality impacts from dust during construction are anticipated to be unlikely for the majority of the time, and moderate on rare occasions due to weather conditions. Air quality impacts from vehicle, plant and equipment emissions during all project phases, as well as dust during project operation and decommissioning, are considered unlikely.

The project would have limited GHG emissions associated with construction, operation and decommissioning and would have a negative GHG emissions contribution due to the generation of renewable electricity.

Next steps

The Air Quality and Greenhouse Gas Impact Assessment have 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 Hexham Wind Farm website at: www.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

For more information or to speak directly to a Wind Prospect team member contact us.

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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