Fact sheet

Wind Farms
Managing impacts

Visual

Will there be any visual impacts?

Wind farms affect the visual amenity of the surrounding area. The degree of visual impact depends on the extent of change to the landscape caused by the development.

An experienced architect and visualization expert will undertake a visual impact assessment as part of the development application process. They will assess the visual impact of wind turbines on a range of factors, including the existing values and character of the landscape, and the size and scale of the project from private and public spaces.

Tools used to assess the visual impact may include:

- Photomontages providing a visual representation of wind turbines from a range of representative viewpoints.
- Turbine visibility maps.
- Artistic diagrams, renders and illustrations.
- Zone of visual influence modelling.

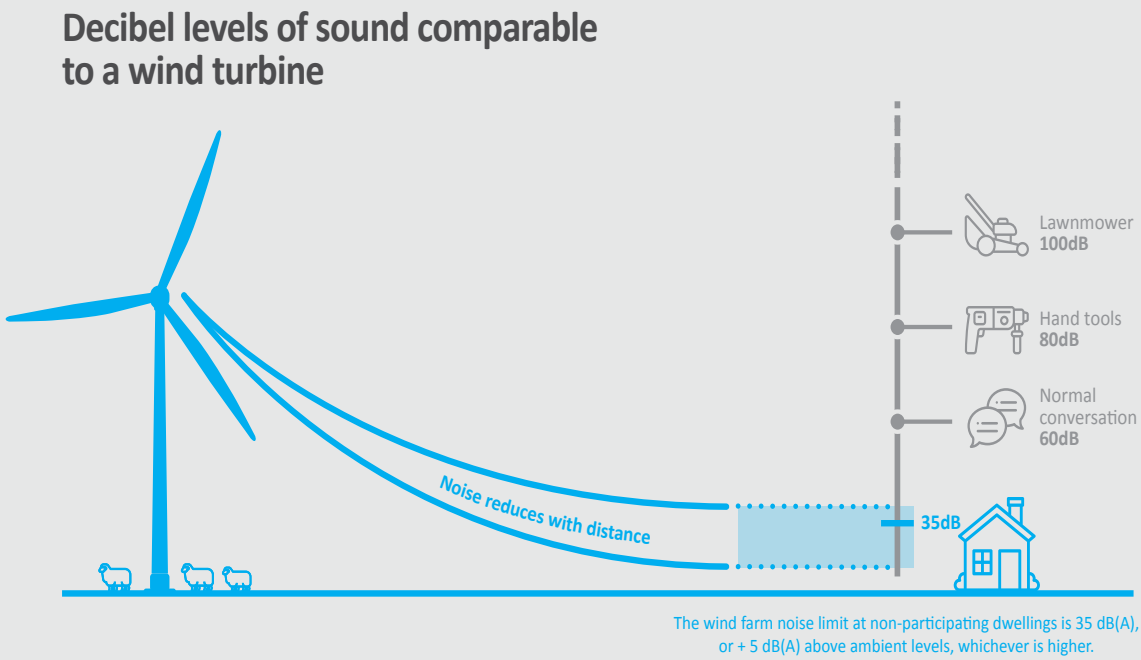
We will be able to use the findings to improve the layout and avoid or minimise significant adverse landscape and visual effects through onsite and offsite options.

Noise

Are wind turbines noisy?

Like almost anything that moves, such as moving cars, waves or wind through trees, wind turbines will make noise. Wind turbines create a mechanical hum sound produced by the generator and a “whooshing” sound made by the blades moving through the air.

The sound you may hear from a wind farm will vary depending on how far you are from the wind turbines, the wind turbine model, atmospheric conditions, background noise, the amount of wind, local topography, and ground cover (trees or pasture, for example).



How will noise be managed?

As part of a development process, an experienced acoustic engineer will be engaged to carry out a noise impact assessment that considers how the wind farm layout will comply with the relevant noise standards and policies.

Should the project be approved, a number of approval conditions will need to be satisfied, including operational noise testing to verify compliance with the prescribed limits.

Shadow flicker

Will there be any shadow flicker?

Shadow flicker is the effect of the sun (low on the horizon) shining through the rotating blades of a wind turbine, casting a moving shadow. The impact of shadow flicker decreases with distance from the wind turbine. We will ensure the design of our wind farm avoids or minimises shadow flicker at nearby dwellings keeping it well within regulatory limits. Independent shadow flicker experts will undertake a shadow flicker assessment to assess the potential shadow flicker impacts on nearby dwellings.

Health

Do wind farms cause health problems?

The National Health and Medical Research Council (NHMRC) Statement: Evidence on wind farms and Human Health was released on 11 February 2015 and is based on the findings of a comprehensive independent assessment of the scientific evidence on wind farms and human health. The statement concludes that there is currently no consistent evidence that wind farms cause adverse health effects in humans.[1]

We prioritise safety and work closely with our contractors and suppliers to make sure our wind farm infrastructure is designed to meet or exceed design and safety standards.

Are there electromagnetic radiation risks?

The level of extremely low-frequency electromagnetic radiation close to wind farms is lower than that found close to common household appliances and much lower than the average level measured inside and outside suburban homes.[2]

Traffic and roads

Will there be any traffic impacts?

Minimal impacts are anticipated during operation of the wind farm. Potential impacts to the surrounding road network will occur during the construction phase when materials, machinery, and turbine components are delivered to site.

Changes to traffic conditions may include:

- Increased traffic.
- More heavy vehicles.
- Temporary access and route detours.
- Slower travel speeds.
- Minor upgrades to public roads and intersections, if required.

We will develop a Traffic Management Plan in consultation with road authorities and traffic engineers to ensure that construction traffic is appropriately managed and adheres to the relevant laws.

We will undertake a survey of the condition of the road just before our project starts construction. The same survey will then be repeated when construction is completed. Where degradation in the road condition is observed, we will return the roads to their pre- construction conditions.

Provide feedback

Email **AUProjects@equis.com** or phone 1800 161 249.

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- Attend a project information session.

We encourage you to follow our project by registering on our engagement hub. On the engagement hub you can provide feedback, subscribe for project updates, register as a supplier and register ideas for community benefits.

We will publish project information on our engagement hub and website, including upcoming information sessions, project updates, newsletters, and fact sheets.

Endnotes

1. National Health and medical Research Council (NHMRC) 2015, NHMRCH Statement: Evidence on wind farms and human health. *https://www.nhmrc.gov.au/about-us/publications/nhmrc-statement-evidence-wind-farms-and-human-health#:~:text=After%20careful%20consideration%20and%20deliberation,adverse%20health%20effects%20in%20humans*
2. Environmental Health Perspectives, 2023, , The Health Effects of 72 Hours of Simulated Wind Turbine Infrasound: A Double-Blind Randomized Crossover Study in Noise-Sensitive, Healthy Adults. Volume 131, Issue 3. *https://doi.org/10.1289/EHP10757*

This document is based on the information known to Equis as at October 2024. It contains assumptions and estimates that may be subject to change.

Need more information

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