

OBSERVATION/SUBMISSION TO PLANNING APPLICATION

Case Reference: 323761

Ryan Gavin
Cooloo
Moylough
Ballinasloe
Galway

To: An Coimisiún Pleanála
64 Marlborough Street
Dublin 1
D01 V902

Date: 01 November 2025

Re: Observation/Submission to proposed wind energy development at Cooloo Wind Farm

Location: Cloondahamper, Cloonascragh, Elmhill, Cooloo, Lecarrow, Dangan Eighter, Lissavally, Slievegorm
- Co. Galway

Applicant: Neoen Renewables Ireland Limited

Dear Sir/Madam,

I am a 17 year old living in Cooloo, I wish to object to this proposed development. I have spent my entire life in the peace and tranquillity of my area. My parents have invested a lot of time and effort into making our home. I fear that this development will make the area an unpleasant living environment and I can see myself moving away from the area in the future because of this development.

Shadow flicker impacts

I object on the grounds that the shadow flicker provisions in the Wind Energy Development Guidelines (2006) are outdated and insufficient for assessing the impacts of modern wind farms, particularly given the extraordinary scale of the proposed turbines.

The proposed turbines represent a dramatic escalation in size compared to those contemplated in 2006:

- Tip Height: 180 meters
- Rotor Diameter: 162 meters
- Hub Height: 105 meters

- Swept Area: Over 20,000 m² per turbine

These dimensions significantly increase the area affected by moving shadows, extending the reach and intensity of shadow flicker events. The 2006 Guidelines do not account for turbines of this magnitude, nor the cumulative impact of multiple units in close proximity to residential receptors.

The Guidelines permit up to 30 hours of shadow flicker per year at any dwelling. This threshold is:

- Arbitrary and unsupported by contemporary health research
- Uniformly applied without regard to turbine scale or proximity
- Silent on cumulative exposure from multiple turbines

No scientific basis is provided for the 30-hour limit, and no differentiation is made between single-turbine exposure and multi-directional flicker from clustered arrays.

Shadow flicker is often dismissed as a minor nuisance, yet growing evidence suggests more serious implications:

- Annoyance and Stress: The U.S. Department of Energy's WINDEXchange notes that even limited flicker can create persistent discomfort, especially during sensitive times of day
- Sleep Disruption: A 2013 report commissioned by the Scottish Government (University of Salford) found that shadow flicker may contribute to sleep disturbance and reduced sleep quality
- Photosensitive Epilepsy: Although rare, flicker frequencies between 3–30 Hz can pose risks. Complex interactions between blade movement, sun angle, and window geometry may approach sensitive thresholds
- Motion Sickness-like Symptoms: The ClimateXChange report noted symptoms such as dizziness and nausea linked to visual stimuli like flicker
- Mental Health and Quality of Life: A 2023 article by Fritz Energy documented community complaints about anxiety, reduced concentration, and general decline in wellbeing

The Guidelines make no distinction between general receptors and vulnerable groups (children, elderly, or those with neurological conditions). In ABP Case 318943, shadow flicker was cited as a material concern, particularly where receptors were located within 500m of turbines.

The 2006 Guidelines offer minimal direction on how shadow flicker should be assessed, modelled, or mitigated:

- No validated modelling standards: The Guidelines do not specify which modelling tools should be used, what input parameters are required, or whether worst-case scenarios should be assessed
- No cumulative impact assessment: There is no requirement to assess overlapping flicker events from multiple turbines, multi-directional exposure, or seasonal variation
- No mandated mitigation strategies: The Guidelines do not require automated curtailment systems, physical shielding, or real-time monitoring
- International best practice ignored: Germany mandates curtailment if flicker exceeds 30 minutes per day; Scotland recommends site-specific modelling; the Netherlands requires flicker-free zones around homes

I respectfully urge the planning authority to:

- Apply a precautionary approach given the outdated standards
- Require robust modelling accounting for cumulative impacts
- Mandate effective mitigation measures including automated curtailment
- Consider updated health research and vulnerable populations

References:

- Wind Energy Development Guidelines (2006) – Department of Housing, Local Government and Heritage
- ABP Case 318943 – Chapter 11: Shadow Flicker
- WINDEXchange – U.S. Department of Energy
- ClimateXChange – Report on Health Impacts of Wind Turbines (2013)

- Fritz Energy – Wind Turbines and Shadow Flicker (2023)

Right to peaceful enjoyment of property

I object on the grounds that this development violates the right to peaceful enjoyment of property under the European Convention on Human Rights.

Article 1, Protocol 1 of the European Convention on Human Rights (ECHR) safeguards every individual's right to the peaceful enjoyment of their possessions. It provides that: "Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law."

Approval of this proposed wind farm would constitute a clear interference with this right. If the development proceeds, I will be deprived of the peaceful enjoyment of my home and property. The construction and operation phases would bring significant and continuous disturbance - including persistent noise pollution, low-frequency noise (LFN), shadow flicker, and heavy vehicle movements. The tranquillity and visual amenity of my surroundings, which form an intrinsic part of my home environment and well-being, would be irreversibly diminished.

During construction, the constant flow of heavy machinery and associated noise would cause ongoing disruption and stress, further impacting daily life. Once operational, the presence of industrial-scale turbines dominating the landscape would permanently alter the character of the area, stripping residents of the quiet enjoyment of their homes and lands. This level of intrusion cannot be considered proportionate or justified in the public interest, and therefore conflicts with the protections afforded under Article 1, Protocol 1 of the ECHR.

Impact on national schools

The presence of wind turbines near schools can have a range of impacts on students, staff, and the overall learning environment. Wind turbines produce both audible noise and low-frequency infrasound, which can be noticeable inside buildings, causing distraction. This constant distraction will interfere with children's attention and overall cognitive performance, making it more difficult for students to focus on learning.

- Cooloo NS is 1.59km away from the nearest wind turbine
- Brierfield NS is 1.35 km away from the nearest wind turbine
- Barnaderg NS is located approximately 2.49 km from the nearest wind turbine

In addition, shadow flicker caused by rotating turbine blades can create intermittent light in classrooms, which can be distracting and, in some cases, uncomfortable or stressful for children.

The noise and shadow flicker will also greatly impact on the children in the school who have an additional need. There is a lack of research to state the impacts on these children.

In addition to the above, during the construction phase and while laying the cabling, the roads will experience increased traffic and road closures. This will impact on children travelling to and from school.

While the severity of these impacts depends on distance from the turbines, it is clear that wind turbines in close proximity to schools have the potential to disrupt learning, reduce student wellbeing, and interfere with the overall educational experience.

Impact on property value

I object on the grounds of significant and documented property value loss for homes within 1km of wind turbines.

A study from the University of Galway and international research indicates that homes within 1 km of wind turbines experience adverse effects on property value, with reductions of up to 14.7%. My home falls within this range, and I am deeply concerned about the financial and emotional impact this will have on my family and our future prospects. The planning application does not appear to address or mitigate this issue.

For many families, their home represents their largest financial asset and a key component of their retirement planning or their children's inheritance. A reduction of up to 14.7% in property value represents a substantial financial loss that could undermine years of mortgage payments and home improvements.

The planning application provides no mechanism for compensating homeowners for this proven loss in property value. This represents an unjust transfer of wealth from local residents to the developer and raises serious questions about fairness and social justice.

Reference:

University of Galway CERIS Working Paper WP-2023-01

<https://www.universityofgalway.ie/media/researchsites/ceris/files/WP-2023-01.pdf>

Road disruption during construction

I wish to object to the proposed development on the grounds of significant traffic and road safety impacts during construction, particularly in relation to abnormal load deliveries. The Traffic Management Plan (Appendix 15-2) lacks essential detail, including the number, timing and routing of heavy goods and turbine loads, and commitments to off-peak scheduling. Without clear and enforceable mitigation, there is a risk of damage to narrow rural roads, verges and drainage, along with conflicts between construction vehicles, farm traffic and school transport. No robust plan has been presented for road strengthening, maintenance or reinstatement. The absence of detailed community-specific measures leaves local access, amenity and safety inadequately protected. Until comprehensive information and binding commitments are provided, the proposal represents an unacceptable risk to road infrastructure and rural community wellbeing. Having roads closed for a combined 210 days (at a minimum) is unacceptable. It is also unacceptable for locals to have diversions of up to 13.7km per journey for the duration of this project.

Climate impact

From a scientific standpoint, developing the Cooloo Wind Farm on peat and forested land will create significant carbon losses from disturbed soils and vegetation. The Environmental Protection Agency already reports over 7 Mt CO₂e annually from the LULUCF sector. Any further increase breaches the intent of Ireland's carbon budgets and the EU LULUCF Regulation, which requires no net debit from land use. The Climate Action and Low Carbon Development Act 2021 obliges decision-makers to act consistently with these limits. Replacing intact carbon sinks with infrastructure and limited native replanting does not align with the national climate objective of net zero by 2050. This project should be refused unless it fully restores and rewets the affected peatlands to avoid additional emissions.

Conclusion

For all of the reasons set out in this submission, it is clear that this windfarm would cause more harm than benefit to our area. This community values its peace, safety, and way of life. The proposed windfarm threatens all of these. I ask An Coimisiún Pleanála to listen to the genuine concerns of local people and to reject this development in the interest of protecting our environment, our homes, and our future.

Yours Sincerely,

Ryan Gavin

Name: Ryan Gavin

Date: 01 November 2025