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The Secretary
An Coimisiún Pleanála
64 Marlborough Street
Dublin 1
D01 V902

16th May, 2026

Re: Case reference: PAX04.324165
Applicant: Proposed Wind Farm Maughanaclea Ltd.
Project: Maughanaclea Renewable Energy Development

Description: The Applicant is seeking permission for the construction of a wind energy development including 14 wind turbines, a 110kV substation and 110kV underground cabling connection, and all associated infrastructure and works in in Maughanaclea and associated townlands, Co. Cork. The Proposed Project will be known as the 'Maughanaclea Renewable Energy Development.' This application is being made directly to An Coimisiún Pleanála (the Commission) as 'Strategic Infrastructure Development' (SID) under the provisions of Section 37E of the Planning and Development Act 2000, as amended.

Location: Ardrah, Maughanaclea, Ballynamought, Gortloughra, Cousane, Coomclogh, Derragh, Glanycarney,Keenrath, Derrynacaheragh, Shiplough, Coolsnaghtig, Mallabracka, Derrylahan, Derreens, Demesne, Dunmanway North, Milleenanannig, and Ballyhalwick, Co. Cork.

A chara,

Please find enclosed my submission and fee in respect of Case Reference PAX04.324165, concerning the proposed Maughanaclea Renewable Energy Development by Maughanaclea Ltd., an associated company of Enerco Energy Ltd.

My submission is strictly grounded in planning law and policy. It will demonstrate that the proposed wind farm proposal contravenes multiple planning policies and legal

requirements and the application has significant shortcomings. Based on the above, An Coimisiún Pleanála should refuse planning permission. I have divided the submission into the following sections for clarity. This submission is made within the statutory timeframe of your deadline of 25th May, 2026.

1. Introduction

Irish scientific sources make clear that peatland is not inert ground. EPA funded research states that "drained peatlands have leached harmful nutrients, acids and carbon loaded water into streams", while National Parks and Wildlife Service confirms that bogs "purify water and reduce flooding by their capacity to absorb, hold and slowly release water."

The Irish Peatland Conservation Council further states that it "cannot support the construction of wind farms on intact peatlands including lowland blanket bog, upland blanket bog and heath habitats." It also states that "drainage removes water from the peat - lowering the water table" and specifically identifies wind farm roads, drainage, cable conduits, turbine foundations and pylons as damaging activities on blanket bog.

These sources support the key hydrological concern where a wind farm is proposed on peat influenced upland ground, the assessment must seriously consider peat stability, altered drainage, sediment release, water table change, stream connectivity, private wells and downstream public water supplies as one connected system. Other negative impacts of wind farms constructed on peat soils include the release of carbon dioxide during construction and peat disturbance, which can hugely undermine the claimed climate benefits of the development.

BirdWatch Ireland's guidance on bird sensitivity mapping for wind energy developments in the Republic of Ireland identifies the relevant risks as "the risk of birds colliding with turbines; being displaced by wind energy infrastructure; being affected by wind energy infrastructure forming barriers to movement or migration; or being affected by habitat loss as a result of wind energy developments." These are recognised Irish ornithological risk pathways, not speculative concerns.

Wind farm impacts on biodiversity are not limited to blade collision. Scientific and conservation sources recognise a wider set of impact pathways, including direct habitat loss, fragmentation, disturbance, displacement, collision mortality, barrier effects and changes to hydrology. These risks are especially important where turbines, access roads, hardstands, drainage and cable works are proposed in an upland landscape containing peatland, heath, watercourses, bird habitat, bat habitat and ecological links to downstream receptors.

Bat Conservation Ireland states that "wind turbines are a known risk to bats." Richardson et al. (2021). Also of note is the peer reviewed journal Scientific Reports, who state "wind turbines are a relatively new threat to bats, causing mortalities worldwide." The same study adds: "wind farms negatively affect over 30 bat species and have potential consequences for population viability of at least one species." It also raises concerns about the limits of pre construction assessment, noting that "given that more than 50% of bat fatalities in Europe are P. pipistrellus, these findings help explain why Environmental Impact Assessments conducted before the installation of turbines are poor predictors of actual fatality rates."

Health Canada found a relationship between increasing levels of wind turbine noise and annoyance towards wind farm features, including "noise, vibration, shadow flicker and aircraft warning lights on top of the turbines." This supports the necessity for a careful and evidence based assessment of residential amenity, not just in relation to noise, but also shadow flicker and other recurring operational effects, experienced by people living near wind turbines.

The wider biodiversity and cultural context of the Mealagh Valley has also been publicly recognised. In a public Facebook post dated 15 October 2025, Christopher O'Sullivan TD, Minister of State for Nature, Heritage and Biodiversity, stated:

"My parents generation were kept awake during summer nights with the deafening sound of the call of the Corncrake. For an insight of what that was like, please take just 5 minutes and have a listen to these gorgeous testimonies from the people of the Mealagh Valley in West Cork. They speak of how the landscape around them has changed since their childhood. They explain their love of nature and how in tune people were with the natural world back then. What really got to me is how you can clearly hear the emotion in their voices as they lament the loss of birds like the Corncrake and other species that were such a big part of their childhood."

Taking Minister O'Sullivan's words into account, particularly his reference to The Mealagh Valley, which is part of the landscape targeted in this proposed wind farm project, it must be remembered that huge infrastructure would not be constructed on an empty

landscape, but on an ecological and cultural one, where biodiversity, birdlife, water, peatland, heritage and community are closely connected.

For the reasons explained throughout my submission, MKO fails to present a proper and strongly evidenced EIAR. The assessment contains contradictions and errors in planning law and relies repeatedly on speculation, unsupported by the necessary lawful evidence to have permission granted by the Board.

Water, Peat, Biodiversity, Flood Risk, Wells and Public Water Supplies

Introduction

My submission relates to the assessment by Enerco Energy's agents MKO is relation to water, peat, biodiversity, flood risk, private wells, mains water networks, public drinking water supplies and protected aquatic receptors and does not comply with Irish planning law and European environmental law. The Board must take into consideration that this application is for a Strategic Infrastructure Development on an upland rural landscape, with associated access roads, watercourse crossings, borrow pits, peat and spoil areas, drainage works and grid connection running through environmentally sensitive areas. Also not proven is their claim that this SID can be built and operated without risk to water quality, water supplies, protected aquatic species, peatland hydrology, downstream sites and local flooding patterns.

1. Legal Framework

My submission refers to the following, based on MKO's material under the Planning and Development Act 2000, EIA Directive 2011/92/EU as amended by Directive 2014/52/EU, Habitats Directive 92/43/EEC, Birds Directive 2009/147/EC, Water Framework Directive 2000/60/EC, European Communities Environmental Objectives Regulations 2009, European Communities (Water Policy) Regulations 2003, European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations 2009, European Communities (Birds and Natural Habitats) Regulations 2011, Wildlife Acts 1976 to 2023, Flora (Protection) Order 2022, and the Cork County Development Plan 2022 to 2028.

This extensive list of proper planning laws, objectives and directives contradict MKO's conclusions on excavation, peat disturbance, drainage, sediment release, runoff, protected species, human health, material assets and water supply. MKO cannot lawfully split these into separate groups, giving non binding assurances that many will be acted upon post consent. Their indications of future monitoring, falls way short of what our planning laws require.

Article 6(3) of the Habitats Directive is very precise in that the Board may only grant permission on definitive findings. The Board will also be familiar with the legal case of Sweetman, People Over Wind and Holohan, which legally reinforces that mitigation must be specific, reliable and capable of removing doubt.

The Water Framework Directive also imposes a clear obligation for adherence by MKO and which the Board must have complete certainty that material presented cannot worsen water status or undermine any of our environmental objectives. In particular and of great concern in their material, is MKO's lack of awareness of hydrological connectivity to the Owvane, Owngar, Mealagh and Bandon systems, including the presence of very

sensitive public water sources and downstream links to protected aquatic habitats and the Bandon River Special Area of Conservation (SAC).

2. Hydrological Connectivity to Sensitive Receiving Waters

MKO confirms the proposed wind farm site would drain into the Owvane, Owngar and Mealagh systems and that grid connection would create an additional pathway to the Bandon catchment. Legally, effects from construction cannot be treated in their assessment as if they stop neatly at the turbine location or road trench edge. It's imperative to note that silt, peat fines, hydrocarbons, cement material, suspended solids and altered drainage released on site, would move quickly through the receiving catchments.

Hydrological issues matter greatly, as Enerco Energy's industrial wind farm is not being proposed on dry, self contained ground, but on an upland landscape of peat, forestry, drains, springs, headwater streams and steep hydrological pathways. MKO put forward a very generic assessment, which contains no substantive evidence that major hydrological issues will not arise post consent. The Board should have received a full catchment based understanding of source, pathway and receptor and not that future mitigation would protect downstream waters.

The assessment confirms the Owngar River separates the northern and southern turbine clusters and that a new crossing must be constructed across the river. MKO attempts to downplay this to a minor engineering detail and give scant treatment of the huge risks involved with Enerco's construction works and the vulnerabilities of a downstream aquatic environment. To construct a wind farm of this size, hydrological connectivity must be a central feature of the environmental sensitivity of the Maughanaclea Hills, MKO have put forward no grounded evidence to demonstrate aquatic life will be preserved and protected. This goes against all laws and objectives.

3. Private Wells, Springs and Local Water Supplies

MKO put forward incorrect conclusions indicating local wells are 'Not Sensitive'. This data is based upon MKO's heavy reliance on the absence of mapped wells within a small given radius from the wind farm site and their findings are based on broad hydrogeological non evidential theory. What should have been undertaken and presented to the Board, was a complete property by property receptor survey containing private wells, springs, boreholes, old pipework farm supplies etc., which are not fully captured in national datasets - but crucial for the rural lands of the Maughanaclea Hills.

The proposed construction works would be invasive and include deep excavations, borrow pits, access roads, turbine bases, cable trenching, peat handling, drainage changes and spoil management. This type of industrial disruption on the landscape

would intercept and damage shallow groundwater, disturb springs, change local flow patterns and introduce new pathways for sediment, hydrocarbons and cement based material. The key question for the Board is not whether the regional water formation is highly productive, but whether communities, homes and farms would suffer a loss or damage to their water supply. MKO has not put forward any surveyed evidential facts that would dispute this damage.

MKO's site description material records extreme groundwater vulnerability, bedrock close to the surface in places, limited overburden, short groundwater flow paths and recharge emerging nearby at springs and surface streams. In other words, this is a site where shallow pathways are evidential. Without a verified schedule of private wells, springs, boreholes, connections and agricultural supplies, supported by baseline water quality and level monitoring, the Board cannot be satisfied that this receiving environment been properly identified and documented.

The Environmental Protection Agency (EPA) website state that a proper risk assessment for water protection must be risk based and catchment focused, addressing risks at source, before contaminants reach abstraction points. This directly supports my submission, in that downstream waters and water supplies cannot be assessed by a narrow site approach.

Further reiteration of this point is made by Geological Survey Ireland, who state that a Source Protection Area is the catchment area around a groundwater source, which contributes water to that source. That supports the need for a catchment based source pathway receptor assessment, rather than a narrow site based approach that treats downstream effects as if they stop at the edge of the works. The Board will be aware from the application material that MKO has not produced such a critical assessment.

4. Public Water Supply and Human Health

MKO accepts that downstream public water supply abstractions on the Owngar, Mealagh and Bandon systems are very sensitive receptors. This is important as we are dealing with not only an ecological issue, but also a human health and public drinking water issue - all of which are under the Environmental Impact Assessment Directive. Once public water drinking resources are acknowledged as very sensitive, the burden is on MKO to put forward an evidence based assessment. They have failed in this and promises that runoff will be managed, cannot be accepted by the Board. If permission were granted on this basis, serious implications surrounding these ecological and human health risks and impacts, would be a matter for scrutiny in any Judicial Review.

MKO have failed to identify each abstraction at risk, map hydrological pathway, establish baseline water quality, explain vulnerability of each intake to sediment and pollution and demonstrate how risk will be prevented at source. A response plan after contamination is

unacceptable. Monitoring after the event is a common practice throughout this entire application and should not be accepted by the Board.

This site is already known to drain to multiple connected systems and the route of the grid connection follows public roads that intersect sensitive catchments. MKO's reference to a 50 meters buffer 'where possible' gives no assurance for the protection of public water supplies and is not an enforceable safeguard.

5. Extreme Groundwater Vulnerability

This chapter records extreme groundwater vulnerability and very high surface runoff and that combination should have triggered a detailed assessment. Instead, the material swiftly moves from 'acknowledging sensitivity,' to expressing confidence that effects will be 'negligible.' This assertion lacks any substantive evidence from MKO.

The site is described as having short groundwater flow paths with recharge emerging close by at springs and streams, coupled with high surface water runoff and comparatively low recharge. In essence, that main pathways of concern are immediate and local and in an upland peat and forestry environment such as the Maughanaclea Hills, it must be stressed that disturbance can quickly turn into sediment laden run off, moving through drains, headwaters into nearby drains, ditches and streams during rainfall.

Damaging impacts from The Maughanaclea Hills site cannot safely be expected to remain localised or slow moving. The hydrological conditions described by MKO are completely inaccurate, as they describe a receiving environment that can transmit impacts quickly.

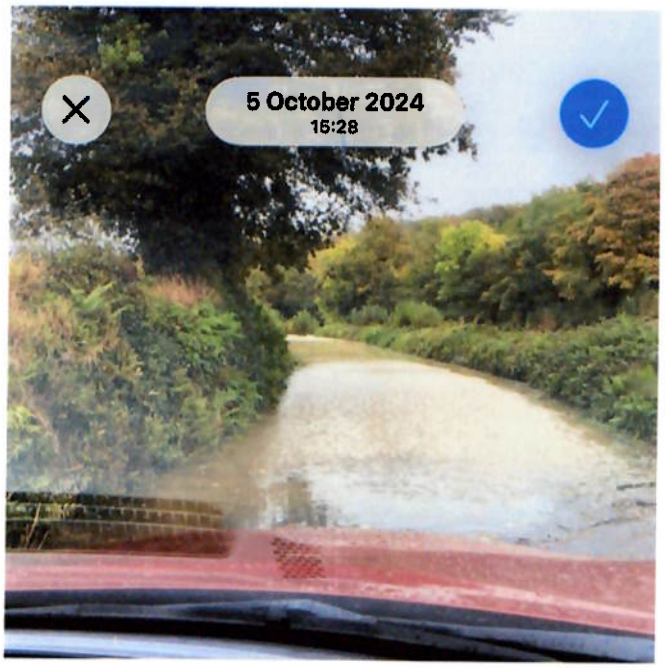
6. Flood Risk, High Rainfall and the Reality of Local Flooding

MKO do not confirm if the flood issue is confined to whether a turbine sits inside or outside a mapped river corridor flood zone? The main factor here is that water running through roads, hardstanding, peat disturbance, drainage alteration, cable works and forestry change, would increase speed, volume, direction or contamination of runoff entering local streams and roads. On a site with very high rainfall and high runoff, the lack of analysis from MKO disputes any assurances they might give to the Board.

For example, a small babbling brook flows from the upland Maughanaclea Hills down into our garden in the Mealagh valley, its waters, slow, clean and pristine. However, photo evidence below demonstrates the massive increase in the rate of downward water flow during heavy storms and rains.

Figure 1. Stream in the Mealagh Valley, West Cork, showing local watercourses within the wider Maughanaclea landscape.

The submitted Flood Risk Assessment is deeply concerning as it completely ignores the true situation and in particular, past events in the receiving catchments. For example, in October 2024, the Mealagh River burst its banks after torrential rainfall, flooding adjoining lands, damaging local road infrastructure and making roads impassable in the Mealagh Valley. Photo evidence below.



Flooded and impassable road just before Inchyclough Bridge, Mealagh Valley, Bantry.

MKO fail to mention any major flooding or the actual partial bridge collapse, which greatly impacted communities in the Mealagh Valley and was widely reported. Flood analysis including the above mentioned, were not properly tested, leading to omissions and incorrect conclusions in MKO's assessment.

As of May 2026, the Inchyclough bridge in the Mealagh valley has not been repaired and is still in a partially collapsed state, yet any reference is omitted by MKO. Photo evidence below.

Figure 2. Flood damage at Inchyclough Bridge, showing the watercourse and temporary safety barriers following high water impacts.

There have been public reports of rivers bursting their banks, lands flooding, roads being destroyed and cut off and local infrastructure coming under strain in and around Mealagh, Bantry and the wider Kealkill area. In that context, a flood assessment which leans heavily on mapping and non technical modelling, fails to address actual documented and widely publicised flood events and should not be accepted by the Board.

The Cork County Development Plan 2022–2028 is also directly relevant through Objective WM 11-15. It requires flood risk to be assessed in accordance with the Flood

Risk Management Guidelines and reinforces the need to address real downstream conditions, run off and known flood susceptibility. MKO fail in their assessment to include the vulnerability of these flood areas and therefore, fail to comply with this lawful objective.

7. The Owngar Crossing and Watercourse Interference

MKO greatly understates potential damage regarding their proposed new crossing on the Owngar River and is one of the most unsubstantiated parts of their application. The Owngar is not a minor watercourse which can be damaged first and dealt with later. It is a watercourse in a highly responsive upland catchment and carries a direct pathway to the Owvane downstream. Once heavy machinery, excavation, road construction, trenching and drainage changes occur, the resulting damage would not remain confined to the works areas, but carried downstream through the watercourse.

MKO cannot treat this as routine engineering works. Flooding has already been documented and demonstrates how local rivers can rise rapidly, overflow and damage land, roads and infrastructure. The Owngar River is a crucial catchment area and the Board should not accept more broad reassurances. A crossing in this location has the capacity to concentrate several of the project's core risks into sediment release, peat fines, polluted runoff, drainage alteration, bank disturbance, fish passage interference and downstream water quality impacts.

The Board should have been presented with exact crossing drawings, a fully worked construction plan, seasonal restrictions, fish passage safeguards, sediment and pollution controls and emergency shutdown protocols. MKO has given no clear evidenced proof that scopes to Inland Fisheries Ireland would be fully adhered to. This must result in a planning refusal from the Board.

8. Inland Fisheries Ireland Requirements

Inland Fisheries Ireland (IFI) scoping response raises another red flag within the application. IFI identified the upper Owvane, Mealagh and Bandon catchments and tributaries as significant salmonid fisheries and required suspended solids and hydrocarbon contaminated runoff to be controlled, thus ensuring no pollution of surface waters can occur.

IFI requires MKO to identify and zone the project for environmental impact in the event of peat movement, set out a contingency peat slippage plan and provide an early stage silt control plan. Where crossings are bridged or culverted, IFI requires fish passage to be unobstructed, the original slope of the river bed maintained and design details be incorporated at planning stage.

These are not minor warnings from Inland Fisheries Ireland, which can be swept into a general Construction Environmental Management Plan (CEMP). They come from our highly respected statutory fisheries authority, regarding sensitivity of the receiving waters and the perceived risks attached to this industrial-scale development. Enerco Energy and their agents MKO have not met these requirements and this should weigh heavily against permission by the Board.

9. Freshwater Pearl Mussel and Sensitive Areas

MKO's handling of our precious Freshwater Pearl Mussel lacks foundation and assessment. MKO acknowledge the receiving environment is Pearl Mussel sensitive and their baseline records positive Freshwater Pearl Mussel detections on the grid connection route. Freshwater Pearl Mussel only survives where river conditions remain pristine, stable and close to natural background levels. It is acutely sensitive to fine sediment, siltation, nutrient enrichment and hydrological disturbance. Once an EIAR application enters sensitive Freshwater Pearl Mussel catchments (e.g. SAC Bandon, Owvane and the Mealagh) a high level of planning, precision and caution should have been attached to this by MKO and they failed to do so.

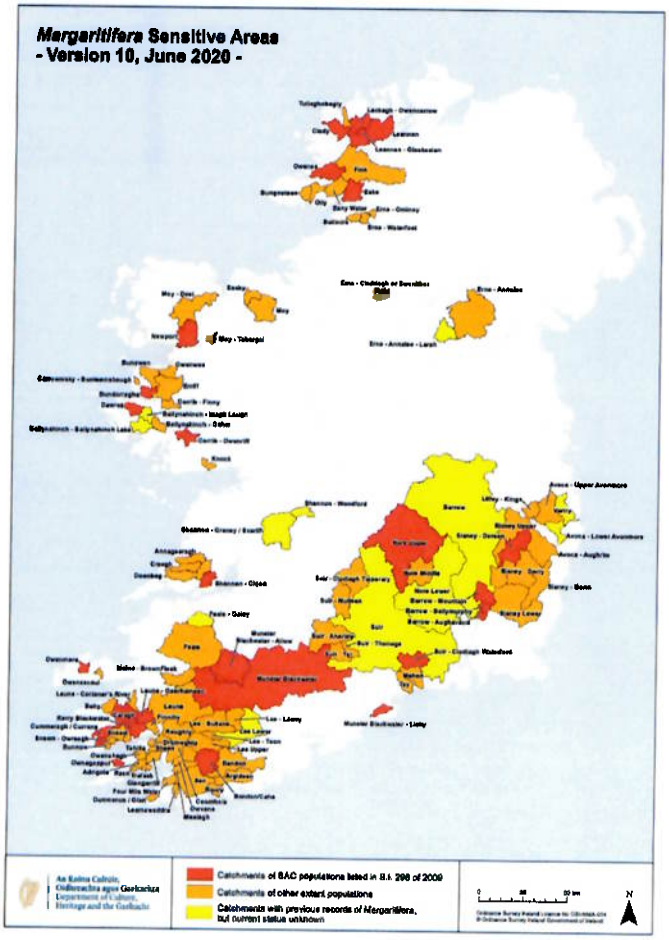


Figure 3. Margaritifera sensitive areas map, showing catchments in Ireland associated with Freshwater Pearl Mussel populations, including sensitive catchments in West Cork.

MKO relies on generic construction controls and fails to properly assess the degree of protection required for one of Ireland's most vulnerable freshwater species. The material contains no clearly defined freshwater pearl mussel specific turbidity thresholds, no convincing suspended solids trigger levels, no receptor specific monitoring framework and no species specific protective focus around confirmed risks. As an important species, the Freshwater Pearl is justified in being handled with caution and planning, MKO undertook none of the above criteria on this vulnerable species.

10. Bandon River SAC and Appropriate Assessment

The hydrological link to the Bandon River SAC cannot be dismissed because MKO state parts of the grid route run within a road carriageway. Road based works create risks from excavation, dewatering, sediment laden run off, accidental spillages, trench drainage failures and sediment washout during periods of heavy rainfall. Where a European site and Freshwater Pearl Mussel sensitive catchment are involved, substantially more precautionary measures should have been addressed by MKO.

MKO has failed in their exclusion of adverse effects in relation to sediment, hydrology, pollution, runoff routing, crossings or Freshwater Pearl Mussel habitat. The Enerco Energy project contains risks as it enters the catchment, impacts hydrology and introduces construction work into pathways connected to protected aquatic habitat.

The Board should not accept any assessment that depends on vague reassurance, where a high degree of criteria and legal certainty is required.

11. Protected Aquatic Species, River Habitats and Habitat Quality

The rivers and streams affected in MKO's proposal support Atlantic salmon, brown trout, sea trout, European eel, lamprey, otter and other species dependent on clean water, stable riverbeds, free passage and a healthy riverbank habitat They are part of the ecological fabric of the Maughanaclea Hills. Once damaged, these river systems may be difficult, slow and uncertain to restore and repeated declines in habitat quality would have lasting consequences. Inland Fisheries Ireland states that gravel provides habitat for salmon, trout and lamprey and continuity in rivers is critical for the free movement of migratory species, such as Atlantic salmon, sea trout, lamprey and European eel. This must be considered by the Board.

MKO use mitigation, as though these rivers can absorb repeated crossings, road drainage interactions, peat disturbance, runoff changes and new hard surfaces, all without real ecological consequence. MKO has failed to prove in their assessment that habitats will not deteriorate, fish passage not obstructed, nursery and spawning conditions not degraded and river corridors not eroded by construction. MKO has not

put forward any substantive data based evidence to refute these ecological consequences.

12. Peat, Sediment and Pollution at Source

Turbine foundations, hardstanding, access roads, borrow pits, drainage works, grid cabling, forestry clearance, peat excavation and spoil handling are all activities that will disturb slope stability, strip protective ground cover, alter drainage pathways and release fine sediment into connected waters. Once that sediment enters the system, the damage is done. The risk is all the more serious as blanket bog is a globally rare habitat. The Environmental Protection Agency of Ireland (EPA) has stated that blanket bog accounts for less than 3% of the world's peatlands. The Irish Peatland Conservation Council states that Ireland holds 8% of the world's blanket bog resource. The National Parks and Wildlife Service position, as reflected in Government material, is that Ireland holds 99.9% of the blanket bog resource within the EU Atlantic Biogeographic Zone. These are not ordinary lands, they are vital peatland systems of exceptional sensitivity.

In a catchment area of this sensitivity, where peat movement, sediment release and polluted runoff may travel quickly into downstream waters, prevention at source is the only lawful and rational course. The EPA makes clear that "at source" means the catchment areas contributing water to abstraction points, while Inland Fisheries Ireland states disturbance of salmonid spawning gravels is an offence. MKO's reassurance of future monitoring should not be accepted by the Board.

Monitoring after pollution occurs is not a substitute for prevention and NPWS states that groundwater flow and sediment dynamics are fundamental to suitable freshwater pearl mussel habitat.

13. Over Reliance on Mitigation, Monitoring and Future Management

Repeated failures occur in this application, with ongoing attempts to push immediate problems off into mitigation, future management and later monitoring, as though these measures can somehow repair uncertainty and multiple errors. Under EU law, mitigation cannot lawfully be left in broad outline or kicked down the road for later refinement, agreement or control. The Board should not grant permission where essential protections depend on future assurances and do not adhere to present day planning laws.

14. Cumulative Effects

I address the hydrological and ecological effects of this project together. The Environmental Protection Agency (EPA) states that many Irish waters are already under pressure, with agriculture the most significant pressure on over 1,000 waterbodies,

followed by physical pressures on rivers and streams, forestry and urban wastewater. It also identifies nutrient losses, changes to habitat conditions and organic pollution as the dominant impacts driving risk.

In relation to Enerco Energy's Maughanaclea Hills application, it must be accepted that The Water Action Plan 2024 and Ireland's River Basin Management Plan are built around integrated catchment planning to protect and restore water quality. National Parks and Wildlife Service go further in its freshwater pearl mussel catchment guidance and states that siltation and nutrient enrichment are catchment wide issues and that negative impacts are cumulative and often observed at considerable distance from the source. NPWS also states that those pressures are closely linked with land use in the catchment, including forestry, construction and land drainage.

Based on the above, the Board should have received a strongly based cumulative assessment from MKO regarding the Owvane, Owngar, Mealagh and Bandon catchments, including evidence of no significant cumulative effects, merely 'anticipated' does not comply with good planning law.

In upland catchments already under multiple pressures, the Board should not accept a bare assertion that cumulative effects will be 'insignificant.' It should have received a catchment evidence based plan, complete with criteria on why those combined pressures would not worsen downstream conditions.

Furthermore, Local Authority Waters Programme (LAWPRO) the body in Ireland working with local authorities, communities, landowners and public bodies on protecting and improving water quality under the Water Framework Directive states that catchment assessment should clarify the multiple impacts that can build up and reach waters, habitats and water supplies of the watercourse catchment area. The EPA states that the source pathway receptor framework is the first step towards identifying the most appropriate measures.

Therefore, MKO's assessment should have identified the overlapping pathways in evidence based terms and given reasons why this development would not worsen water quality, habitat condition or downstream floods. On a site of this scale, in upland catchments already and subject to multiple pressures, MKO has not submitted a proper cumulative assessment to the Board.

15. Overview - crucial MKO omissions

- Complete schedule and map of all private wells, springs, boreholes, group water connections, farm supplies, mains water infrastructure and public water supply sources within the site zone, plus baseline monitoring and emergency replacement criteria
- Full schedule of each watercourse and drain crossing, culvert, bridge, buffer area, cable trench and road drainage connections, including construction methodology,

seasonal restrictions, fish passage measures, sediment controls and emergency protocols

- A Freshwater Pearl Mussel specific assessment addressing Owvane, Mealagh and Bandon/Caha catchments sensitive areas for Freshwater Pearl Mussel, Bandon River SAC, sediment risk, release of nutrients into nearby waters, strict preventative measures during storms and high rainfall.
- A more rigorous flood and runoff assessment incorporating documented flood issues in the Mealagh Valley and other receiving areas, rather than reliance on desk based mapping and modelling.
- Clear evidence that Inland Fisheries Ireland scoping issues has been fully and lawfully followed.

16. Conclusion

Enerco's agents MKO, acknowledge sensitivity on this landscape and confirm hydrological connectivity to the Owvane, Owngar, Mealagh and Bandon systems. They record very high rainfall, high surface runoff, extreme groundwater vulnerability, short flow paths emerging at springs and streams, very sensitive downstream public drinking water sources, significant salmonid waters and freshwater pearl mussel risk catchments, associated with the grid route and multiple watercourse crossings, including a new crossing on the Owngar River.

However, a far more rigorous, precautionary and site specific assessment was essential for consideration by the Board, but what was presented, lacks complete, precise and definitive evidence required for consent for a project of this scale and sensitivity on the Maughanaclea Hills. MKO has not provided the crucial evidence required to demonstrate that the proposed development will not adversely effect private wells, mains water infrastructure, public water supply, the Owvane, Owngar, Mealagh and Bandon catchments, freshwater pearl mussel, salmonid fisheries, otter and other protected aquatic species, the Bandon River SAC, peatland hydrology or local flood behaviour.

In the absence of non adherence to these laws, directives and objectives, Enerco Energy and their agents MKO, do not meet the standards required by the EIA Directive, Habitats Directive, Water Framework Directive, Freshwater Pearl Mussel Regulations, Wildlife Acts and the wider obligation of protection.

Based on all of the above, this application should be refused by the Board. If granted, this non compliance, would certainly be matters that could be brought forward in any Judicial Review.

17. References

Chapter 6 Biodiversity

Hydrology, aquatic ecology, protected species, Inland Fisheries Ireland scoping, and sensitive water receptors.

Appendix 6-3 Aquatic Baseline Report

Fish, otter and other aquatic survey information.

Chapter 8 Land, Soils and Geology

Peat, spoil, borrow pits and peat stability issues.

Chapter 9 Hydrology and Hydrogeology

Groundwater vulnerability, flow paths, wells, stream buffers and hydrological constraints.

Appendix 4-3 Construction and Environmental Management Plan

Proposed drainage, pollution control and construction stage protection measures.

Appendix 9-1 Flood Risk Assessment

Rainfall, runoff, flood mapping, local hydrology, designated sites and proposed drainage measures.

Relevant project drawings

Access roads, watercourse crossings, drainage, peat and spoil management and grid connection route.

18. Legal and Policy References

The main legal and policy documents relied on in my submission are:

Planning and Development Act 2000, as amended

Environmental Impact Assessment Directive

Directive 2011/92/EU, as amended by Directive 2014/52/EU.

Habitats Directive

Council Directive 92/43/EEC.

Birds Directive

Directive 2009/147/EC.

Water Framework Directive

Directive 2000/60/EC.

Freshwater Pearl Mussel Regulations

European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations 2009.

Birds and Natural Habitats Regulations 2011

Wildlife Acts 1976 to 2023

EPA Guidelines on EIARs (2022)

Inland Fisheries Ireland guidance on protection of fisheries during construction works

The Planning System and Flood Risk Management Guidelines for Planning Authorities (2009)

Cork County Development Plan 2022–2028

19. Technical and Scientific References

Environmental Protection Agency

Survey of GHG Emission and Sink Potential of Blanket Bog in Ireland

Irish Peatland Conservation Council

Ireland's share of the world's blanket bog resource

Department of Housing, Local Government and Heritage / National Parks and Wildlife Service

Ireland's share of the blanket bog resource within EU Atlantic Biogeographic Zone

20. Legal References

Sweetman and Others v An Bord Pleanála (Case C-258/11)

People Over Wind and Sweetman v Coillte Teoranta (Case C-323/17)

Holohan and Others v An Bord Pleanála (Case C-461/17)

Biodiversity

Introduction

I have major concerns in that Enerco Energy's agents MKO repeatedly acknowledge ecological sensitivity, habitat loss, hydrological risk and uncertainty, yet attempt to manage these through off setting and post consent monitoring. All of their biodiversity chapters must be strenuously examined as a complete assessment should have been put before the Board before application, not thrown into post consent monitoring.

MKO's own biodiversity chapter includes Annex I habitats in which the National Parks and Wildlife Service (NPWS) specifically raised in consultation regarding the following:

- The loss and degradation of peatland and heath habitats
- The site is one of the few remaining open upland peatland and heath areas locally
- The surrounding land uses may affect the success of the proposed wet heath enhancement area
- The hydrological impacts on watercourses and downstream freshwater pearl mussel

1. Legal and policy

The Board will be aware that Under the Habitats Directive, Member States must avoid deterioration of natural habitats and the habitats of species, including disturbance of the species for which Special Areas of Conservation (SAC) are designated, a protected site, designated under the Habitats Directive for important habitats and species. Any industrial developments such as the one proposed by Enerco Energy for the Maughanaclea Hills, close to Bantry, West Cork, would have significant impacts and must be subject to the strictest assessment by the Board. The Birds Directive also requires special conservation measures for Annex I birds and prohibits deliberate disturbance. In Ireland, these duties are reinforced by the Wildlife Acts, the European Communities (Birds and Natural Habitats) Regulations 2011 and the public sector biodiversity duty introduced by the Wildlife (Amendment) Act 2023. This requires public bodies to adhere to the objectives and targets of Ireland's 4th National Biodiversity Action Plan.

The Cork County Development Plan 2022–2028 requires this same strict adherence. Objective BE 15-1 requires compliance with national biodiversity protection policy and Objective BE 15-6 requires biodiversity to be protected and enhanced in the development management process. Those objectives are crucial when private wind developers target rural lands in West Cork and where biodiversity effects must be scrutinised under rules of planning law. MKO's material identifies Annex I peatland and

heath habitats, aquatic receptors, protected species and the need for long term management and monitoring. This is clearly an attempt to counteract losses. The Board is entitled to apply the highest level of scrutiny to this Enerco Energy application, because as a private wind farm developer, the construction of 14 huge 169 metre high turbines and all associated works, would greatly impact our biodiversity.

2. The assessment

MKO suggests it followed a precautionary approach in the Biodiversity chapter, yet its own material does not stand up to scrutiny. The chapter relies heavily on general TII road scheme ecology guidance, disregarding the fact that this would be an industrial-scale wind farm and grid connection crossing peatland, upland and hydrologically sensitive rural lands. A major weakness which MKO confirm, is that no survey limitations were identified, but also accepted is that certain species may be seasonally absent, nocturnal or cryptic.

Crucially, MKO's survey for the highly protected Kerry slug was not carried out until 5 December 2025. A December survey automatically makes this mostly invalid for the Board, as Kerry slug is not an ordinary species in planning terms. National Parks and Wildlife Service (NPWS) state that it has a very small global range, being restricted to north west Iberia and south west Ireland and listed under Annex II and Annex IV of the Habitats Directive. NPWS also records that seven Special Area of Conservation (SAC's) have been designated for it in Ireland. That level of protection is crucial in biodiversity. This species is of recognised European importance and the Board must see it as presented by MKO as a minor tick box from a December 2025 winter survey.

The timing of the survey is extremely convenient for the benefit of MKO's data. Both NPWS and Transport Infrastructure Ireland (TII) state that Kerry slug activity depends heavily on conditions. NPWS states that Kerry slugs emerge to feed in very damp and humid conditions, on warm damp days during or after rain or at dawn, dusk and during the night, if it is not too cold or dry. TII also state that surveys can be carried out all year round, but periods of excessive cold or drought should be avoided as survey efficiency is considerably reduced and cloudy damp daytime surveys are less efficient than nocturnal surveys.

There is also published evidence that timing affects detection. A peer reviewed study on monitoring Kerry slug found that autumn is the optimal time for sampling, while avoiding extremes of hot or cold weather. The Board should be cautious about any attempt to treat a 'convenient December visit' as if it had no limitations, particularly for a species whose detectability is known to vary with season and weather.

3. Annex I habitats

MKO's biodiversity Annex I habitats material is substantially weak. The chapter shows a direct loss of approximately 0.2 hectares of degraded blanket bog and a loss of approximately 2.02 hectares of degraded wet heath. It also accepts that, even after mitigation, there will be a residual significant effect on blanket bog habitat arising from the loss of approximately 0.2 hectares of degraded blanket bog. The weakness in this chapter is that it does not end with a clean bill of ecological health, it ends with MKO admitting a significant residual effect on an Annex I peatland habitat.

Figure 1. Two bees found in our garden in the Mealagh Valley, a small but important reminder that this rural landscape supports everyday pollinators and biodiversity directly around local homes, gardens, hedgerows and fields.

The residual effects are also attempted to be lessened by MKO on the Biodiversity Management and Enhancement Plan. For wet heath, they state that the loss near turbines T04 and T14 will be offset by felling about 5.3 hectares of young conifer plantation. This would be in an area where wet heath previously existed, with restoration and a monitoring plan to follow. In substance, MKO shows that the project still needs compensatory habitat work over a long period of time. This is an attempt to make the biodiversity balance acceptable to the Board.

Reading the consultation record is deeply troubling. National Parks and Wildlife Service highlight their concern about the loss of Annex I peatland and heath habitat within the wind farm site, describing the site as one of the few remaining open upland peatland and heath sites in the area and warning that surrounding land uses, including grazing, drainage and land reclamation, may affect the success of the proposed wet heath enhancement area. The Board should note their warnings, as it means the success of the offsetting strategy, is not fully under Enerco's control. It depends on external land management conditions and long term compliance. The Board is entitled to ask whether the proposed enhancement area is a reliable ecological solution or another of the many assumptions that run through this application.

Figure 2. Mealagh Valley landscape looking towards the Maughanaclea Hills, showing the open rural character, farms, hedgerows and biodiversity that would be affected by the proposed wind development.

The Biodiversity Management and Enhancement Plan (BMEP) confirms a lot of future management is needed as it sets out long term monitoring for native woodland and peatland restoration at 1, 2, 3, 5, 10, 15, 20 and 30 years. Seeking consent from the Board makes this very problematic, as Enerco's agents MKO are asking the Board to approve habitat loss now, but on the basis that ecological restoration may be delivered and maintained over decades. Their ecological solution is based on guess work and yet again, future monitoring. This should not be acceptable to the Board and permission should be refused.

4. Aquatic ecology and hydrological risk

In the Enerco application, Inland Fisheries Ireland said the site encompasses the upper Owvane, Mealagh, Bandon catchments and tributaries, all described as significant salmonid fisheries. They specifically asked for contingency planning for peat movement, silt control and careful watercourse crossings treatment. MKO records that composite water samples were collected for freshwater pearl mussel, white clawed crayfish and crayfish plague and that NPWS raised hydrological impacts on downstream freshwater pearl mussel and other aquatic receptors during consultation.

This should be deeply concerning to the Board as freshwater pearl mussel is not an ordinary receptor. NPWS describes it as highly threatened and critically endangered in Ireland and across Europe. The species is exceptionally sensitive to sedimentation, hydrological change and deterioration in water quality. In a peatland wind farm with tracks, excavations, drainage and watercourse crossings, destruction is inevitable. In essence, The Board is being asked to consider an SID wind farm development in a landscape, where NPWS has flagged peat movement, silt release, downstream linkage and mussel sensitivity.

If hydrological risk is important enough to engage IFI, NPWS and freshwater pearl mussel testing, then MKO fail, as their biodiversity case is already deeply flawed at this application stage.

5. Kerry slug: the project's own documents show that this is not a minor issue

The biodiversity chapter confirms that the proposed wind farm lies within the known range of Kerry slug. As mentioned, it records hand searches on 5 December 2025, acknowledges suitable habitat in forestry, peatland and rocky areas. It also confirms presence at one location within the proposed wind farm site and states that the project will result in the loss of 44 hectares of conifer plantation or recently felled woodland together with about 2.02 hectares of degraded wet heath, which are treated as suitable

Kerry slug habitat. Shockingly so, a derogation licence in Appendix 6-6 confirms that MKO give recognition to the fact that direct interaction with a strictly protected species would take place, as part of the wind farm construction.

It is evident that Kerry slug risks will attempt to be managed through displacement and later monitoring. The seeking of derogation by MKO does not change the fact that a protected site specific species will be impacted. A derogation licence does not oblige the board to grant permission. As our leading planning authority, permission can still be refused for a wind farm application, even if a derogation exists.

Backing this up, NPWS's own licence wording says that a derogation "does not provide consent to proceed" with works that need another approval, such as planning permission. NPWS's current Article 17 says Kerry slug has a favourable and improving overall status in Ireland, helped in part by large populations in conifer plantations. This strengthens the fact that conifer plantation habitat cannot be dismissed as ecologically expendable.

6. Bats: The application material gives no reassurance

MKO presents the site as generally low risk for bats, referring to limited linear features, modest habitat suitability and activity levels said to be typical of conifer plantation, wet heath and agricultural grassland. However, their material also records high collision risk species on site, localised areas of elevated activity, need for curtailment, blade feathering, felling buffers and at least three years of operational monitoring. This proposed wind farm site on the Maughanaclea Hills is certainly not low risk, if it requires that level of operational control regarding predicted harm to this protected species.

a) Significant effects before mitigation

MKO's biodiversity chapter records Leisler's bat, common pipistrelle, soprano pipistrelle and Nathusius' pipistrelle during their surveys. They then apply precaution relating to the proposed wind farm operation, with the potential to result in long term harmful effects on the local bat population, before mitigation. This should cause concern to the Board.

(b) The survey results show a bat community relevant to turbine risk.

The bat report strengthens that concern. Across all deployments, 73,383 bat passes were recorded. Common pipistrelle being the dominant species, then Leisler's bat, Soprano pipistrelle and Myotis species. Nathusius' pipistrelle and lesser horseshoe bat were recorded, but less frequently. Lesser horseshoe bat accounted for 93 passes, but it must be noted that activity was not evenly spread across the site. The report records high median activity for Leisler's bat in summer and high median activity for common pipistrelle in spring. It also accepts notable localised increases. This all equates to site

specific evidence of protected bats, using only parts of the Maughanaclea Hills and directly relevant to turbine collision risk.

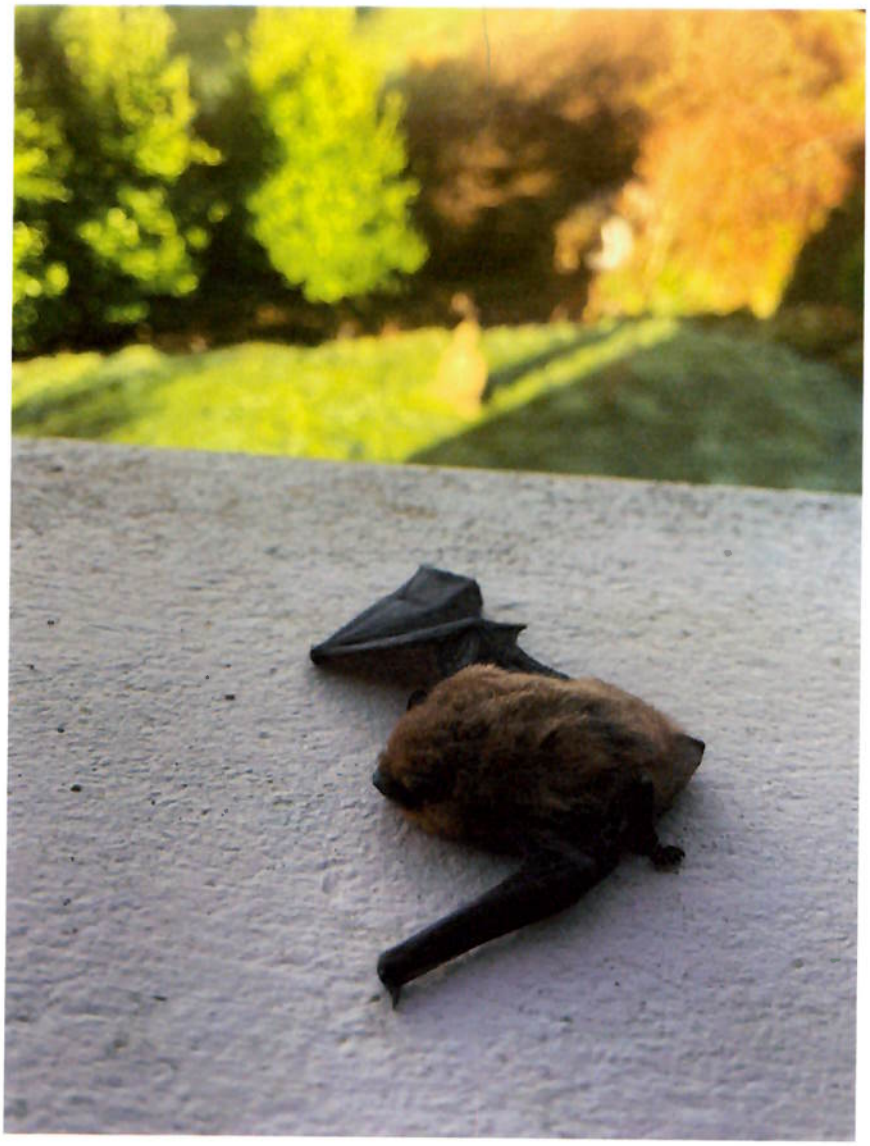


Figure 3. Bat resting on window sill, at our home in the Mealagh Valley

(c) Legal and conservation increases evidence

All Irish bat species are strictly protected under the Habitats Directive and Irish law. Lesser horseshoe bat has the added protection of Annex II as well as Annex IV. The report notes that lesser horseshoe bat remains in an inadequate conservation status in Ireland. It also notes that Nathusius' pipistrelle has an unknown conservation status and that wind, wave and tidal power infrastructure is expressly identified as a pressure or threat for that species. Wind infrastructure is also identified as a pressure for Leisler's bat. This is important as these species are not being assessed against a conservation

background, but in the context of an industrial-scale wind farm with 14 turbines, each standing 169 metres high into the skies across the Maughanaclea Hills.

(d) The treatment of lesser horseshoe bat

MKO's desk study identified eleven lesser horseshoe bat roosts, within the overlapping hectares. The nearest known roost is stated to be around 2 kilometres from the proposed grid connection and about 5.5 kilometres from the nearest proposed turbine. MKO relies heavily on distance, absence of roost features within the immediate turbine area and in their assumptions about flight behaviour, argue that it is low risk. Lesser horseshoe bat is a strictly protected species in a conservation status and it is accepted that the nearest known roost falls within the wider Dunmanway area, a point flagged by the Development Applications Unit. The Board should not accept a report that focuses distance and generalisation of this protected species and should refuse permission.

MKO try to guess what level of restriction might be necessary after consent and construction, even though they are aware of local zones of elevated activity and where high collision risk species have already been recorded. All of this, plus carcass searches, monitoring and a curtailment regime should have been fully resolved, before this application was even put before the Board.

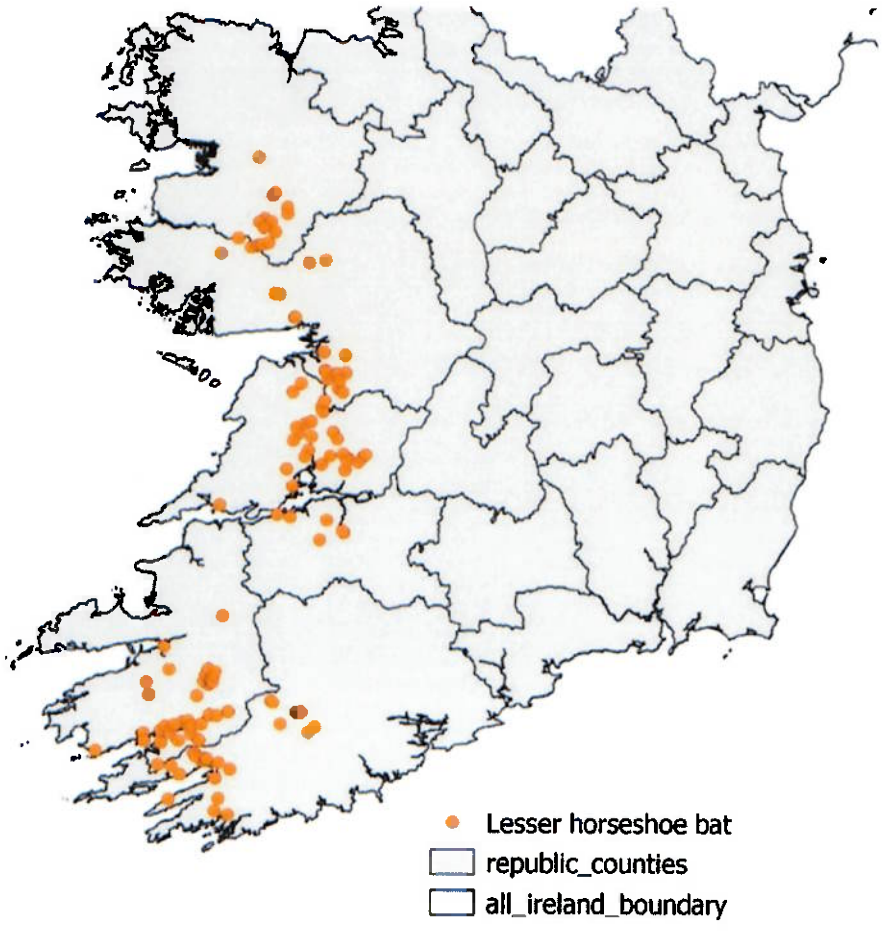


Figure 3. Lesser horseshoe bat distribution in Ireland (BCIreland Database 2010-2021)

(e) Bat mortality

Bat mortality at wind turbines is well documented. Bats are killed not only by collision with blades, but also by barotrauma, (injury caused by rapid air pressure changes near moving blades). According to Science magazine: "Scientists estimate that millions of bats die every year after slamming into giant blades, making turbines one of the top killers worldwide. But just what exactly lures bats to turbines in the first place is a mystery. New laboratory experiments suggest the key is light. Bats use the brightness of the open sky to navigate - a visual cue replicated by light reflecting off turbine blades. Much like a moth drawn to the flame, these reflections create an 'ecological trap,' drawing bats into fatal collisions."

European bat authorities have also long recognised wind turbine mortality. EUROBATS has warned that recorded carcass numbers are likely to understate true mortality, due to scavenger removal, search failure and incomplete search area coverage.

(h) Cumulative collision risks exist

MKO's very weak bat report identifies one existing wind farm and three proposed wind farms within five kilometres of the proposed turbines, with additional wind farms and other developments within ten kilometres. They include no spatial or functional linkages were identified, which would give rise to cumulative bat effects. MKO clearly needed to have undertaken more research before presenting their assessment to the Board. Bats do not move within neat boundaries, they are highly mobile nocturnal mammals using wider landscapes, edges, shelter, woodland margins and foraging grounds. In a landscape such as the rural lands of The Maughanaclea Hills which is already being targeted by multiple private wind developers, the absence of a shared roost, does not mean the absence of cumulative collision risk or cumulative pressure on movement and feeding patterns.

(i) Cumulative effects acknowledged

The chapter states that cumulative impacts with other wind farms in the area have been assessed and notes that both IFI and NPWS asked for comprehensive cumulative treatment. This is important as the biodiversity and ornithology material must be considered against a wider landscape of wind energy proposals, peatland habitats, aquatic pathways and protected species. A cumulative assessment that mentions reviews of other wind farms, should have explained the reasons why combined pressures of habitat loss, disturbance, changes to drainage, sediment risk and species displacement still remain acceptable in this Enerco application. They reduce the importance of direct

habitat loss and underplays how multiple effects can accumulate in an already pressurised upland landscape, such as The Maughanaclea Hills.

(j) Irish planning and biodiversity policy should matter

As the Board is aware, Cork County Development Plan Objective BE 15-1 requires support for and compliance with national biodiversity protection policy. Objective BE 15-6 requires biodiversity protection and enhancement through development management. Those objectives are not followed by MKO, as their assessment depends on future restoration, long term habitat management and post consent mitigation.

9. Conclusion

In planning terms, MKO's biodiversity material is uncertain, mitigation dependent and too reliant on future ecological fixes. Their material admits direct losses to Annex I habitat, a residual significant effect on blanket bog, records a hydrologically sensitive receiving environment and depends on derogation and translocation measures for a protected species. When these are all compared with legal obligations under the Habitats Directive, the Birds Directive, Irish wildlife law, the National Biodiversity Action Plan and Cork County Development Plan Objectives BE 15-1 and BE 15-6, the Board has significant lawful reasons to refuse permission to Enerco Energy on biodiversity grounds.

References

Chapter 6 Biodiversity; Appendix 6-1 Botanical Survey Report; Appendix 6-2 Bat Report; Appendix 6-3 Aquatic Baseline Report; Appendix 6-4 Biodiversity Management and Enhancement Plan; Appendix 6-6 Kerry Slug Derogation Licence.

Chapter 6 Department and NPWS consultation responses on Annex I habitat loss, hydrological linkage, freshwater pearl mussel, and cumulative assessment.

Chapter 6 Kerry slug survey date and statement that no survey limitations were identified.

Chapter 6 direct Annex I habitat loss, 5.3 ha wet heath restoration proposal, and the admitted residual significant effect on approximately 0.2 ha of degraded blanket bog.

Chapter 6 Kerry slug presence, loss of 44 ha of conifer plantation/recently felled woodland and approximately 2.02 ha of degraded wet heath treated as suitable habitat.

Appendix 6-4 BMEP, monitoring table: woodland and peatland monitoring proposed at 1, 2, 3, 5, 10, 15, 20 and 30 years.

Bat Report and Chapter 6 summary: localised elevated bat activity at detectors D02, D03, D08 and D09, with the project stating that curtailment may be devised after Year 1 monitoring if required.

Official sources

Cork County Development Plan 2022–2028, biodiversity objectives including BE 15-1 and BE 15-6 (Cork County Council).

Ireland's 4th National Biodiversity Action Plan 2023–2030 and the public sector biodiversity duty (NPWS / Department of Housing, Local Government and Heritage).

Habitats Directive 92/43/EEC, Article 6 and species protection provisions (EUR-Lex).

Birds Directive 2009/147/EC, Articles 4 and 5 (EUR-Lex / European Commission).

NPWS material on freshwater pearl mussel species as highly threatened and critically endangered in Ireland.

NPWS Article 17 on Kerry slug and official NPWS biodiversity material on protected habitats and species.

Baerwald et al. (2008), evidence of bat mortality at wind turbines from both collision and barotrauma. References

Science Magazine - Bats may mistake wind turbines for open sky, causing deadly collisions

EUROBATS guidance and resolutions on wind turbines and bat populations

NPWS guidance - confirming that all bat species in Ireland are strictly protected.

ORNITHOLOGY

Introduction

There are significant concerns regarding the manner in which Enerco's agents, MKO, has assessed ornithology on the Maughanaclea Hills. Their own survey records important and sensitive bird species, including chough, hen harrier, peregrine falcon, red grouse and white-tailed eagle. Yet their conclusions are repeatedly downplayed, describing effects as 'slight, imperceptible or not significant.' These interpretations are flawed, considering the importance of ornithology and the subject of birds in the environment of an industrial-scale wind farm proposed for the Maughanaclea Hills.

1. Legal and policy framework

The Board must compare the MKO ornithology assessment with binding European law, Irish law and Cork County Development Plan objectives. These require the Board to ensure biodiversity and landscape protection are treated as real constraints and are not as MKO has presented here.

- Directive 2009/147/EC deals with the conservation and protection of wild birds, their habitats and protection against deliberate disturbance, especially during breeding and rearing. The Board must note that Annex I species require special conservation measures.
- The Habitats Directive 92/43/EEC and associated Appropriate Assessment require strict precautions, where there is any risk of effects on European sites supporting habitat or ecological function.
- The Wildlife Act 1976, as amended, protects wild birds, nests and eggs in Ireland. Section 22 is directly relevant to areas such as the Maughanaclea Hills, where breeding, roosting or disturbance close to nesting locations must be protected by law.
- The Planning and Development Act 2000, as amended, together with EIA framework and EPA guidelines information contained in EIARs 2022, require a complete and transparent assessment of likely significant effects, including limitations, uncertainty and mitigation, that is specific and reliable. MKO's EIAR fails in demonstrating this.
- Cork County Development Plan 2022–2028, Objective BE 15-1 requires compliance with national biodiversity protection policy and Objective BE 15-6 requires the protection and enhancement of biodiversity enhancement measures.
- Cork County Development Plan Objective GI 6-1 protects the visual and scenic amenities of the County and Objective GI 7-1 protects important views and the surrounding landscape setting. These objectives must be adhered to as upland bird

habitat, open landscape and scenic character are closely linked on the Maughanaclea Hills - the site being targeted for this industrial development.

The material compiled by MKO identifies protected and high sensitivity species, breeding activity, roosting activity, collision pathways and the need for post consent monitoring over many years. It is obvious that their baseline and impact assessment are fundamentally inadequate, for a development of this scale and sensitivity. MKO do not reach any certainty, care or scientific reliability which the Board is entitled to expect and there is ample evidence to refuse permission. Evidence to refuse as follows:

- MKO's study is built heavily around a 500 metre turbine radius and is too restrictive for a roaming upland and raptor species. However, MKO indicates that the birds use the wider hinterland and species such as hen harrier, peregrine and white-tailed eagle range far beyond that distance.
- This chapter repeatedly states that surveys were comprehensive, yet the collision appendix acknowledges major uncertainty, including night activity, avoidance behaviour and design uncertainty. Appendix 7-6 uses an expected turbine operational time of 85% from a 2007 British Wind Energy Association source - why would MKO use a 19 year old survey from another country in their argument to support this theory? MKO also uses a generic blade profile, as apparently no specific blade profile was available for the turbine model used in the assessment? MKO is being paid millions of euros by Enerco Energy to put this application together, yet they have no knowledge of the specific blade profile? Why would they leave the Board and the public without these details, instead only handing over this important specification, post consent?
- The collision model material often accepts evidence of use, breeding, hunting or avoidance, but then implies this is insignificant, as habitat is said to be widespread elsewhere?

2. MKO over reliance on 500 metre survey limit

The chapter defines the study area at the outset as a 500 metre radius from possible turbine locations. Appendix 7-6 states that the combined vantage point survey coverage was designed around a 500 metre radius from potential turbine positions. Appendix 7-7 then carries that same 500 metre approach into pre-construction and operational monitoring.

That is an unrealistic approach for a sensitive upland landscape. Birds do not plan their movements, feeding or breeding around a map drawing for a turbine layout. This issue is particularly relevant for chough, Hen Harrier and Peregrine, taking into account that

MKO's chapter itself accepts use of the wider surroundings, breeding territories outside the immediate footprint and movement across a broader landscape. A put together convenient framework that repeatedly draws the line at 500 metres, seriously risks how this development would sit within the larger foraging, roosting and commuting areas.

Legal issues arise here as the EIAR must assess likely significant effects of the entire project, not just effects chosen in some imaginary inner ring. Supporting habitat and ecological extend far beyond that line and MKO's assessment has to follow the ecology, not the convenience of an artificial survey limit.

These defects raise credibility and reliability issues in the application itself. For a project of this scale and sensitivity, the Board is entitled to expect precision, certainty and strong site specific evidence, not an assessment that continuously falls back on broad reassurance and no evidence of reliability. Negligible collision risk is unacceptable, where ornithology material depends on generic turbine assumptions, avoidance and a tightly bounded survey area.

4. MKO use of monitoring and unresolved risk

Appendix 7-7 again contains repeated monitoring post construction, including vantage point surveys, breeding raptor and Chough surveys, Red Grouse surveys and carcass collision searches in Years 1, 2, 3, 5, 10 and 15. This is a long term development and bird use, breeding activity and mortality issues should not be permissible by the Board, after turbines are in place. This a substantially weak assessment, full of assumptions and all made while seeking SID planning permission.

Chough

The Department of Housing, Local Government and Heritage in a press release dated 17th April, 2021 entitled 'National chough survey to help with conservation of rare bird' said: "The red-billed chough is one of our most charismatic birds, but one which is probably most familiar to those living along rugged Irish coastlines. The chough is a scarce bird associated with coastal fringes from Donegal to Wexford. Fewer than 850 breeding pairs along our coastline from Inishowen in Donegal to the Saltees in Wexford - they are very much a bird associated with western Atlantic coastal grasslands."

In that same press release Dr Sinéad Cummins, scientist in NPWS Science Biodiversity Section added: "We are very pleased to be undertaking a national assessment of these characterful birds this year. The data gathered is very important to ensure that Ireland can meet its international obligations to protect and enhance the small and precious population of chough around the Atlantic coastline of Ireland."

MKO's material relating to chough is full of contradictions. On one hand, it records breeding within the proposed wind farm site near the Owngar River, roosting within the site and repeated foraging within and around the site. However, it also accepts that chough is a high sensitivity species. The chapter repeatedly moves from 'high sensitivity' to 'slight negative' or 'imperceptible negative' and 'not significant'. Their flawed reasoning being: 'Only a small percentage of the site footprint is directly affected ; that habitat is available elsewhere; that there is little wind farm specific literature on chough displacement and that forestry disturbance distances can be used as a comparative measure'.

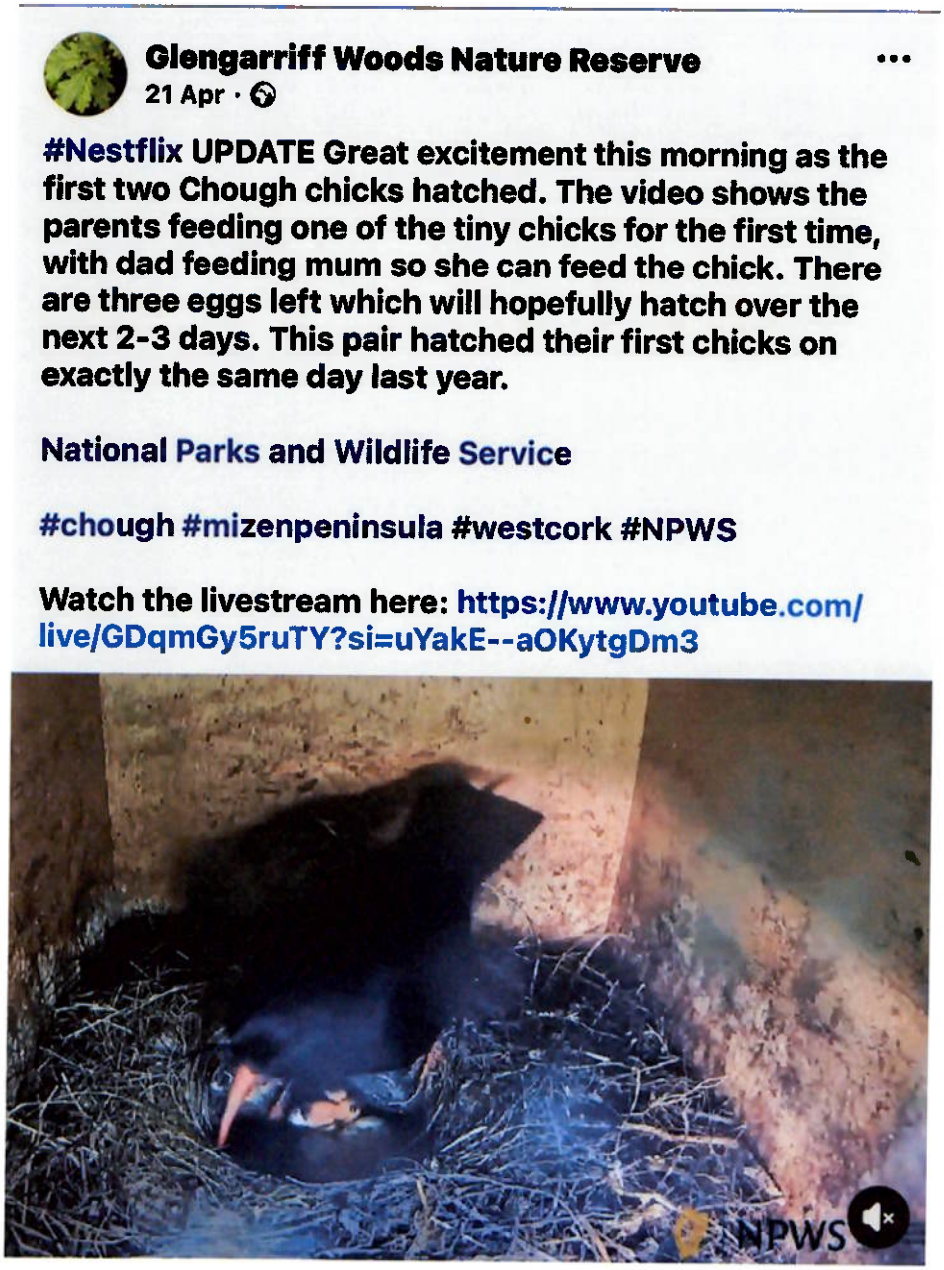


Figure 1. Chough chicks hatching in West Cork, recorded by Glengarriff Woods Nature Reserve and NPWS. A reminder that local landscapes support sensitive birdlife and breeding habitats that must be protected.

The MKO chapter accepts that chough were recorded flying within potential collision height. It then uses the example of Alpine chough mortality, as adult chough mortality is said to be unknown and claims to take a precautionary approach by choosing the lower 8% annual mortality figure. Choosing the lower figure greatly understates the seriousness of additional mortality and is flawed and contradictory. A lawful assessment to the Board should not reduce site mortality risks, while calling that 'precautionary.' The Board should have been presented with proper numerical assessments.

Hen harrier

The hen harrier assessment is completely inaccurate because it accepts nationally important winter use of the site, then narrows the implications. Chapter 7 records use of the site by up to three wintering hen harriers and treats that as a population of National Importance, while also accepting that the birds' origin cannot be determined from observation alone. Hen harrier is an Annex I species, the Mullaghanish to Musheramore Mountains Special Protected Area (SPA) is designated for hen harrier. In a press release dated 9th September 2024 issued by the Department of Housing, Local Government and Heritage in part reads:

"The plan sets out a roadmap to reverse the decline of this rare bird of prey and improve its long term prospects. The plan includes a series of co-ordinated, cross sectoral actions across agriculture, forestry and wind energy sectors. It builds on extensive public and stakeholder engagement and recognises the unique role of landowners and farmers in Hen Harrier conservation".

Minister of State for Nature, Heritage and Electoral Reform, Malcolm Noonan TD on 10th September 2024 launched the Hen Harrier Threat Response Plan (2024-2028). The plan describes the particular threats faced by this rare bird of prey. Minister Noonan said: "The publication of the Hen Harrier Threat Response Plan marks a significant milestone in our collective effort to prevent the extinction of our precious Skydancer. The plight of this iconic bird highlights the broader issues we face both nationally and globally in tackling the biodiversity crisis and its future is very much in our hands. It's vital that we now focus urgently and strategically on implementation. We must seize the opportunities presented in this Plan to deliver meaningful change to the management of our landscapes and protect our most vulnerable species."

The Government press material added: "The Hen Harrier is a ground nesting bird of prey that breeds in open upland bog, heather moorland and associated habitats. It has seen significant declines in recent years, and could face extinction within the next twenty-five

years if action is not taken. The Plan features clear actions to address key threats and pressures, such as land use change and climate change."

Niall Ó Donnchú, Director General with NPWS said: "This plan sets out a direction of travel to give the Hen Harrier a chance of survival. It is incumbent on us across the public sector to work together to ensure that the actions are implemented. I look forward to further engagement with government departments and agencies as we prepare for delivery of the Plan."

NPWS states that the species may forage up to about 5km from the nest site across open bog, moorland and hill farmland. NPWS's 2022 national survey also found the Irish breeding population had fallen to 85 confirmed and 21 possible pairs, down 33% since 2015, and identifies wind energy as a significant sectoral pressure capable of causing displacement, disturbance, reduced breeding success and mortality. NPWS further states that assessment and management must extend beyond SPA boundaries into the wider countryside and address functional landscape connectivity.

Against that background, MKO's lack of adequate understating regarding wind turbine risks and the site's real ecological role in a wider hen harrier landscape, must deeply concern the Board and permission refused.

Peregrine Falcon

MKO material states that Peregrine were observed regularly during surveys and that there was evidence of breeding in the wider area, although no nest was located. It also accepts county importance and carries out assessment of habitat loss, disturbance and collision risk. That combination should not give any reassurance to the Board. According to the National Parks and Wildlife Service, the breeding population of peregrine falcon in the Republic of Ireland is estimated at about 425 pairs and that between 2007 and 2019, Ireland's RAPTOR protocol recorded 33 confirmed peregrine incidents involving 36 birds killed or injured. Peregrines remain vulnerable to persecution at nest sites.

As evident throughout this application, MKO's overall presentation runs risk downwards and this includes the harmful impacts on Peregrines. The absence of a located nest does not mean breeding is irrelevant, but it does demonstrate their data is incomplete.

Red Grouse

MKO recognises Red Grouse as a county importance species and accepts potential habitat loss and disturbance or displacement. Their assessment then limits concern as there were no birds recorded flying at potential collision height, within 500 metres of turbines during vantage point surveys. This does not reduce collision concerns and nor does it answer the wider habitat and disturbance issue, where a red listed upland species is tied closely to the landscape of the Maughanaclea Hills.

Their monitoring programme also proposes later breeding Red Grouse surveys, which again suggests that uncertainty is being managed, by pushing these important issues post permission.

White-tailed eagle

MKO's treatment of white-tailed eagle is extremely inconsistent and problematic. Chapter 7 says the species is included on a precautionary basis, yet their assessment then relies on an exercise where no birds were recorded flying at collision risk height within 500 metres of the site. They limit their exercise to habitat loss disturbance and displacement, rather than carrying out a proper collision risk assessment for the Board.

Glengarriff Nature Reserve says The National Parks and Wildlife Service (NPWS) set up a live webcam to monitor a pair of white-tiled sea eagles breeding in County Cork and its facts page refers to the Garnish Island nest. Heritage Ireland describes Garnish Island as being in Glengarriff in Bantry Bay. NPWS has expressly identified wind turbine strikes as one of the main threats to the species in Ireland.

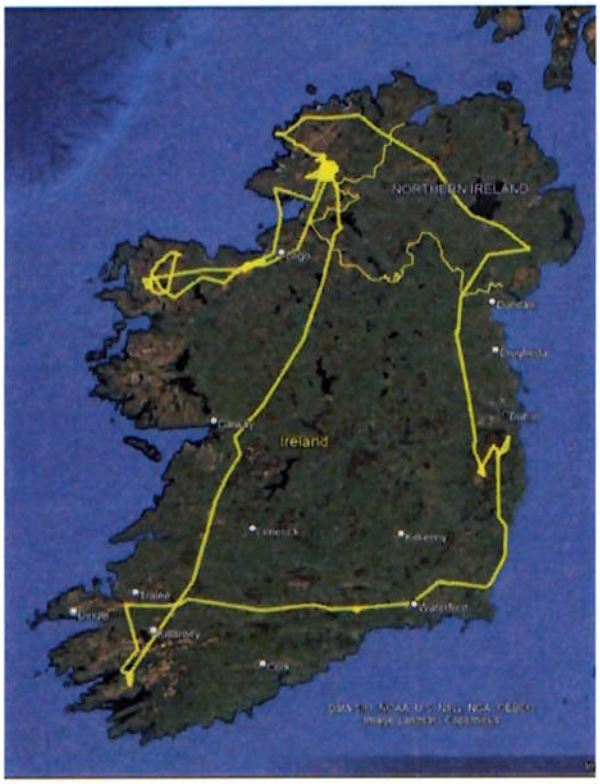


Figure 2. Satellite tracking map showing the 2025 Glengarriff White-tailed Eagle chick travelling around Ireland before returning to West Cork.

Figure 3. White-tailed Eagle associated with Glengarriff, West Cork. The species wide-ranging movements show why upland, coastal and inland landscapes cannot be assessed in isolation.

Eamonn Meskell, Divisional Manager, National Parks and Wildlife Service said: "The main threat to the species in Ireland is persecution, predominantly through shooting and the illegal use of poison and wind turbine strikes. The misuse/illegal use of poisons accounts for nearly 50% of eagle deaths where the cause of mortality was able to be determined. Other causes of death include wind turbine strikes, lead shot poisoning and shooting. Avian Influenza and adverse weather also negatively impacted the breeding population."

Minister of State for Nature, Heritage and Biodiversity, Christopher O'Sullivan TD said: "Any loss in the wild not due to natural causes, is usually the result of human activity and this tragic loss of a wonderfully aged bird, breeding happily in the Irish wild, is deeply regrettable. The Reintroduction Programme had been making significant progress in restoring this lost flagship species to Irish skies. These birds are part of Ireland's natural heritage and are important for our biodiversity, as they are a good indicator species regarding the health of our ecosystems."

Kestrel

The National Biodiversity Data Centre notes that the Common Kestrel is Red listed in Ireland for 2020–2026 signifying it is of high conservation concern. BirdWatch Ireland also identifies kestrel among the Red or Amber Listed Birds of Conservation Concern in Ireland. MKO's treatment of the kestrel as 'not significant' yet it accepts this species was regularly recorded on the proposed wind farm site and in the wider surroundings. The chapter says kestrel were resident, using the area for foraging and breeding and evaluates the population as of Local Importance (Higher Value). Yet, despite this, their assessment lessens effects into 'slight or imperceptible' conclusions. This demonstrates grave disregard for a species on this rural landscape that would be permanently altered by 14 turbines of this scale and height. In this application, once a species is accepted as regularly using the site for feeding and breeding, the Board should not accept well trotted out assurances that the effects are 'not significant.'

Snipe

BirdWatch Ireland states that snipe forage across a variety of wetland and damp habitats, with particularly high concentrations on the fringes of lowland lakes. A 2026 DAERA announcement referring to the Birds of Conservation Concern in Ireland list identifies snipe as one of the breeding wader species that are Amber or Red listed in Ireland. Snipe should not be disregarded simply because MKO presents the effect as limited. MKO includes snipe in the formal collision modelling and records the species in both breeding and winter periods, with the chapter identifying a population of Local Importance (Higher Value). In the Maughanaclea Hills consisting of an upland landscape of bog, wet ground and open habitats, disturbance and displacement are important to birds such as the snipe, even where MKO's collision figures are presented as low. The

Board should not accept another downplayed conclusion, where MKO's own application accepts that the snipe species merits conclusion in their collision assessment.

Buzzard

According to BirdWatch Ireland: "Despite this bird of prey becoming a common sight across most counties, it has had a difficult history in Ireland. Once thought to be a very widespread species, the Buzzard unfortunately went extinct in Ireland by the late 1890s. At the same time, serious population declines led other raptor species such as the White-tailed Eagle, the Golden Eagle and the Red Kite to also go extinct. However, unlike these birds, the Buzzard began to recolonise Ireland and reestablish itself naturally without and human led reintroduction." The key words here from BirdWatch Ireland are "went extinct in Ireland", so we are lucky to have this Irish raptor back in the skies above the Maughanaclea Hills. However MKO still reduce them to 'slight or not significant' terms. Buzzard is a large raptor using the same open uplands, skies and slopes that would be fundamentally damaged by turbine operation and rotor blades spanning over four acres. MKO cannot accept regular presence and breeding, hence they reduce their implications for permission purposes.

Sparrowhawk

BirdWatch Ireland says sparrowhawk is Ireland's most common bird of prey and is frequently seen in both urban and rural gardens. Even so, MKO's own material includes sparrowhawk in the collision risk modelling and records it in both breeding and winter periods, with evidence of breeding on or around the proposed wind farm site. Even if the sparrowhawk is not one of the main species in this chapter, it still forms part of MKO's own ornithological case. Its treatment is the same repeated pattern in their material - species acknowledged, evidence recorded, conclusions downplayed.

5. Incomplete collision risk assessment

MKO's collision risk assessment for this application is incomplete. The Board is entitled to expect a collision assessment that is complete and reliable for the most sensitive protected species associated with the site, yet Appendix 7-6 models only chough, peregrine falcon, kestrel, snipe, buzzard and sparrow hawk. Completely omitted are the hen harrier and white-tailed eagle, despite Chapter 7 treating hen harrier, white-tailed eagle and chough as high sensitivity ornithological receptors.

That omission is especially significant in the case of the white-tailed eagle, as the Department of Housing, Local Government and Heritage expressly stated at scoping stage that collision and mortality risk for this recently reintroduced Annex I species had

to be fully assessed and warned against 'lacunae' (gaps, omissions or missing parts) in the assessment. The Department specifically raised concerns about ridge siting, orographic lift and cumulative corridor effects.

The same applies for hen harrier. Chapter 7 accepts repeated use of the site and its immediate surroundings by hen harrier, recording 19 vantage point observations, including 10 within 500 metres of the proposed turbine locations, with birds mainly flying, hunting and foraging, yet that species was omitted from the quantified collision modelling. Chough was modelled, but the applicant's own appendix makes it clear that the model is theoretical and must be interpreted with caution It also identifies substantial uncertainty, including values of 0.52 for the breeding season and 0.75 for the winter season. Taken together, this is not a fully functional collision assessment. It is a partial exercise which leaves some of the most sensitive species either un-modelled or assessed only within a framework, acknowledged by MKO to be uncertain. The Board should not accept this as a sound basis for consent.

Figure 4. First reported cuckoo heard in Coomhola, near Glengarriff, on 7 April, as recorded by Glengarriff Woods Nature Reserve. The cuckoo is a seasonal migrant and its early arrival is a reminder that the Maughanaclea Hills and wider Mealagh, Kealkill, Coomhola and Bantry hinterland form part of a living bird corridor that must be treated with care in any wind farm assessment.

6. MKO's conclusions are incorrect and misleading

The chapter reads as though a protected or red listed species can be acknowledged, mapped, tracked, classified as sensitive and yet still reduced to insignificance provided the footprint percentage is low and habitat exists elsewhere.

Birds use areas as a breeding territory, hunting area, roosting zone, flight path and upland feeding areas, with none being interchangeable, but MKO's justification is that 'vegetation may exist nearby'.

7. Conflicts with Cork County Development Plan

Within the ornithology review, it is evident there is a clear conflict in policy. The Cork County Development Plan 2022–2028 does not regard biodiversity, scenic value or important views as optional considerations, but identifies them as matters requiring protection within the framework of this development.

- Objective BE 15-1 points to compliance with national biodiversity protection policy. The material put forward by MKO regarding bird assessment depends on substitutions and long term monitoring post consent, rather than compliance with that objective at application stage.
- Objective BE 15-6 requires biodiversity protection and enhancement in a new development. MKO accepts protected birds use of the site, but reduces the consequences to negligible or imperceptible, without strong site specific evidence, which also fails to comply with this objective.
- Objective GI 6-1 protects visual and scenic amenity. In an upland West Cork landscape such as the Maughanaclea Hills, scenic character and open bird habitat are closely connected and cannot lawfully be treated by MKO as separate planning sections to suit their assessment. MKO fails to comply with this objective.
- Objective GI 7-1 protects important views and prospects. This is important not only visually, but ecologically, as the same open upland conditions that create valued views also support hunting, movement and visibility dependent bird use. MKO fails to comply with this objective.

The ornithology material compiled by MKO does not comply with the above mentioned objectives of the County Development Plan and the Board would be justified in its decision to refuse permission.

References:

- Ch. 7 Ornithology: use of site by chough, hen harrier, peregrine falcon, red grouse and white-tailed eagle; receptor sensitivity; effect conclusions; treatment of chough disturbance and collision risk.
- Appendix 7-6 Collision Risk Assessment: 85% turbine operation assumption; generic blade profile; reliance on NatureScot avoidance rates and uncertainty; 500 metre view approach.
- Appendix 7-7 Bird Monitoring Programme: pre-construction to 500 metre radius; operational monitoring in Years 1, 2, 3, 5, 10 and 15; collision monitoring and repeated post-construction survey programme.
- Appendices 7-1, 7-2 and 7-3: survey, species list and summary information supporting the presence of relevant receptors.

Noise, Shadow Flicker, Population and Human Health

Introduction

It is evident from MKO's material, that communities living around the Maughanaclea Hills will not be protected from lasting harm arising from turbine noise, shadow flicker, sleep disturbance and industrialisation of what are now rural lands. MKO attempt to brush off serious concerns about effects to the public, including communities, families, elderly and those suffering ill health and many more. An area known for its quiet environment and rural tranquility, would be expected to endure years of intrusive effects from 14 industrial turbines, each at a height of 169 metres.

MKO presented the Board with an incomplete assessment, broad assumptions and mitigations. What they should have presented is a clear legal obligation to address significant effects of this wind farm on population, human health, noise, vibration, shadow flicker and residential amenity. The EIAR prepared by MKO is substantially inadequate and would expose rural communities to irreversible harm.

1. Legal and policy framework

The Board should take into consideration Directive 2011/92/EU regarding the Environmental Impact Assessment, as amended by Directive 2014/52/EU. It clearly requires the significant effects of a development, such as the proposed Maughanaclea Hills to be identified. MKO's suggestion that affected residents can simply 'close curtains' or 'sleep in another part of the house to avoid shadow flicker' is derisory and insulting to communities. This is not a mitigation measure, but an attempt to normalise industrial disturbance in their own homes with no tangible measures to tolerate these associated wind turbine impacts.

I refer the Board to Directive 2002/49/EC on environmental noise, relevant in recognising environmental noise prevention and its harmful effects. The WHO Environmental Noise Guidelines for the European Region 2018 provide a health based benchmark and recommend reducing average noise levels produced by wind turbines below 45 dB Lden.

This should be recognised in the Board's assessment of population and human health and taken into consideration, as MKO relies heavily on Ireland's outdated Wind Energy Development Guidelines 2006 and ETSU-R-97. Being 20 years old, these 2006 Guidelines are not compatible with the scale of modern turbines and are not a full public health assessment for the present day. The WHO 2018 guidance, the EIA Directive's population and human health requirements and Irish High Court decisions recognise that wind turbine noise can amount to unreasonable interference, nuisance, distress and harmful effects on residential homes.

2. Noise assessment

MKO use a very limited baseline noise exercise and modelling assumptions which are hugely deficient for a SID development of this scale. They indicate that noise surveys were carried out at only a small number of locations, despite the obvious land variation, shelter, exposure, wind conditions and background sounds across the area.

MKO's own acknowledgement regarding non surveyed locations are included and that criteria was based on a 'conservative review' and not necessarily on actual background noise at those locations. This indicates an acceptance rate that real background conditions have not actually been established at many homes. They are asking the Board to permit an assessment of these conditions, measured someplace else and should apply to homes that were not properly assessed in their own right. This is not a secure basis for the Board to access how homes and health on the Maughanaclea Hills would be protected.

The Board should have been presented with a clear, receptor-by-receptor assessment on why the background and monitoring location are representative of each affected home. MKO has failed to provide such information, therefore giving no reliable basis to conclude that all affected households were been properly assessed. In a rural area of natural peace and quiet, MKO's irrelevant and 'conservative' data is deeply flawed and must be refused by the Board.

3. Noise modelling

MKO's operational noise modelling contains serious contradictions. Its material refers in one place to ISO 9613-2:2024, yet the modelling states that prediction calculations were carried out in accordance with ISO 9613-2:1996, an older version of the standard. The Board should give consideration to this inconsistency, as incorrect planning data and modelling affects transparency and compliance in planning laws.

The Board is being asked to accept predicted turbine noise levels as a basis for permission. MKO has not provided which standard was used and if outputs would change, if newer methods were applied? This is crucial as their model depends on assumptions about receiver height, ground effect, terrain screening and weather, which can affect the result. These inconsistencies should not be accepted by the Board.

MKO presents numerical data, but the modelling is unclear and dependent on their assumptions, which deserve scrutiny. The Board has not being provided with proper and accurate sound modelling, including topography, ground absorption, receptor height, source height, weather uncertainty and cumulative effects.

4. Turbine specification

There is a further variation regarding the absence of firm, acoustic certainty around the turbine specification. The proposed turbines are industrial-scale structures, 169 metres in height. MKO's assessment must be tied to a noise limit, not to a loose turbine assumption, which can later shift post consent.

MKO has not fixed the exact turbine make and model in their application, leaving the Board, public and community greatly undermined, as they cannot assess the precise turbine that may ultimately be installed and thrust upon them. Instead, the Board is asked to make decisions on a theoretical machine, with the final choice deferred post consent. This is unacceptable in an environmental assessment, as it must be recognised and taken into consideration that a key component of the development is not available for proper scrutiny at the application stage. The Board must attach significant importance to this deficiency.

5. Tonal noise

MKO's material on tonal noise is completely inadequate. It states that no tonal penalty has been included in the predicted noise levels, but downplay that omission saying it would be dealt with by relying on a manufacturer warranty and confirming the selected turbine will not require a tonal correction? Again, foreseeable risk is full of holes and pushed into the post consent stage.

A manufacturer warranty is very different to an assessment confirming what nearby residents may hear once turbines are operating in changing weather conditions, over the life of the wind farm on the Maughanaclea Hills. From other communities and court cases covered in the media, it is well known that this hum, whine, hiss, screech and persistent tonal noise would become deeply disruptive to people, communities and animals. As our leading planning authority, it is unacceptable that the Board should be asked to consider this application, when substantive statistics have been omitted and the true situation left to communities to discover post consent. If tonal noise is present and places the burden on communities to complain, keep records, wait for a manufacturer or operator to decide if a penalty is justified or as often seen, end up in the court legal system. If tonal risk is foreseeable enough to require a complaint protocol, then the Board should have been presented with a factual assessment.

6. Amplitude modulation

MKO demonstrates similar inconsistencies in their handling of amplitude modulation. Their complaint protocol recognises the possibility of thumping, whoomphing or similar disturbing noise and nuisance, giving this serious significance there is awareness connected to this type of intrusive noise, that would arise during the wind farm

operation. Rather than being dealt with at application stage before the Board, MKO defers it to a post consent complaints process.

7. Predicted operational noise levels

The predicted operational noise levels are not definitive, as MKO records no formal exceedance. The Board should have present knowledge of the real margin of safety, tonal character, amplitude modulation, turbine variability, meteorological conditions, affecting life in a quiet rural environment.

In a tranquil existing soundscape full of bird song, animals and farming life, the arrival of continuous industrial turbine noise would not be a background sound, it would dominant daily life. That change would be especially acute at night, in the early morning and during other quiet periods, when even noise said to comply on paper, would become oppressive and deeply intrusive. The Board should not accept conclusions with no significant effects.

8. Low frequency noise, infrasound and vibration

MKO are deficient in their material on low frequency noise, infrasound and vibration. Communities living near wind turbines commonly describe the disturbance not simply as audible noise, but as pressure, pulsing, throbbing, vibration and a repetitive "whoomphing" sensation that can be felt, as much as heard. Communities living near these turbines would experience intrusive low frequency effects both inside and outside of their homes. MKO's material states that there are 35 sensitive properties within 1km of the proposed turbine locations, 79 sensitive receptors within 1,330 metres of the proposed turbines, including a closest third party sensitive receptor at approximately 682.6 metres from the nearest proposed turbine and closest involved landowner receptor at approximately 682 metres. That same chapter indicates there are no sensitive receptors within 500 metres, but the fact remains that a very substantial number of homes would lie in close proximity to this industrial wind farm of 14 turbines of 169 metres and crucially this has not been taken into consideration.

It is evident MKO gives the Board no clear and convincing explanation on how low frequency noise, infrasound and vibration have been assessed at the nearest and most exposed dwellings. Were indoor effects examined, what assumptions were made about night time conditions or what operational controls would apply when these effects arise? Instead, they trot out general compliance language, leaving the most sensitive parts of the issue unexplained. The public and local communities are entitled to know what this assessment truly entails and not when the turbines are built and harm is experienced. On that basis and given the number of homes located in such close proximity to these proposed turbines, the Board must refuse permission.

9. Outdated guidance, Irish High Court nuisance authority and the limits of numerical compliance

The public and communities are very exposed to the fact that large scale wind turbines are still being constructed under outdated 2006 Wind Energy Development Guidelines. The 2006 guidelines contain no prescribed setback distances, no upper height limit and only vague reference to cumulative visual or environmental impact, leaving our rural communities such as those on the Maughanaclea Hills, exposed to disproportionate and aggressive wind farm expansion.

It is ironic that Micheál Martin, Corkman and our current Taoiseach, raised concerns as a Deputy in the Dáil Leader's Questions as far back as 2013.

"I wish to raise the significant step change in the technology and development of wind farms throughout the country that is causing considerable anxiety and concern among communities. While we are supportive of the development of wind energy, what has happened recently has scared communities and caused large divisions in many areas for which major proposals are being prepared.

"There is a fundamental absence of transparency governing these developments. There is an absence of consultation with local residents and communities. Above all, there is an absence of a legislative framework to deal with the step change in technology and scale of development. Since the wind farms are being located close to residential areas, the health implications are causing concern to residents in terms of noise, shadow flicker, the destruction of amenities, particularly residential amenities, the negative visual impact, etc. A Government intervention is required. The 2006 planning guidelines are outdated and were never framed in the context of the technology that is emerging. Will the Government introduce legislation to govern the development of large-scale industrial wind farms? As a matter of urgency, will the Government accelerate the updating of the guidelines to deal with this new technology?"

(Source: Oireachtas Dáil Éireann debate - Wednesday, 19th June 2013 Leaders' Questions.)

Wind turbines have grown dramatically in height, blade sweep, visual reach and zone of influence. The result is that rural communities are still being judged by standards written for much smaller turbines from decades ago. The scale of the proposal for the Maughanaclea Hills has outstripped that guidance.

The 2006 Guidelines state that the likelihood of shadow flicker is very low beyond 10 rotor diameters. For the 80 to 100 metre rotors under the earlier planning framework, that implied a study distance of roughly 800 metres to 1 kilometre. The Irish High Court has already recognised that wind turbine noise can amount to a private nuisance where it

causes unreasonable interference with the enjoyment of nearby homes. In Webster and Another v Meenacloghspar (Wind) Limited; Shorten and Another v Meenacloghspar (Wind) Limited [2024] IEHC 136, the High Court found that wind turbine noise from the Ballyduff Wind Farm in Co. Wexford amounted to an unreasonable interference with the enjoyment of nearby homes. This confirms that wind turbine noise is not merely a theoretical planning concern, but can give rise to legally recognised nuisance where residential amenity is seriously affected. These would be very justified reasons in any Judicial review relating to this wind farm.

10. Shadow flicker

MKO 's material is similarly inadequate regarding its handling of shadow flicker. For a development of this scale, there should be a clear and easily traceable assessment of shadow flicker impacts. Local communities should not have to search across scattered chapters and appendices to establish whether their home has been assessed? Which turbines may affect them? How often flicker may occur? What assumptions did MKO use and what protection is proposed?

Shadow flicker can be deeply distressing, where large rotating blades create repeated moving shadows across homes, workspaces and roads. It can interfere with enjoyment of the home and be extremely stressful, exhausting and impossible to ignore.

MKO has not presented the Board with a complete shadow flicker assessment, identifying each affected dwelling and sensitive receptor, turbines responsible, predicted duration and curtailments or shutdown controls proposed.

12. Conclusion

For all of these reasons, permission for this proposed development should be refused. The Board has not been presented with proper assessments and MKO depend on post-consent management, rather than proper application stage assessment and prevention.

This chapter is conspicuously inadequate as an independent acoustic assessment and shadow flicker assessment; receptor specific baseline justification; clarification of ISO methodology used; a binding turbine acoustic specification; full assessment of tonal noise, amplitude modulation, low frequency noise, infrasound and vibration, review of the acoustic modelling, including the treatment of topography, ground absorption, receptor height, source height, meteorology, uncertainty and cumulative effects and a complete shadow flicker receptor schedule.

I am making this objection without prejudice to any further submissions, procedural rights or legal options that may arise. From the factual references I have put forward here, it is abundantly clear that this chapter lacks proper assessments and fails to comply with planning objectives, directives and laws. If permission were granted, all options would have to remain open, including judicial review.

References

- EIAR Chapter 5 Population and Human Health.
- EIAR Chapter 12 Noise and Vibration
- Appendix 12-1 Glossary of Acoustic Terms.
- Appendix 12-2 Noise Study Area.
- Appendix 12-3 Noise Modelling Parameters, including ISO 9613:1996 calculation statement, modelling assumptions and turbine coordinates T01 to T14.
- Appendix 12-4 Predicted Noise Levels N133.
- Appendix 12-5 Noise Contour Map.
- Appendix 12-6 Noise Meter Calibration Certificates.
- Appendix 12-7 Protocol for Management of Complaints.

6. Conclusion

Taken together, the issues raised in the chapters on Water, Peat, Flood Risk, Wells and Public Water Supplies, Biodiversity, Ornithology, Noise, Shadow Flicker, Population and Human Health clearly demonstrate that this is not a reliable EIAR for Board to rely on. MKO's assessment repeatedly relies on mitigation, modelling, assumptions and general conclusions of "not significant" effects, while failing to provide the level of site specific certainty required for a development of this scale in such a sensitive upland landscape.

The EIAR appears to acknowledge risks in one part of the documentation, only to minimise them later through broad reassurance. Concerns raised through scoping by bodies such as the HSE, Inland Fisheries Ireland, NPWS and other consultees should have led to a more rigorous assessment. Instead, they appear to have been completely dismissed.

While this project is in an area designated as "Open to Consideration", it is located immediately adjacent to areas designated as "Strategically Unsuitable Areas". This area is being targeted over and over again (An Bord Pleanála refusal of permission to Ardrah Wind Farm Limited, 8 July 2014). The justification for this proposal rests overwhelmingly on the availability of wind resource, rather than if this is an appropriate location for a development of this scale. Strong wind resource explains why this site is attractive to profit driven developers, but private profit cannot be allowed to stand in for proper planning, environmental protection or legal compliance. The fact that MKO is being paid by Enerco does not provide reassurance as to its impartiality. Rather, the material gives the impression of an assessment tailored to support every aspect of Enerco's project before the Board.

Where a project would place industrial scale infrastructure into such a sensitive upland landscape as the Maughanaclea Hills, with unresolved risks to water, peat, biodiversity, birds, bats, homes and public health and wind resource, it cannot be used as a substitute for site suitability. The availability of wind is only one factor, but the Board cannot be expected to override environmental protection, public health, landscape policy or ignore strong precautionary scoping advice from other well respected organisations.

The Maughanaclea Hills wind farm application made on behalf of Enerco Energy by MKO, is littered with contradictions, errors, lack of evidence based facts and overall assessment failures. For all of the above reasons, An Coimisiún Pleanála would be very justified in its decision to refuse permission.

Yours sincerely,

David Aller Ontalba