JANUARY 2026

Hexham Wind Farm

FACT SHEET

Landscape and Visual, Shadow Flicker

The proposed Hexham Wind Farm is located between Hexham, Caramut and Ellerslie in the Moyne Shire in south-west Victoria. If approved, the project would incorporate up to 106 wind turbines with an approximate height of up to 260 metres from ground to blade tip. The proposed project also includes an on-site terminal station and Battery Energy Storage System (BESS) and other associated infrastructure.

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 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 Prospect engaged Moir Landscape Architecture to prepare a Landscape and Visual Impact Assessment (LVIA) and Entura to prepare a Shadow Flicker and Blade Glint assessment.

These assessments have been prepared in accordance with the Victorian Government Planning Minister's scoping requirements for the assessment of environmental effects, relevant legislation and government guidelines, and stakeholder and community consultation. The assessments identify the existing landscape and visual setting of the project site area and considers the potential impact on key viewpoints, including public locations and residential properties. A number of mitigation measures are proposed to minimise and/or avoid the potential impacts to visual amenity from the project.

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How the assessment was carried out

A preliminary landscape and visual impact assessment was prepared in January 2022, with further research, field work and photographic survey carried out since then. A shadow flicker and blade glint assessment has also been prepared.

In addition to the wind turbines, ancillary infrastructure has been assessed as part of the LVIA, including access tracks, road upgrades, underground electricity cabling, overhead power lines, terminal substation and switchyard, BESS, proposed temporary on-site quarry and concrete batching plants, operations and maintenance facility and grid connection to the adjacent transmission line.

The shadow flicker and blade glint assessment followed the Draft National Wind Farm Development Guidelines. These guidelines are based on a worldwide review of existing assessment methods and are considered to be a good-practice approach to the issue of analysing wind farm shadow flicker.

What is shadow flicker

Shadow flicker results from the fluctuating light levels caused by the movement of shadows across an area. It occurs when the sun passes behind the rotating blades of a wind turbine, and can potentially be a source of disruption over an extended period of time.

It is more common around sunrise and sunset when shadows are longer as a result of the low position of the sun on the horizon. Due to the precise angle of the sun required to cause the effect, shadow flicker is rare and only occurs in limited locations. The potential impacts of shadow flicker can be minimised with careful design and positioning of each wind turbine.

Study methods included:

- Undertaking shadow flicker and blade glint assessments to model and predict any potential impacts.
- Determining the landscape character, features and values of the project area through descriptions, mapping and photographs.
- Assessing the potential cumulative impacts of other operating and approved wind farms in the region.
- Identifying existing built features within the landscape (e.g. 500kV powerlines and other transmission lines) and their impact on the landscape and visual setting.
- Identifying viewpoints from which project infrastructure could be seen, including from residences and public viewpoints.
- Developing photomontages and wire frame diagrams to outline and evaluate any potential design and wind turbine positioning options that could avoid or minimise potential effects on landscape and visual amenity.
- Sharing the photomontages and wire frame diagrams with the community and near neighbours to inform the study findings and mitigations measures.

Existing view from Warrnambool-Caramut Road, looking north-east

Findings

The findings from the LVIA and the shadow flicker and blade glint assessments show that it is possible to maintain the key visual features of the landscape and mitigate potential visual impacts as a result of the project.

Although the landscape is mostly flat and cleared, existing natural features will assist in reducing the potential visibility of the project. These include large areas of roadside vegetation, windbreak planting and vegetation along creeklines.

Other key findings of the assessments concluded that:

- shadow flicker results indicate that the project is compliant with regulations without the need for management measures.
- viewpoints within three to six kilometres of a wind turbine are most likely to notice turbines within the existing landscape setting.
- public viewpoints from locations on Hamilton Highway and Woolsthorpe-Hexham Road, and from Ellerslie Cemetery and Ellerslie Memorial Park were assessed as having a moderate or moderate-low visual impact rating due to their visual magnitude or sensitivity.
- six non-involved landholders within three kilometres of a proposed wind turbine would have moderate visual impact prior to the implementation management measures, and two would have a high visual impact.
- cumulative visual impacts from the proposed Hexham Wind Farm and the proposed Mount Fyans Wind Farm, as well as established developments such as Salt Creek Wind Farm may be possible. Factors including the direction and speed of travel, existing vegetation screening and the distances from the roadside would limit the views of multiple wind farm projects in the region.

Visual magnitude refers to extent of change that would be experience by a receptor.

Sensitivity refers to how a change to the existing landscape is perceived.

Managing adverse effects

The LVIA and the shadow flicker and blade glint assessments provide recommendations which seek to integrate the project within the landscape and minimise any potential visual impacts to the greatest extent possible.

Updating the project layout and design is a primary method of managing potential adverse impacts on the landscape and visual amenity. Mitigation measures would include:

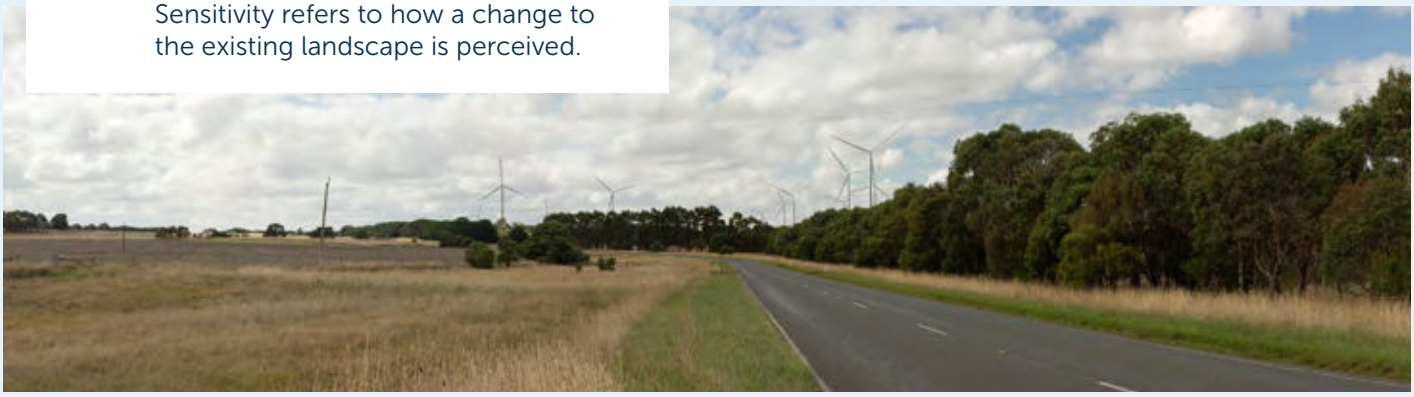
Minimising the magnitude of the potential impacts of wind turbines by establishing a buffer of 1.5 km to near neighbouring dwellings and a minimum 3 km buffer of surrounding townships.

Use of uniform, simple colours and non-reflective materials, and avoiding unnecessary lighting or signage.

Applying a low reflectivity treatment to minimise blade glint on all proposed wind turbines.

Offering screen planting to all neighbouring dwellings within 6 km of where there are views of a wind turbine.

Continuing discussions with the community and other key stakeholders to understand other opportunities to minimise visual impacts.



Proposed view from Warrnambool-Caramut Road, looking north-east (distance to nearest wind turbine is 1.89 km)

Next steps

The LVIA and shadow flicker and blade glint assessments 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 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.

Cropped proposed view from the corner of Hamilton Highway and Boortkoi Road, looking south

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.

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