

OBSERVATION/SUBMISSION TO PLANNING APPLICATION

Case Reference: 323761

John and Mary Fleming

Barnaderg

Tuam

Galway

To: An Coimisiún Pleanála

64 Marlborough Street

Dublin 1

D01 V902

Date: 16 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,

We live near Barnaderg village, my home is 3.47 km away from the proposed windfarm development. Our son owns a property in Hillsbrook and we also own land beside him in Hillsbrook which is located 1km from proposed turbine T3. We hope to give this land to our grandchildren so that they can build their homes on this family land, however we now fear that this may not be possible in the future due to planning restrictions on the land that is in proximity to the wind farm. As a result we believe our family's future in the area is at risk due to this development. I am also greatly concerned about my family's health and wellbeing and the potential impact that low frequency noise and shadow flicker may have on them. The family has a history of suffering from migraines and I believe we are at risk from this condition being made worse by the operational effects of the wind farm.

We also depend on the Barnaderg/Gortbeg water scheme as the water supply for our home and our son's home. I am very concerned that the water supply will be disrupted or contaminated during the construction of this industrial scale development.

Our grandchild will be going to school in Barnaderg and the construction work will impact on him travelling from Hillsbrook to Barnaderg.

We also really enjoy and appreciate the local environment and wildlife and it would detrimentally affect our enjoyment of our later years if we saw any destruction or negative impact on our local habitats. We had fed the wild birds in our garden for over 40 years and observed their flight paths. Every year we see swans,

storks, wild ducks, geese and all the returning summer birds flying over the area and across the proposed site of the windfarm. We would hate to see any impact to their wellbeing and our enjoyment of their presence in our later years.

I strongly urge An Coimisiún Pleanála to refuse the planning application for this windfarm based on these reasons and the reasons listed below.

Community Consultation and Engagement

The basis that the consultation was undertaken by Neoen and MKO for the Cooloo Wind Farm has failed to meet the basic expectations of transparent and inclusive community engagement. It falls short of national guidelines and the intent of An Bord Pleanála's Strategic Infrastructure Development process.

Statutory notices were published in the Irish Examiner instead of the Tuam Herald, which most local households rely on for news.

Despite claims of consultation with local groups, key organisations such as Killereerin Community Council and Killereerin GAA, were not engaged in any meaningful way.

No public event was held in Moylough, even though seven of nine turbines are proposed there, excluding many directly affected residents.

The developer's report cites "door-to-door engagement" with only 55 homes and ten written responses is evidence of a process that reached few and failed to inform many.

The developer's continued reliance on online materials to provide information disadvantaged rural residents with poor internet access and a large number of older residents without a technical knowledge.

These shortcomings show that the consultation was administrative rather than genuine, and did not provide the community with a fair chance to participate. An Bord Pleanála should recognise these significant deficiencies when assessing the project's compliance with public engagement standards.

Planning Framework and Guidelines

Relying on the Wind Energy Development Guidelines 2006 is no longer appropriate. Since their publication, wind energy technology has advanced significantly, and scientific understanding has deepened. The 2006 Guidelines were based on turbines under 100 metres and 1–2MW in capacity, whereas the proposed turbines will be 180 metres tall and produce around 6MW, causing greater impacts.

The outdated nature of these guidelines has been acknowledged in the Dáil multiple times. In 2013, Deputy Micheál Martin noted that the guidelines did not reflect modern technology, and in 2025, Tánaiste Simon Harris confirmed that the Government prioritizes the creation of new guidelines.

Therefore, it is inappropriate for An Coimisiún Pleanála to base decisions solely on the 2006 Guidelines. Decisions must reflect current technology and environmental standards. All new Wind Farm developments should be paused until updated guidelines are established so that affected communities are not unfairly treated by these outdated guidelines

Barnaderg Gortbeg Group Water Scheme

I use the water from Barnaderg Gortbeg Group Water Scheme as my main source of drinking water for my household. The water is of excellent quality and I am very concerned that pollution of various types such as silt, sediment and other contaminants will enter the water source, causing me and my family harm. With the location of two Turbines within the Source Protection Area (SPA) I believe the Cooloo Windfarm should not be granted permission whatsoever, especially in such a highly karsified and hydrologically sensitive area.

Right to Own/Transfer Property

Article 43.1.2 of Bunreacht na hÉireann provides that "the State accordingly guarantees to pass no law attempting to abolish the right of private ownership or the general right to transfer, bequeath, and inherit property." Granting permission for this wind farm development would effectively undermine this constitutional protection. Landowners and farmers within the affected area would face significant restrictions, as land situated near turbines would become unsuitable for residential development. This would prevent families from transferring land for the purpose of building homes for future generations, thereby eroding their practical rights of ownership and inheritance.

Furthermore, Article 43.2.1 acknowledges that the exercise of property rights must be regulated by the principles of social justice. However, this proposed development cannot be regarded as socially just. It disproportionately burdens local residents while providing little to no direct benefit to the community. Those of us living in the area would experience substantial and lasting impacts — including increased traffic and road closures during construction, ongoing noise pollution, shadow flicker, and significant visual intrusion on our landscape. In addition, there remains insufficient scientific evidence to conclusively demonstrate that large-scale wind farms pose no long-term health risks to nearby residents. In these circumstances, permitting this development would be neither fair nor consistent with the principles of social justice recognised under Article 43.

Right to Peaceful Enjoyment of Property

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.

Property Devaluation

It is fair to surmise that people will not want to live near an industrial wind farm. There is growing evidence of loss of value and depreciation in the marketability of houses which are located near wind farms. The knock-on effect is that people will not move to the area or the local schools, and the community will wither. Rural Ireland still has a strong thriving support network of neighbours and community which will fundamentally be put at risk by imposing an industrial wind farm in the midst of 400 homes.

Noise

The proposed Cooloo Wind Farm should be refused planning permission, citing the Irish High Court case

Byrne & Moorhead v ABO Energy [2025] IEHC 330, in which wind turbine noise was legally recognized as a private nuisance, leading to the permanent shutdown of turbines in County Wexford. The objection highlights that the Cooloo proposal fails to address proven low-frequency and amplitude-modulated noise impacts similar to those measured in the Wexford case, where sound levels far exceeded safe limits and caused serious disturbance to residents living over a kilometre away. The Cooloo project's reliance on outdated ETSU-style noise standards, which disregard low-frequency and tonal effects, is therefore deemed inadequate to protect public health and residential amenity.

The proposed turbines at Cooloo—significantly larger than those involved in the Wexford case—are likely to generate even stronger low-frequency noise that travels farther and fluctuates more intensely under local atmospheric conditions. This increases the risk of nuisance and potential legal liability for both developers and planning authorities. Ireland's 2006 wind energy guidelines are outdated and fail to reflect modern scientific understanding of turbine acoustics. Until revised national standards are adopted, approving large-scale wind farms under obsolete criteria would be unsafe and contrary to the public interest. Planning permission should therefore be refused due to the clear and foreseeable risk of harm to residential amenities, the inadequacy of current noise controls, and the legal precedent confirming wind turbine noise as a substantial nuisance.

Shadow Flicker

Chapter 5 of the EIAR ('Population and Human Health') states that the nearest residential property is 720 metres away from the closest wind turbine (T8). However there is no mention of a house (Eircode H53 FF64) that is 530 metres away from Turbines 4 and 5 and 600 metres away from Turbine 8. This property is not accounted for at all in the EIAR.

The Wind Energy Guidelines of 2006 advise a setback distance between a wind turbine and a house of 500 metres. These guidelines are almost 20 years old and outdated.

The 2019 Draft Wind Energy Development Guidelines suggest a mandatory minimum setback distance of 500 metres between a wind turbine and the nearest residential property, and 4 times the tip height, whichever is greater.

Shadow flicker, caused by the rotating blades of wind turbines casting intermittent shadows, can have a significant impact on nearby residents. Prolonged exposure to these flickering shadows can cause visual discomfort, headaches, and even trigger migraines in susceptible individuals. Adequate setback distances and screening measures should be implemented to minimize the potential health effects associated with shadow flicker.

National Schools

I am concerned that the presence of the wind turbines so close to the three local schools will have an impact on students, staff and the overall school community. All of the schools are less than 3.5 km away from a turbine. Turbines are known to create noise, low frequency infrasound and shadow flicker. These issues will no doubt impact on the students in the local schools.

Also during the construction phase and while laying the cabling, the roads will experience increased traffic and road closures. This will impact children travelling to and from school. I am also concerned that if Cooloo Wind Farm is granted planning permission less people will be moving to or building in the area. This will lead to fewer children in the community and may lead to schools losing teachers, and ultimately school closures.

Barnaderg National School

Barnaderg National School is located approximately 3.49 km from Turbine No 1.

The turbines being this close to the school will no doubt have an impact on the education of the children in Barnaderg NS. The school will suffer from noise pollution and infrasound. In addition to this, during the construction phase and while laying cabling the roads to and from the school will be impacted by road closures, traffic, additional noise and dust. Again, all of this will impact on the children of the school.

I am also concerned that if t planning permission is granted less people will be moving to or building in the area of Barnaderg. This will lead to fewer children in the community and may lead to the school losing teachers, and ultimately the school closure.

Farming

There are dairy and dry-stock farmers in Barnaderg, Cooloo and the surrounding areas, both full-time and part-time. Holdings vary in size. Many of these farmers depend on their livestock performing well in order to pay their bills. Also, those who are farming in the area enjoy the work they do, in the absence of shadow flicker, noise or visual pollution. If this development is granted their livelihoods will be impacted.

The 'Importance of Noise Hygiene in Dairy Cattle Farming – A Review' (Published November 1st of 2023 by Dimo Dimov, Toncho Penev and Ivaylo Marinov) details how vibration and noise from a milking parlour can negatively impact the milk yield and milk quality of a dairy cow. The paper also discusses how exposing animals to noise from an unfamiliar source can cause them stress.

It is also important to note that the developer has not taken into account the ways in which farmers depend on the local roads for moving cattle and for access to their land when going about their daily tasks within their farms.

Reference:

Dimov, D., Penev, T., and Marinov, I. (2023) 'Importance of Noise Hygiene in Dairy Cattle Farming – A Review'. Featured Position and Review Papers in Acoustics Science.

Available at: <https://www.mdpi.com/2624-599X/5/4/59>.

Biodiversity impact

I object to the proposed development on the grounds of its significant and permanent impact on biodiversity, including legally protected habitats and species.

The project's Environmental Impact Assessment Report (EIAR) acknowledges a residual adverse effect on Degraded Raised Bog (habitat 7120), a habitat of County Importance with capacity for natural regeneration (EIAR Ch. 6, p. 142). Construction of the proposed floating access road between turbines T7 and T9 will directly remove approximately 0.18 ha of this sensitive peatland and disrupt its hydrological balance (EIAR Ch. 6, Sec. 6.5.2.1.1). This is contrary to the conservation obligations set out under the EU Habitats Directive (92/43/EEC).

The site supports cutover bogs (PB4) and Marsh Fritillary (*Euphydryas aurinia*), an Annex II species protected under European law. Breeding webs were recorded near turbine T5 within metres of proposed construction works (EIAR Ch. 6, Sec. 6.4.3.3). The disturbance, dust, and drainage changes associated with turbine and road construction threaten the species' survival locally, directly conflicting with Ireland's duty to maintain favourable conservation status for Annex II species.

The EIAR highlights potential effects on hydrology and connected wetland systems that could degrade otter (*Lutra lutra*) habitat and aquatic fauna (EIAR Ch. 6, Sec. 6.5.2.1.1 and 6.2.2). Otters are also protected under Annex II of the Habitats Directive, and any degradation of their habitat represents a breach of Ireland's legal obligations.

These outcomes are inconsistent with the objectives of the National Biodiversity Action Plan 2023–2030,

which seeks to prevent net biodiversity loss. Allowing this development to proceed would contradict national policy commitments and international conservation obligations.

Given the acknowledged residual adverse effects on protected habitats and species, I respectfully request that An Coimisiún Pleanála refuse permission for this development. The permanent loss and degradation of biodiversity cannot be justified, particularly where protected species and habitats are involved.

References:

- EU Habitats Directive (92/43/EEC)
- National Biodiversity Action Plan 2023–2030
- EIAR Chapter 6 (Biodiversity)
- An Coimisiún Pleanála Case 323761

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

I object to the proposed Cooloo Wind Farm because it would damage Ireland's ability to meet its climate targets under the Climate Action and Low Carbon Development Act 2021. By excavating peat and clearing mature forest, this project will release large amounts of stored carbon and increase emissions from the Land Use, Land Use Change and Forestry (LULUCF) sector, which is already a major source of greenhouse gases. Under the law, all public bodies must act consistently with national carbon budgets. Allowing a development that worsens LULUCF emissions contradicts that duty and the EU 'no debit' rule under Regulation (EU) 2018/841. Renewable energy projects are important, but they should not come at the cost of destroying carbon-rich habitats or undermining Ireland's long-term environmental obligations.

Battery storage and substation safety risks

I object on the grounds of unacceptable risks to public health, fire safety, and water contamination posed by the proposed substation and Battery Energy Storage System (BESS).

The developer's own Appendix 12-3 Battery Storage Noise Assessment (Sept 2025) identifies fifteen CATL EnerC+ battery containers containing lithium-ion (LiFePO₄) systems manufactured by CATL. Predicted operational noise levels reach up to 31 dB LAeq at nearby homes, representing an increase of +11 to +14 dB above background levels. The report itself classifies this as a "significant adverse impact" on residential amenity. Scientific research shows that chronic noise above 30 dB can raise risks of cardiovascular disease and sleep disturbance.

Lithium-ion Battery Energy Storage System (BESS) installations worldwide have experienced fires and explosions that release toxic gases such as hydrogen fluoride and hydrogen cyanide. Research shows that fire-water run-off from lithium-ion battery fires can contain hydrofluoric acid, dissolved metals, and fluorinated

organic compounds, which may contaminate nearby soil and waterways if not properly contained.

This proposed Substation and BESS would have a major impact on The Lough Corrib Special Area of Conservation, as a nearby stream eventually flows into Lough Corrib, potentially harming aquatic life and drinking water sources.

Based on the absence of any Fire Safety Management Plan within Appendix 12-3, it appears that nearby fire services are not equipped or trained to respond effectively to large-scale lithium-ion battery fires.

In *Grace & Others v. An Bórd Pleanála* (2017), the Supreme Court ruled that a residence within one kilometer of a proposed development site had standing to argue against consent. This case emphasizes the significance of thoroughly evaluating related infrastructure such as the substation and BESS, which ought to be included in the same consenting procedure as the wind farm itself.

With homes, farmland, and livestock within a few hundred metres of the proposed site, this industrial-scale development poses an unacceptable risk to community health, safety, and environmental integrity. Until independent noise, fire-safety, and hydrological risk audits are completed and verified by competent authorities, I urge An Bord Pleanála to refuse this application in accordance with the Precautionary Principle.

References:

- National Fire Protection Association (NFPA) (2020) Hazard Assessment of Lithium-Ion Battery Energy Storage Systems
- TNEI Ireland (2025) Appendix 12-3 Battery Storage Noise Assessment
- World Health Organization (WHO) (2018) Environmental Noise Guidelines for the European Region
- Irish Legal News (2017) Supreme Court: Challenge to wind farm development referred to CJEU

Major accidents and natural disasters

I object on the grounds that Chapter 16 of the Cooloo Wind Farm EIAR fails to provide a robust assessment of major accident and natural disaster risks.

The report's references to peat instability and raised-bog cutover are inadequate given the known susceptibility of peat landscapes to movement and sediment release during heavy rainfall or storm surge events. The EIAR's reliance on generic statements about low geological risk neglects the amplified high-wind, flood and peat-fire hazards forecast for County Galway under the local authority climate plan.

The lack of detailed modelling of flood-pathways or worst-case scenario storm events undermines the precautionary principle embedded in Irish planning law. This is a serious deficiency given the scale of the proposed development and the sensitivity of the peat landscape.

No explicit contingency or evacuation measures are detailed for the community along the grid-route corridor — a serious omission when tall turbines and infrastructure could present hazard in extreme events.

The assessment is incomplete and fails to satisfy the legislative requirements of an EIAR insofar as it must identify, describe and assess direct and indirect effects of the development on the environment and human beings.

I call on An Coimisiún Pleanála to require an independent supplementary risk assessment, specific to peat-hazard, flood-modelling and major-accident scenarios, before any decision is made on this application.

References:

- Galway County Council (2024) Local Authority Climate Action Plan 2024-2029
- Environmental Protection Agency (EPA) (2022) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EIAR)
- European Commission (2024) Environmental Impact Assessment: Overview of EU Rules

Bird collision risk

I object to the proposed development on the grounds that the Collision Risk Assessment (Appendix 7-6, MKO 2025) is methodologically and scientifically inadequate to protect legally protected bird species.

The assessment relies on the theoretical Band Model, which assumes fixed avoidance rates and static behaviour, without validation using telemetry or local field data. Survey coverage is temporally and spatially limited, missing key migration and nocturnal flight periods. This approach fails to capture the real-world behaviour of birds in the area.

The use of a 99.5% avoidance rate for Whooper Swans, without local validation, significantly underestimates the risk of collision. Evidence from Irish Wetlands Bird Survey (I-WeBS) and BirdWatch Ireland indicates that Whooper Swans routinely commute between Horseleap Lough and surrounding feeding areas at low altitudes that overlap turbine rotor heights. The conclusion of 'negligible risk' is therefore unsupported and unreliable.

The report fails to consider cumulative impacts with other regional wind farms or infrastructure, contrary to EU Directive 2009/147/EC (Birds Directive) and Article 6(3) of the Habitats Directive. This is a serious omission given the presence of multiple wind energy developments in the region.

Mitigation measures are undefined and untested. Key figures such as flightline maps (e.g., Figure 7-6-1) are omitted, hindering independent review and transparency. Without clear, evidence-based mitigation strategies, there is no guarantee that collision risks can be managed effectively.

Under the Birds Directive (2009/147/EC) and the Habitats Directive, Ireland has a legal obligation to protect migratory and resident bird populations. The assessment as presented does not provide sufficient evidence that these obligations can be met.

I respectfully request that the planning authority reject or defer this application pending an independent, peer-reviewed reassessment. This should include:

- Full telemetry and radar data for local bird populations
- Expanded seasonal coverage including migration and nocturnal periods
- Transparent disclosure of all field survey data and model assumptions
- Cumulative impact assessment with regional wind farms
- Defined, evidence-based mitigation strategies

References:

- MKO (2025). Appendix 7-6 Collision Risk Assessment, Cooloo Wind Farm EIA
- Band, W., Madders, M. & Whitfield, D. (2007). Developing field and analytical methods to assess avian collision risk at wind farms
- Scottish Natural Heritage (2018). Avoidance Rates for the Onshore Wind Farm Collision Risk Model
- NatureScot (2021). Research Report 909: Using a collision risk model to assess bird collision risks onshore wind farms
- Rees, E. (2006). Whooper Swans: Biology and Conservation. T & AD Poyser
- Crowe, O. et al. (2019). Migration and Roosting of Whooper Swans. Irish Birds 43
- BirdWatch Ireland (2024). Whooper Swan Species Profile & Irish Wetlands Bird Survey (I-WeBS)
- European Commission (2021). Wind Energy and Natura 2000

Visual Impact

The proposed turbines would be highly intrusive and visually dominant, overwhelming the existing rural character of the local landscape. Their visibility from multiple vantage points would transform a natural and agricultural setting into an industrial-scale development.

The proposal is out of scale with the surrounding environment. The turbines' extreme height and size would cause visual clutter and a loss of scenic amenity, remaining visible even at long distances and creating

continuous visual intrusion.

When combined with existing or approved wind farms in the region, this development would lead to visual saturation and skyline dominance, further eroding the landscape's character and reducing its recreational value.

The developer's visual impact assessment understates the visibility and significance of the turbines. Photomontages appear selective and fail to represent the true extent of visual intrusion likely to be experienced by residents and visitors.

The proposal would diminish the rural amenity, tranquillity, and identity of the local region. It threatens the area's sense of place and the quality of life for residents who value the natural and agricultural landscape.

The local wind farm's size and visual impact are excessive and inconsistent with the character of the area. While supporting renewable energy, developments must respect the local landscape — this project does not. The proposal should therefore be refused on the grounds of unacceptable visual and landscape impacts.

Broadband Impact

Given the number currently working from home now, strong broadband is a necessity. There are concerns that the signal, and therefore working from home capabilities will be negatively affected by this proposed windfarm. This is due to the fact that the windfarm is situated exactly within line of sight to the mast. It is unacceptable that broadband signal and mobile phone services utilizing this mast will be degraded, and potentially to such a degree that it will be unusable. This may be worsened by the width of the wind turbine needed to support the weight, and the blades which can create periodic drops in signal level and variable amounts of reflection.

Conclusion

In light of the serious concerns outlined above I respectfully urge An Coimisiún Pleanála to refuse permission for this development. The proposal is not compatible with the principles of proper planning or sustainable development and would have lasting negative effects on local residents, farmers, and the wider community. I therefore strongly object to this proposal and ask that it be refused in full.

If permission is not refused outright, I request that an oral hearing be held so that local residents, farmers, and the wider community can have our say on the impacts of this development.

Yours Sincerely,

Mary Fleming
John Fleming

Name: John and Mary Fleming

Date: 16 November 2025