Environmental Considerations

Overview

ABO Energy is currently carrying out an Environmental Impact Assessment (EIA) for the proposed Dunnaree Hill Wind Farm. This involves gathering detailed information about how the project might affect the environment. The results will be compiled into an Environmental Statement (ES), which will be submitted with the planning application.
Once submitted, the Fermanagh and Omagh District Council planning departments and statutory bodies will assess the proposed development and the potential effects of the wind farm. The ES will provide an assessment of potential effects under the following topics:

- Socio-Economic Impact Assessment
- Landscape and Visual Impact Assessment
- Flora and Fauna Assessment
- Fisheries Assessment
- Avian Assessment
- Water, Geology and Peat Slide Hazard
- Archaeology and Cultural Heritage
- Transport, Access and Haulage
- Noise Assessment
- Shadow Flicker Assessment
- Telecommunications and Aviation Assessment
- Grid Connection Assessment
- Assessment of Significance of Impact Interactions

The assessments will be site specific and will be informed by detailed surveys. While the ES will cover all these topics, for the purposes of community consultation we have chosen key topics to explain further below.
If you have questions about the EIA process or want more details, feel free to speak with someone from our project team.

Shadow Flicker

Shadow flicker happens when the blades of a wind turbine rotate and cast moving shadows, creating a flickering effect. This is carefully regulated using strict guidelines based on best practice.

To assess potential shadow flicker effects, a specialist computer model is used to calculate where and how often shadow flicker could occur, taking into account the position of the proposed turbines and the range of turbine dimensions.

The assessment is carried out using the worst-case scenario, assuming clear skies and that turbines are operating whenever the sun is shining. This ensures that any potential real-world effects are conservatively estimated and therefore likely to be less than those predicted.

In line with the Fermanagh and Omagh District Council Plan Strategy and Planning Policy 18 Renewable Energy Best Practice Guidance, wind farm proposals must demonstrate that they will not result in any unacceptable adverse impacts on nearby dwellings or other sensitive receptors.

Strict shadow flicker limits will be adhered to and will be subject to planning conditions to ensure that any shadow flicker is acceptable.

Noise

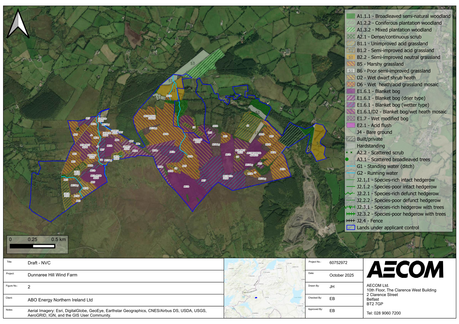
Noise from the proposed Dunnaree Hill Wind Farm will be modelled and assessed using the latest noise standards and best practice guidance from the Institute of Acoustics.

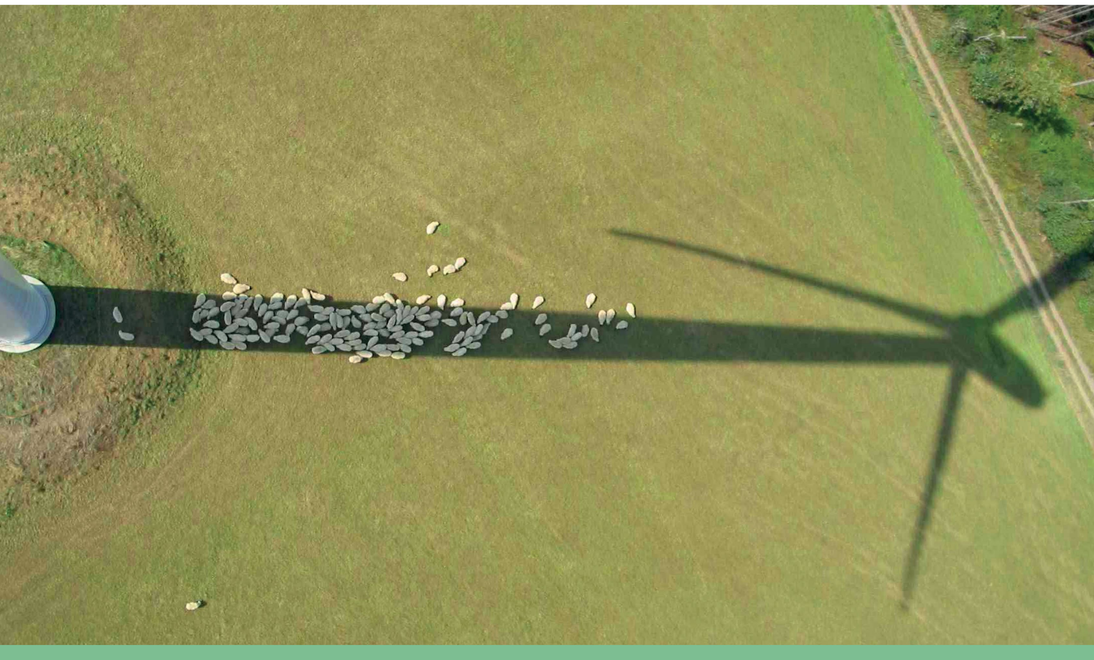
Background noise level measurements were undertaken at 4 residential properties along the Braden Road and Glen Road. The cumulative impact of the proposed Dunaree Hill Wind Farm in addition to operational wind farms such as Castlecraig Wind Farm and Tappaghan Wind Farm will be assessed as well as the consented and amendment Clunahill Wind Farm which remains under consideration by FODC.

Noise modelling is ongoing as ABO Energy seek to finalise the layout of the wind farm and candidate turbine model. The turbines being considered can run in different noise settings, so if needed, they can be adjusted if required after construction to reduce noise.

Ecology

AECOM has carried out a range of land-based ecology surveys to support the EIA for the proposed Dunnaree Hill Wind Farm. This included a full survey of the site's habitats using Phase 1 and National Vegetation Classification (NVC) methods. The survey results will be used to identify any sensitive habitats and inform the final layout to ensure there is no unacceptable adverse impact upon any priority habitat.
For wildlife, a range of ecological surveys are being carried out to identify any protected mammals on site, including badgers and otters. Additional detailed surveys are also being undertaken for bats and butterflies, with butterfly surveys focusing on the protected species Marsh Fritillary and Large Heath.
All surveys are being completed in line with best practice guidance from the Northern Ireland Environment Agency (NIEA). The findings will help determine whether any measures are needed to avoid or reduce potential impacts on protected species or habitats. As part of the project, habitat enhancement measures will be proposed and will be provided within the Environmental Statement.





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