

OBSERVATION/SUBMISSION TO PLANNING APPLICATION

Case Reference: 323761

Catriona Devaney

Peak

Barnaderg

Tuam

Galway

To: An Coimisiún Pleanála

64 Marlborough Street

Dublin 1

D01 V902

Date: 13 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,

My name is Catriona Devaney and myself and my husband, Michael live in Peake, a townland just 1km from the village of Barnaderg. I have lived in this area all of my life, apart from a short time away for education purposes.

When we got married my husband and I made a conscious decision to stay in this area for many reasons, among them the local community, the countryside, the lifestyle and wellbeing it offered.

The area has seen many changes since my childhood. The population has declined and risen again, and many positive developments have occurred. One of these developments, which was prompted and established by the local community, and which will be under significant threat if the windfarm develops is our local Group Water Scheme. Initially this service was developed to provide piped water to the local population. This development fostered further positive development in the local farming and greater community and indeed, it enabled people to stay in the area and encouraged many to return. This vital service is under direct threat by this proposed development of the wind farm.

We have no doubt that the proposed development of the wind farm, consisting of nine excessively large

turbines has the potential to ruin the local services, including the group water scheme, landscape, environment, and will definitely lead to the abandonment of our local community.

Myself and my husband, Michael oppose the development of this windfarm in the most ardent fashion and will do all in our power to oppose it's advancement.

We object to the proposed Wind Farm on the following grounds

Community Consultation and Engagement

The consultation led by Neoen and MKO for the Cooloo Wind Farm was deeply flawed and misleading. It does not meet the standards of genuine public engagement expected by An Bord Pleanála.

Notices appeared in the Irish Examiner while the Tuam Herald, the community's main news source, was ignored.

There was only a single public consultation meeting which was held outside Moylough, even though seven of nine turbines are proposed there. The plans have also changed significantly since this original meeting.

Despite claims of outreach to community groups, neither Killrerin Community Council nor Killrerin GAA were consulted. Only 55 homes were visited during 'door-to-door' engagement and ten written responses were received which is evidence of a process that failed to inform or involve the community. With poor broadband limiting access to online materials, and many residents not having the skills or technical knowledge to access online content, many locals were effectively excluded.

This was not meaningful consultation but a box-ticking exercise which did not provide the community with a fair chance to participate. These failures must carry serious weight in An Bord Pleanála's consideration of the application.

Planning Framework and Guidelines

The continued reliance on the Wind Energy Development Guidelines 2006 is no longer appropriate or proportionate given the significant evolution of wind energy technology and the clear advancements in scientific understanding since their publication nearly two decades ago. The 2006 Guidelines were developed in an era when turbines were typically less than 100 metres in height and generated 1–2 MW of power. The turbines in this proposed development will be 180 metres and produce approximately 6 MW of power. This will result in greater visual, acoustic, and environmental impacts than those contemplated in 2006.

The fact that the Wind Energy Development Guidelines 2006 has been acknowledged in the Dáil many times by many different people. In 2013 Deputy Michéal Martin told, the then Taoiseach, Enda Kenny that the guidelines were outdated and were never framed in the context of the new technology. Yet in 2025 Tánaiste Simon Harris is still saying in the Dáil that he acknowledges that the guidelines are outdated and that there is a specific commitment from the Government to prioritise the publication of new guidelines.

It is therefore unreasonable and contrary to the principles of proper planning and sustainable development for An Coimisiún Pleanála to continue to rely solely on the 2006 Guidelines. An Coimisiún Pleanála must make sure that any decision made is not based on outdated standards.

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 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

The 2023 CERIS (Centre for Economic Research on Inclusivity and Sustainability) paper – 'Wind Turbines and House Prices Along the West of Ireland: A Hedonic Pricing Approach' – surveyed the prices of houses located near windfarms in seven counties.

The paper states that: 'The analysis finds a robust and significant reduction in property value of -14.7% within 1km of a turbine' and that 'Back-of-the-envelope calculations suggest that the total loss in value for houses within 1km of a turbine in the case counties is approximately €6.8 million.'

Galway County Council is an agent for the state of the Republic of Ireland and as such is responsible to uphold Article 40 of the Irish Constitution which states – 'the state shall in particular by its laws protect as best it may from unjust attack and in the case of injustice done vindicate the life, person, good name, and property rights of every citizen.'

I am aware that the Barnaderg Cooloo Wind Farm Action Collective have spoken to a local auctioneer, who said that he had trouble selling a house in County Mayo because it was close to several wind turbines. The auctioneer was able to site a specific instance whereby a married couple looked at the house and decided not to buy it. The auctioneer said that the presence of the wind turbines was a crucial factor in the couple's decision not to buy the house. The owners of this house ended up selling for less money than the couple had been initially willing to pay for the house.

Noise

Planning permission for the proposed Cooloo Wind Farm should be refused on the basis that it poses a clear and foreseeable risk of substantial interference with the normal use and enjoyment of nearby homes. In *Byrne & Moorhead v ABO Energy* [2025] IEHC 330, the Irish High Court found that wind turbine noise—specifically low-frequency and amplitude-modulated sound—constituted a private nuisance under common law, as it significantly disrupted residents' ordinary domestic life. The Court held that such noise

amounted to an unreasonable and continuous intrusion, preventing the quiet occupation of the home and resulting in the permanent shutdown of three turbines in County Wexford.

The Cooloo proposal relies on outdated ETSU-based noise criteria that fail to account for the same low-frequency and modulated noise effects found to cause substantial nuisance in the Wexford case. Given the proposed turbines' greater height and rotor size, the likelihood of these harmful acoustic effects occurring at Cooloo is even higher. Approving this development under obsolete standards would disregard the High Court's findings and expose local residents to predictable and legally recognized interference with their right to the peaceful enjoyment of their homes. Planning permission should therefore be refused in full on these grounds.

Impact of Wind Turbines on the Neurodiverse within the Community

Numerous studies and planning inspectors with An Coimisiún Pleanála have acknowledged that wind turbines can have negative effects on neurodiverse individuals. Research by Howell (2015) found that people with autism are more sensitive to environmental noise, experiencing higher rates of sleep disturbance, cognitive difficulties, and stress due to low-frequency noise (LFN). The neurodiverse community often struggles to filter background sounds, and constant turbine noise and vibration could cause pain, anxiety, and loss of concentration, reducing quality of life.

These impacts extend to education. Local schools and preschools, including Brierfield National School which has a special class for children with autism, would be particularly affected. Senior planning inspectors have previously noted that facilities for children with additional educational needs may become unviable near large-scale wind farms due to such disturbances.

Shadow flicker poses further risks, as studies (Becchio et al., 2010) show that individuals on the autistic spectrum may fixate on spinning movements, heightening distress. Those with epilepsy or neurological conditions may also be affected.

Ireland's obligations under the UN Convention on the Rights of Persons with Disabilities require protection from harm and equal enjoyment of rights. Allowing this development would contradict those principles.

While more research is needed, there is no definitive evidence proving that wind farms are safe for, and do not significantly impact, the neurodiverse community—and the absence of evidence is not evidence of absence.

References:

- An Bord Pleanála. (2016). PA0041 – Assisting report to Senior Inspector [PDF].
<https://www.pleanala.ie/anbordpleanala/media/abp/cases/reports/pa0/rpa0041a.pdf>
- An Bord Pleanála. (2015). Inspector's report: ABP-PA0038 [PDF].
<https://www.pleanala.ie/anbordpleanala/media/abp/cases/reports/pa0/rpa0038.pdf>
- Howell, G. (2015). Autism and the effect of introducing a new noise source into quiet rural communities: risk factor from industrial wind power generation
- Becchio C, Mari M, Castiello U (2010) Perception of Shadows in Children with Autism Spectrum Disorders. PLoS ONE 5(5): e10582.
<https://doi.org/10.1371/journal.pone.0010582>

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 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.

Biodiversity Impact - Earthworms

I object on the grounds that the Environmental Impact Assessment fails to address the impacts of wind turbine-induced vibrational noise on soil biodiversity and ecosystem function, particularly earthworm populations.

Recent peer-reviewed research by Velilla et al. (2021, *Oikos*, 130(7), 1033–1047) demonstrates that wind turbines generate continuous low-frequency vibrations (< 500 Hz) that travel considerable distances through soil. Key findings include:

- Vibrational noise decreased by only 23 ± 7 dB over 200 metres, meaning measurable vibration extends well beyond turbine bases
- Earthworm abundance declined by approximately 40% near turbines compared to sampling points further away
- Soil compaction and crop type were ruled out, confirming vibrational noise was the primary cause
- The impact is body-size-dependent, especially harmful to earthworms and other large soil invertebrates

Earthworms are critical "ecosystem engineers" essential to soil health and agricultural productivity. A 40% decline in their populations can lead to:

- Reduced soil aeration and water infiltration, increasing flooding and erosion risks
- Disruption of nutrient cycling and carbon sequestration, undermining soil fertility and climate regulation
- Deterioration of soil structure and microbial balance, impacting crop performance and long-term land viability

These impacts are especially concerning in productive agricultural soils. The Cooloo site shares characteristics with the farmland studied by Velilla et al. (2021) — organically managed, rural, and composed of active agricultural soils.

The Environmental Impact Assessment submitted for Cooloo does not address subsurface vibrational noise or its potential to degrade soil ecosystems. This represents a significant omission in the assessment of environmental and agricultural impacts.

I respectfully request that An Coimisiún Pleanála require:

- Comprehensive assessment of soil-borne vibrational noise impacts
- Evaluation of effects on soil macrofauna, especially earthworms
- Protective buffer zones of at least 200–250 metres from turbine bases to high-value agricultural soils
- Vibration-dampening measures in turbine design and foundations
- Soil biodiversity indicators in post-construction monitoring

Reference:

- Velilla, E., Collinson, E., Bellato, L., Berg, M.P., & Halfwerk, W. (2021). Vibrational noise from wind energy turbines negatively impacts earthworm abundance. *Oikos*, 130(7), 1033–1047.
<https://doi.org/10.1111/oik.08166>

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 support renewable energy but object to the Cooloo Wind Farm because it will worsen Ireland's land-use emissions. Clearing mature forest and disturbing peat for turbine bases and access roads will release long-stored carbon into the atmosphere. Ireland's Climate Action and Low Carbon Development Act 2021 and the European Climate Law both require that each sector reduce its emissions without offsetting increases elsewhere. This means energy targets cannot legally override land-use targets. If projects like this go ahead without full rewetting and carbon recovery, Ireland risks breaching its climate budgets and facing EU fines. We need clean energy that complements, not competes with, our land-based climate commitments.

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

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

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.

If permission is not refused outright, I request that an oral hearing be held so that I as a local can have my concerns about this development heard.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Catriona Devaney'. The signature is written in a cursive style with a large, stylized 'C' and 'D'.

Name: Catriona Devaney

Date: 13 November 2025