

FORMAL SUBMISSION IN OPPOSITION TO THE PROPOSED LEMANAGHAN WIND FARM

Submission to An Coimisiún Pleanála / Offaly County Council

Objector:

Linda Egan
Tumbeagh, Ballinahown, Co. Offaly R37 X0R9
House Number 24

Case Number: PAX19.324161

RE: Proposed Lemanaghan Wind Farm, Co. Offaly

1. INTRODUCTION

I wish to **formally object** to the proposed Lemanaghan Wind Farm development on the grounds that it would result in serious and material injury to residential amenity, health, wellbeing, safety, and overall quality of life for myself and nearby residents.

My dwelling is located in close proximity to the proposed development area, and more than half of the windows in the property directly face the bog and proposed turbine locations (See attached images). This creates a direct, unavoidable visual and environmental exposure to the development from principal living areas of the home, including rooms used continuously throughout the day and night.

The proximity and orientation of my dwelling means that impacts would not be intermittent or distant, but continuous and dominant.

I submit that the proposal:

- is contrary to proper planning and sustainable development principles
 - fails to adequately protect residential amenity
 - relies on outdated and evolving national guidance
 - introduces long-term uncertainty regarding environmental and health impacts
 - and imposes an excessive burden on a settled rural community
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2. FAILURE TO PROTECT RESIDENTIAL AMENITY

The proposed development would fundamentally transform the character of the area from a quiet rural landscape into an industrial-scale renewable energy zone.

The EIAR identifies a large number of sensitive receptors in close proximity, including dwellings within 1 km and 1.5 km of turbines. However, numerical receptor counts do not adequately reflect *degree of impact*, particularly where orientation, topography, and continuous visibility are not evenly distributed.

The proposed turbines are of an exceptionally large scale:

- 220m tip height
- 145m hub height
- 150m rotor diameter

At this scale, turbines are not visually recessive infrastructure; they become dominant vertical industrial structures visible over long distances and above existing landscape features.

For my dwelling, where the majority of windows face the development, this would result in:

- continuous visual presence of rotating blades
- domination of horizon and skyline views
- loss of visual relief and natural landscape character
- inability to screen or mitigate views through planting or landscaping
- constant awareness of industrial motion in daily living spaces

This represents a permanent alteration of residential amenity, not a temporary or partial impact.

3. HUMAN HEALTH AND WELLBEING

The EIAR acknowledges that human health considerations include both direct environmental effects and indirect effects arising from changes in living conditions.

In this context, impacts extend beyond measurable noise levels or compliance thresholds and include:

- chronic sleep disturbance due to night-time noise and shadow flicker
- increased stress and anxiety from continuous visual motion and industrial presence
- reduced psychological restoration associated with rural environments
- heightened annoyance and cognitive load from persistent environmental change
- long-term reduction in perceived quality of life

Importantly, health impacts associated with wind energy developments are often cumulative and contextual, depending on proximity, sensitivity, and duration of exposure rather than isolated exceedance of limits.

The fact that national Wind Energy Guidelines remain under review further indicates that current understanding is evolving. Where uncertainty exists, the precautionary principle should be applied, particularly where permanent infrastructure is proposed in close proximity to homes.

4. SHADOW FLICKER IMPACTS

Shadow flicker is a well-documented phenomenon occurring when rotating turbine blades intermittently cast moving shadows through windows.

The EIAR confirms that shadow flicker impacts depend on:

- direct line of sight between turbine and dwelling
- orientation of windows
- seasonal sun path variation
- distance and rotor size

In this case, my home's orientation is directly toward the proposed turbine area, with more than 60% of windows facing the development. This increases exposure risk significantly, particularly in principal living spaces. (House 24 See attached images)

The "greenhouse mode" assessment used in EIAR studies assumes worst-case exposure across all windows, but this is still a modelled approximation and does not fully reflect lived conditions.

Draft revised guidelines stating that no dwelling should experience shadow flicker highlight a clear policy direction toward elimination rather than mitigation. Given the scale of turbines and proximity involved, it is not evident that this objective can be reliably achieved.

5. NOISE, DISTURBANCE AND QUALITY OF LIFE

Wind turbine noise is not solely a function of decibel levels but also of character, variability, and persistence.

The proposed development would introduce:

- aerodynamic swish and amplitude-modulated noise
- mechanical and tonal components
- low-frequency vibration and infrasound perception effects
- increased night-time audibility due to atmospheric conditions
- continuous background industrial soundscape in a rural setting

Even when numerical compliance with ETSU-R-97 or similar frameworks is achieved, residents may still experience significant annoyance due to amplitude modulation and tonal variation, which are not fully captured by averaged metrics.

The key issue is the transformation of a quiet rural acoustic environment into one characterised by continuous industrial sound presence, which alters baseline conditions permanently.

6. ROAD SAFETY AND CONSTRUCTION IMPACTS

The construction phase would involve significant abnormal traffic on rural roads not designed for such loads.

This includes turbine component transport, crane mobilisation, concrete delivery, and excavation haulage.

Impacts would include:

- structural stress and deterioration of local roads
- increased collision risk due to oversized vehicles on narrow routes
- disruption to emergency access and daily commuting
- vibration impacts on nearby dwellings
- prolonged noise and dust exposure during construction phases

These impacts are not short-term inconvenience, but prolonged, multi-year disruption associated with phased turbine construction.

The application does not adequately demonstrate enforceable mitigation, such as road strengthening commitments, binding traffic routing plans, or compensation frameworks for infrastructure degradation.

7. HYDROLOGY, BOG DRAINAGE AND FLOOD RISK

The site lies within a modified peatland system with a long history of artificial drainage and water management infrastructure.

The EIAR confirms:

- drainage dating from the 1950s
- high surface runoff rates
- engineered outfalls to surrounding catchments
- very low groundwater recharge capacity

Peatlands naturally act as water retention systems; however, drained peatlands behave as rapid runoff systems, increasing downstream flow variability.

The proposed development introduces additional physical disruption through:

- excavation and peat removal
- construction of foundations and roads
- alteration of drainage pathways
- compaction of soil reducing infiltration capacity

These changes may:

- increase peak runoff events
- reduce natural attenuation of rainfall
- exacerbate flooding in already vulnerable low-lying areas
- increase sediment loading in watercourses
- disrupt existing engineered drainage balance

Given documented annual flooding in surrounding areas, even small hydrological changes may have disproportionate downstream effects.

The Midlands region is historically vulnerable to flooding because of:

- flat topography;
- high rainfall events;
- extensive river catchments;
- peatland drainage systems;
- and the hydrological relationship between bogs and the River Shannon system.

The EIAR confirms that:

- all drainage from the proposed site ultimately enters the River Shannon catchment;
- the site drains toward the Brosna River, Blackwater River, Boor River and Shannon system;
- and several engineered outfalls already discharge water away from the bog.

The EIAR further confirms that recurring flood events already occur in the area, including flooding along the R436 near Lemanaghan where low-lying land and roads flood annually following heavy rainfall.

8. CARBON STORAGE AND ENVIRONMENTAL FUNCTION OF THE BOG

Peatlands are globally significant carbon stores, accumulated over millennia.

Disturbance through drainage or excavation can:

- expose peat to oxidation
- release stored carbon dioxide and methane
- permanently reduce carbon sequestration capacity
- degrade long-term ecological function

In addition to carbon storage, bogs provide:

- regional air quality regulation
- natural cooling and microclimate regulation
- moisture retention and hydrological buffering
- biodiversity habitat functions

Large-scale infrastructure development risks irreversible degradation of these functions, particularly where peat is physically disturbed or hydrological regimes are altered.

9. OVERDEVELOPMENT OF A RURAL LANDSCAPE

The Midlands region is already characterised by increasing renewable energy infrastructure, including multiple operational wind farms visible from the area.

Cumulative effects must be assessed not only within the site boundary but across the wider landscape context.

The proposed development would add:

- additional 220m turbines
- aviation lighting visible at night
- industrial access roads and substations
- permanent alteration of skyline character

This results in a cumulative industrialisation effect, where individual projects may be technically compliant but collectively transform rural character.

The key issue is not isolated impact but saturation of the landscape beyond its carrying capacity for industrial structures.

10. RELIANCE ON OUTDATED GUIDELINES

The EIAR relies significantly on 2006 Wind Energy Guidelines while acknowledging that updated guidance is in draft form.

This creates a policy gap:

- older guidelines do not reflect current turbine scale (220m+)
- updated drafts propose stronger residential protections
- scientific understanding of AM, tonality, and shadow flicker has evolved

Relying on outdated standards for a development of this scale introduces regulatory mismatch, where compliance may not equate to acceptability.

In such cases, decision-making should prioritise current scientific understanding and precautionary assessment.

11. OBJECTION: NOISE COMPLAINT INVESTIGATION PROCEDURE (AM & TONALITY)

The proposed complaint procedure is insufficient as a safeguard due to lack of independence and enforceability.

Key concerns include:

Lack of independence:

Investigation is led by the operator and turbine manufacturer, creating an inherent conflict of interest.

Subjective reliance on diaries:

Complaint logs depend on perception, which cannot reliably capture intermittent AM events.

Delayed investigation trigger:

Objective monitoring is not immediate, risking loss of transient acoustic evidence.

Restricted data transparency:

No guaranteed independent access to SCADA or operational datasets.

Flexible methodology wording:

Use of “equivalent agreed methods” allows variability in assessment standards.

No defined thresholds:

Absence of measurable AM/tonality limits prevents clear enforcement.

No continuous monitoring:

Complaint-driven system cannot characterise intermittent or seasonal impacts.

Extended reporting intervals:

Six-month reporting delays may prolong unresolved impacts.

Non-final status:

As a draft document, the procedure is not legally fixed and may change post-consent.

Overall, the system lacks the independence and enforceability required for robust environmental protection.

12. IMPACT ON HOUSE PRICES

The report’s conclusions are limited to a statistical analysis of Scottish property transactions between 1990 and 2014. However, these findings are highly context-dependent and cannot be transposed to Lemanaghan Bog in Co. Offaly, which presents a fundamentally different physical and environmental setting.

The Scottish dataset includes a wide mix of mountainous, remote, and urban fringe landscapes where terrain variation, screening effects, and dispersed turbine placement materially influence visibility and impact outcomes. By contrast, Lemanaghan Bog is a low-lying, flat, open peatland landscape with limited natural screening and high levels of visual exposure, meaning turbines would have a far more continuous and dominant presence from nearby dwellings. The study also does not assess residential amenity, landscape character, ecological sensitivity, or planning acceptability, nor

does it account for site-specific topographic conditions or peatland vulnerability. Its findings are therefore aggregate economic observations rather than predictive evidence of localised visual, environmental, or amenity impacts in a sensitive rural bog setting such as Lemanaghan.

13. CONCERNS REGARDING VISUAL ASSESSMENT AND PHOTOMONTAGES

I also wish to formally raise concerns regarding the accuracy and representativeness of the submitted photomontages, in particular those relating to the Tumbleagh viewpoint.

It appears that the visualisations may not fully represent a direct, centred, and realistic view from the verified receptor location. As a result, there is a concern that the visual impact of the proposed turbines may be underestimated.

Photomontages form a critical part of the Environmental Impact Assessment process and are relied upon to assess scale, dominance, and cumulative visual impact. It is therefore essential that they:

- accurately reflect the true line of sight from the agreed viewpoint;
- are correctly aligned with the verified receptor location; and
- present a realistic representation of turbine scale and visibility within the landscape.

Given the proposed turbine height (220m to tip), even minor variations in viewpoint, lens selection, or framing can significantly influence perceived scale and visual dominance. In this case, there is concern that the Tumbleagh photomontage under-represent skyline intrusion, cumulative impact, and the true extent of industrialisation of the landscape.

Accordingly, I respectfully request that limited weight be attached to this visualisation unless it can be demonstrated that it fully complies with best practice and agreed assessment methodology.

Where uncertainty exists, it is appropriate that the precautionary principle be applied, and that assessment errors on the side of a full and realistic representation of visual impact.

On the Planning Process and Assessment Approach

It is acknowledged that large-scale infrastructure projects necessarily rely on technical modelling and standardised assessment methodologies. However, there is a legitimate concern that such approaches may not fully reflect the lived experience of those residing in close proximity to the development.

From a community perspective, there is a perception that compliance with guideline thresholds does not always equate to an absence of meaningful impact on residential amenity.

It is therefore respectfully requested that full consideration be given to:

the cumulative real-world impact on nearby dwellings;

the lived experience of residents within the immediate visual and acoustic environment of the proposal;

the distinction between technical compliance and actual residential amenity.

Relevant Planning and Environmental Principles

It is a well-established principle in planning and environmental assessment that:

- environmental assessment must be complete, transparent, and evidence-based;
- mitigation measures must be certain and not assumed post-consent;
- compliance with guideline thresholds is not determinative of acceptability;
- residential amenity is an independent and material planning consideration;
- cumulative and real-world impacts must be properly assessed.

Application to the Proposed Development

In light of the above principles, particular concern arises where:

- reliance is placed on draft or evolving guidance;
- mitigation measures (including noise complaint procedures) are not final or enforceable;
- impacts such as amplitude modulation, tonality, shadow flicker, and visual dominance are subject to modelling uncertainty;
- cumulative landscape and residential effects are significant.

Accordingly, the planning authority is required to apply a precautionary, evidence-based approach consistent with Irish and EU environmental law when determining whether the development is acceptable in principle.

We have also spoken to residents living in close proximity to existing wind turbines, who have described adverse impacts within their households and wider community. Some have shown videos illustrating their lived experience once turbines are operational. Some have their house up for sale because of the impact it is having on their mental health. These accounts describe perceived noise disturbance, shadow flicker within homes, visual dominance, and reduced residential amenity, reinforcing concerns regarding similarly sited development near my home.

Policy Context and Compliance

The proposed development is not consistent with proper planning and sustainable development having regard to Section 28 Ministerial Guidelines and Draft Wind Energy Development Guidelines.

Draft Wind Energy Development Guidelines

The draft guidelines place increased emphasis on:

- protection of residential amenity;
- elimination of shadow flicker at sensitive receptors;
- improved assessment of noise character, including amplitude modulation;

- cumulative landscape impact assessment;
- appropriate separation distances from dwellings and community facilities.

Given the scale of turbines (220m tip height) and proximity to sensitive receptors, the proposal does not demonstrate compliance with these emerging standards.

2006 Wind Energy Guidelines

The EIAR relies heavily on the 2006 Wind Energy Guidelines. However, these are:

- not designed for modern turbine scales exceeding 200m;
- limited in addressing amplitude modulation and tonal noise;
- outdated in relation to cumulative landscape effects.

Reliance on these guidelines is not sufficient where current policy direction provides for stronger protection of residential amenity.

Proper Planning and Sustainable Development

The proposal conflicts with key planning principles, including:

- protection of residential amenity;
- preservation of rural landscape character;
- avoidance of over-concentration of infrastructure;
- safeguarding community facilities;
- ensuring proportionality between development scale and receiving environment.

The proposal would result in unacceptable intensification of industrial infrastructure in a sensitive rural peatland landscape.

Environmental Impact Assessment Requirements

The EIA process requires full assessment of all likely significant effects, including cumulative impacts and enforceable mitigation.

Uncertainty remains in relation to:

- shadow flicker exposure;
- noise character and amplitude modulation;
- visual dominance and cumulative landscape effects;
- hydrological impacts in a drained peat system.

Where uncertainty exists, the precautionary principle must be applied.

13. CONCLUSION

For the reasons outlined above, I respectfully request that planning permission for the proposed Lemanaghan Wind Farm be refused.

The proposed development would result in significant adverse impacts, including but not limited to:

- serious harm to residential amenity;
- unacceptable visual intrusion and dominance within the rural landscape;
- exposure of nearby sensitive receptors to shadow flicker, noise, and general environmental disturbance;
- negative effects on health, wellbeing, and quality of life through increased stress and loss of tranquillity;
- the industrialisation of a currently quiet and rural landscape character;
- disturbance to a sensitive peatland environment and associated ecological systems;
- increased pressure on local drainage, hydrology, and flood management infrastructure;
- potential adverse impacts on local road networks and community infrastructure; and
- cumulative visual and environmental impacts arising from existing and proposed wind energy developments in the wider region.

The impacts on my dwelling are of particular concern, as the majority of habitable rooms directly face the proposed development area and surrounding bog landscape, resulting in a heightened level of visual exposure and perceived dominance of the turbines.

My family and I have strong and longstanding ties to this area. I am the ninth generation of the Egan family living in the Kilnagarna / Tumbleagh area, and our connection to this landscape extends across generations. The bog and surrounding environment are not merely a view from our home, but an integral part of our family history, identity, and daily life.

We regularly walk and use the bog and value its peace, natural beauty, and unique environmental character. The introduction of an industrial-scale wind farm in close proximity would fundamentally alter the character of this landscape and result in a permanent and irreversible change to the rural setting that has defined this area for generations.

At present, existing wind turbines at Mount Lucas, Birr, and Lumcloon are already visible from our property, along with associated aviation warning lights which contribute to night-time visual disturbance. The addition of further turbines at Lemanaghan would intensify this cumulative impact, further eroding rural amenity, landscape character, and the sense of natural darkness and tranquillity in the area.

There is a clear point at which cumulative infrastructure development places an excessive burden on rural communities. In my view, Offaly has already made a significant contribution to national renewable energy targets and has already experienced substantial landscape change as a result of existing wind energy infrastructure.

The wind turbines are proposed in very close proximity to Rashina National School, there are also serious concerns regarding their potential impact on the school environment and pupils. The close siting of large turbines will introduce persistent low-level noise and visual intrusion, which will affect classroom concentration and reduce the quality of the learning environment, particularly during quiet study periods. There is also the potential for shadow flicker to intermittently affect parts of the school building and outdoor play areas at certain times of day, creating distraction for children.

In addition, increased construction traffic and activity during the development phase will disrupt access routes, raise safety concerns, and interfere with the normal operation of the school. Wind turbines will affect our community infrastructure such as Rashina National School and the wellbeing of children attending it.

Rural communities are already experiencing significant social and economic pressures, including rising electricity costs, increased living expenses, and growing strain on local infrastructure and services. Families who have worked hard over generations to build homes and lives in these areas are now facing the prospect of further disruption to their peace, wellbeing, and quality of life through large-scale industrial development in close proximity to their homes. Residents are entitled to reasonable enjoyment of their homes and rural environment, and there comes a point where communities feel that the cumulative burden being placed upon them has become excessive. Enough is enough.

This proposed development would represent a further disproportionate intensification of industrial development within an already impacted rural setting.

Overall, I am of the view that the proposal would result in unacceptable and irreversible harm to residential amenity, landscape character, local heritage, and quality of life, and should therefore be refused.

Final Request

Accordingly, I respectfully urge An Coimisiún Pleanála / Offaly County Council to refuse planning permission for the proposed development in the interests of protecting the local community, the bog landscape and future generations of families living in Kilnagarna, Tumbeagh and the wider Lemanaghan area.

Signed

A handwritten signature in black ink, appearing to be 'K. O'Sullivan', written over a horizontal line.

Date 19.05.2026



- Proposed Turbine Layout
- ▲ Sensitive Receptors
- ◌ Shadow Flicker Study Area (1.5km)-10x150m Rotor Diameter

Every window facing the bog at House Number 24 will have a visible view of the proposed wind turbine. 60% of the windows in my home.


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Drawing Title Shadow Flicker Study Area and Sensitive Receptors	
Project Title Lemanaghan Wind Farm, Co. Offaly	
Drawn By EM	Checked By EC
Project No. 200804	Drawing No. Figure 5-3
Scale 1:24,000	Date 2026-01-21
 MKO Planning and Environmental	











