

## An Coimisiún Pleanála – Tirawley Wind Farm Case Ref: PAX16.324258

Brendan Boyd  
Ballinlena, Carrowmore-Lacken, Ballina, Co Mayo, F26K2A8,

22 June 2026

An Coimisiún Pleanála  
64 Marlborough Street  
Dublin 1  
D01 V902

Dear Sir/Madam,

### **Objection Submission to An Coimisiún Pleanála - Case Number: PAX16.324258**

Re: Planning permission for the construction of Tirawley Windfarm consisting of 16 wind turbines, a permanent 110kV substation, 110kV underground cable and grid connection, and ancillary developments. I am writing to formally oppose the proposed Tirawley Windfarm development on the 'Grounds for Refusal' set out in this document.

Yours Sincerely

Brendan Boyd

### **Section Headings:**

- 1. Introduction and Background**
- 2. Priority Legislation Concerning Climate:**
- 3. Summary of Grounds for Refusal**
- 4. Previous Planning History and Planning Refusal 2011**
- 5. Ineffectiveness of Wind Energy**
- 6. Landscape and Visual Amenity – EIAR, Ch 12**
- 7. Inadequacy of Photomontages**
- 8. Negative Impacts on Tourism and Recreational Activity Context**
- 9. Cultural Heritage – Archeology – EIAR, Ch 14**
- 10. Ornithology EIAR, Ch 7 – Birds in General – Hen Harrier**
- 11. Biodiversity EIAR, Ch 6 – General + Bats**
- 12. Geology – Hydrology - Hydrogeology - EIAR, Ch 8/9**
- 13. Health and Wellbeing – EIAR Noise Ch 11**
- 14. Shadow Flicker- EIAR, Ch 15**

## 1. Introduction and Background

“We should not destroy biodiversity in order to save the planet. Renewables cannot save the planet, so should we continue letting them damage it?”

I wish firstly to acknowledge the difficult and often invidious position in which An Coimisiún Pleanála (ACP) has been placed by successive governments, particularly since the introduction of Strategic Infrastructure Development (SID) legislation in 2007. From my experience working within a government department and from years of examining energy and “Net Zero” policy, I appreciate that planning decisions operate within a quasi-judicial framework.

As a fundamental pillar of democracy, comparable in importance to the courts and judiciary, ACP should remain independent and free from political or ministerial interference. Governments should establish policy frameworks but should not influence individual planning decisions. However, since the introduction of SID legislation in 2006, the independence of ACP has in practice, been progressively undermined in ways that allow undue political influence over planning outcomes.

The SID process also removed the right of appeal, effectively leaving Judicial Review as the only remaining avenue of challenge. Given the enormous financial burden involved, Judicial Review cannot reasonably be regarded as an adequate substitute for access to an independent, objective appeals process. The removal of appeal rights fundamentally weakened the principles of natural justice, fairness, transparency, and accountability in planning decision-making.

ACP is effectively being asked to make planning decisions based on guidance already acknowledged to be outdated and inadequate (outdated 2006 Guidelines on Wind Energy – attempts to redraft in 2019 Draft Guidelines that are cynically delayed for 7 years and ongoing – Spatial Plan Analysis based on 2018 WHO Noise parameters carried out in 2021 and buried because it suggested an upper limit on onshore of 6.8 GW.) In these circumstances, the role of ACP has become politicised rather than being genuinely independent.

No further planning decisions concerning wind energy developments should proceed until two essential reforms are completed:

- The updating and replacement of the 2006 Wind Energy Guidelines; and
- The restoration of independent appeal rights removed under the SID process in 2007.

Under EU law, including Case C-24/19 and Directive 2001/42/EC, the Wind Energy Guidelines constitute plans and programmes requiring a Strategic Environmental Assessment (SEA). In the absence of such an SEA, planning permissions granted under the current guidelines lacks legal validity. The continued failure to undertake a proper SEA raises serious legal and environmental concerns.

The public is frequently led to believe that wind and solar energy are both “clean” and “cheap.” In reality, both technologies involve significant environmental costs associated with mining, manufacturing, maintenance, disposal, backup generation, and grid integration. Unlike conventional or nuclear generation, wind and solar require duplicate backup systems due to their intermittent nature, making direct cost comparisons fundamentally misleading. At some time in the future, we will look back and wonder how such a futile and damaging alternative to fossil fuel was considered viable in Ireland. It is recognised now by a minority as an ideology that is not supported by science or engineering. Let us hope that more viable alternatives are put in place before the country is again bankrupted as in 2008, followed by the arrival of the IMF in 2010. Current energy policies are unviable long term.

## **2. Prioritising Legislation Concerning Climate and Low Carbon:**

Section 15(1) of the Climate Action and Low Carbon Development Act 2015 provides that a public body in so far as is practicable shall perform its functions in a manner consistent with specified climate related factors. Fortunately, this is not a dictate or we could potentially have 200M high turbines located in the Phoenix Park. The phrase ‘in so far as is practicable’ leaves the necessary discretion to make a balanced judgement. That judgement involves county Council planners, ACP and or the High or Supreme Courts considering if reducing the output of carbon-based fossil fuel in each location, outweighs the need to protect scenic landscapes, the natural carbon sink peat bog environments, cultural heritage, archeology, ornithology, biodiversity and human health. Human Health is unfortunately the Achilles Heel because the current State legislation deliberately does not adequately protect it. There is ample evidence that the State apparatus is well aware of this, but chooses to actively ignore its implications. To that extent, the State has so far deliberately chosen to regard section 15(1) as a dictate, as opposed to a balanced judgement to be made. Perhaps in carrying out their Quasi-Judicial function, ACP can hopefully restore that balance.

Section 2 of the Climate Action and Low Carbon Development Act 2015 ("Effect of Act") of the Act, as amended by the Climate Action and Low Carbon Development (Amendment) Act states as follows:

"Nothing in this Act, a climate action plan, a national long-term climate action strategy, a national adaptation framework, a sectoral adaptation plan, a carbon budget, a sectoral emissions ceiling or a local authority climate action plan shall operate to affect—"

"(a) existing or future obligations of the State under the law of the European Union, including—"

"(i) Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment,"

"(ii) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora..."

In the case of a wind farm or Appropriate Assessment context, the key legal point is that the Climate Action and Low Carbon Development Act cannot be relied upon to dilute or override obligations arising under the Habitats Directive, the SEA Directive, or other EU environmental law. Section 2 expressly preserves those obligations.

It is the intent of my objection to demonstrate clearly that in the case of the 'Tirawley Wind Farm' proposed by Constant Energy (itself an oxymoron) the preservation of scenic landscapes, the natural carbon sink peat bog environments, cultural heritage, archeology, ornithology, biodiversity and human health outweighs the theoretical importance of the carbon reduction potential of this wind farm. I refer to 'theoretical importance' in the sense that wind energy is intermittent and unreliable. The process of turbine manufacture and installation itself involves the use of significant fossil fuel derived carbon. It is also totally dependent on fossil fuel back up and displaces carbon in the peat bogs and forestry to be removed and of course the reality in practice is that RE significantly increases the cost of electricity, despite propaganda to the contrary.

One can only hope that when considering and evaluating this proposal by reference to section 37G(1) of the 2000 Act, when making a decision in respect of a proposed development for which an application is made under section 37E, the Board will use the discretion under section 15(1) and section 2 of the Climate Action and Low Carbon Development Act 2015 wisely.

I am conscious also of the implications of section 37G(6) of the 2000 Act and the related implications of compliance with sections 172 to 172D and Part XAB. It is my understanding that An Coimisiún Pleanála must be able to demonstrate compliance with all of those provisions before granting permission for a SID wind farm application.

It is my overall contention that due to the many inadequacies of the EIAR and indeed other aspects of the planning application, it is not possible for ACP to demonstrate that these provisions have been fully complied with or that the provisions in Section 15(1) of the Climate Action and Low Carbon Development Act 2015, dilute or override the obligations arising under the Habitats Directive, the SEA Directive, or other EU environmental law. Section 2 of the 2015 Act expressly preserves those obligations.

### **3. Summary of Grounds for Refusal**

**As I appreciate the complexity involved for ACP personnel in deciding on this application, I have summarized the core grounds at the beginning of each chapter and also repeat a short summary of grounds immediately below here.**

- A planning application for a much less significant wind farm in this specific area was refused in 2011 (**Planning Reference No. 11/409**). Nothing has changed meanwhile, other than the industrial scale of the turbines has increased dramatically.

- There is no evidence to support the view that renewable energy can effectively replace fossil fuels. It is based on ideology and propaganda.
- Mayo County Development Plan – **Landscape Appraisal Guidelines** are not being adhered to and no mitigation is possible in that regard.
- Undesirable Impacts on the scenic landscape for both residents and tourists are glossed over.
- The impacts on **Cultural Heritage and Archeology** are under played.
- **The photomontages** do not demonstrate the scale and appear to deliberately avoid the most significant Viewing Points (VPs).
- The **ornithological and bat** monitoring surveys are clearly inadequate and deficient and **assume that flying creatures stay inside or outside the red lines.**
- **The Hen Harrier (See Chapter 10) is a native Irish bird of prey listed in Annex 1 of the EU Birds Directive (2009/147/EC).** The population of hen harrier in Ireland has dropped by 33% since 2015. Its current estimate is 85 to 106 breeding pairs. As of now the installation of wind energy projects is its greatest threat. There is clear evidence that this wind farm is high risk for the species and mitigation is not possible.
- **Bats – (See Chapter 11)** The consultant's own classification of the site as "**High Risk**" for bats.
- **Presence of Leisler's bat**, a globally significant Irish population and recognised high-collision-risk species.
- Requirement for **curtailment of 12 of 16 turbines**, indicating substantial acknowledged **collision risk for bats.**
- **Environmental impacts** are underplayed concerning hydrological implications on Lacken Salt Marsh, Lacken Bay and Bunathir Bay, etc.
- The **cumulative impacts** of multiple wind farm sites are also ignored concerning ornithology, biodiversity and indeed humans, as if each wind farm site behaved independently and there was no movement or interactions between adjacent sites.
- Similarly, within individual wind farms, the **cumulative impact of multiple turbines** adjacent to one house or receptor is also ignored.
- Noise impacts are ignored and not considered and 4 X Tip height is assumed to provide adequate noise protection.
- **Mitigation** is the most often repeated and misused word. There is a very poor record in Ireland of any companies adhering to good environmental practices (EPA Reports). There is no record of enforcement. The Agencies 'pass the buck' between them. Nobody wishes to accept the enforcement role, where everybody knows everybody and politicians make representations.
- **The Power Imbalance** - EIARs are commissioned and paid for by the WF companies. 'He who pays the piper .....
- **'The Precautionary Principle':** In every Wind Farm planning application there appears to be an inherent assumption that they should be approved because they are beneficial. In instances of sensitive environments that have priority protection, under both EU and national legislation, **'the precautionary principle'** should be applied and a refusal should be

the outcome where there is considerable doubt or inadequacy in addressing the doubt. Mitigation or monitoring the questionable issue, to be dealt with later is proffered as a solution. Of course, this ignores the precautionary principle and is not a suitable substitute.

## **4. Previous Planning History and Planning Refusal 2011**

### **Summary of Grounds for Objection**

- When addressing the issue of 'Previous Planning History in their initial planning application, Constant Energy failed to disclose a wind farm planning refusal in 2011 in respect of this area in respect of 4 small turbines. That is an important undisclosed material fact and shows 'bad faith'.
- The reasons for refusal issued by Mayo County Council and An Bord Pleanála in 2011 are even more applicable today, given the vastly increased scale and visual impact of the current proposal.
- The current proposal, involving turbines with a tip height of 135 m in a highly sensitive elevated open landscape, would have a disproportionate adverse impact on the scenic character of North Mayo and should be refused on grounds similar to those applied under previous **Planning Reference No. 11/409**.

### **Background and Planning Precedent**

A clear planning precedent was established in 2011 when a substantially smaller wind farm proposal in this scenic area of North Mayo was refused under Planning Reference No. 11/409.

That earlier proposal involved only four turbines with an overall generating capacity of approximately 2 MW. The turbines were significantly smaller in scale, lower in height, and located in a less visually exposed position than the current proposal. Proximity to Lacken Salt Marsh (SAC/SPA) and its salmonid streams was identified as a refusal reason.

By contrast, the present application proposes:

- 16 turbines;
- an overall capacity of approximately 70 MW;
- individual turbine capacities of 4.3 MW;
- a hub height of approximately 76.5 m; and
- a maximum tip height of 135 m.

The previous application was refused because the site was considered:

1. Highly sensitive in planning and environmental terms;
2. Located within an elevated and open landscape designated as Policy Area 1 in the *Landscape Appraisal of County Mayo Development Plan 2008–2014*; and

3. Within approximately 2.5 km of a scenic route, where the applicant failed to demonstrate that the development would not adversely affect the visual and scenic landscape.

These concerns remain fully applicable today and are considerably intensified by the vastly increased scale and visibility of the current proposal.

### **Comment by Objector**

#### **The existence of the previous planning application and refusal was denied by the current applicant.**

The justification for refusal in 2011 is highly relevant to the present application. The earlier proposal was modest and limited in scale when compared with the current application before An Coimisiún Pleanála. The proposed turbines are now almost three times higher than those proposed in 2011, increasing from approximately 45 m to 135 m tip height, while turbine numbers have increased from 4 to 16.

The proposed development would also be located in close proximity — in many areas less than 500 m — from the internationally promoted Wild Atlantic Way coastal tourism route through Lacken Parish, North Mayo.

Importantly, the fundamental characteristics of this landscape have not changed in the intervening 14 years. The area remains open, elevated, visually exposed, and highly sensitive in both planning and environmental terms. These are precisely the qualities that make the area attractive to residents, visitors and tourism interests.

The landscape of North Mayo is actively promoted internationally by tourism organisations because of its unspoilt scenic character. It therefore requires meaningful protection by both Mayo County Council and An Coimisiún Pleanála from developments that would fundamentally alter that character.

Environmental protection should not involve the irreversible industrialisation of sensitive and scenic landscapes.

### **5. *Ineffectiveness of Wind Energy:***

#### **Summary of Grounds for Objection**

- Planning permission should not be granted where the national electricity grid lacks sufficient capacity to absorb and distribute the electricity generated.
- No new RE installations should be awarded planning until the Government has reviewed the current ineffective energy policies in the light of their discussions with the Irish Academy of Engineers (2026) and viable long-term policies are developed.

- After 30 years of installation, RE now produces merely 10% of Ireland's energy. It has increased our electricity costs to the highest level in Europe. Yet there is no public debate on these crucial issues. **WHY So ?**
- Wind Energy (WE) has a comparatively low capacity factor. According to published EirGrid data, wind turbines in Ireland generated approximately 27% of their installed capacity during 2024, before Grid losses.
- Wind energy cannot operate as a fully standalone system because it requires continuous backup and balancing support from dispatchable generation sources, principally gas-fired power stations.
- The Irish Academy of Engineers, have contributed to renewed political and public debate regarding Ireland's flawed energy strategy, including reconsideration of the prohibition on nuclear energy introduced in 1999. They estimate that Ireland's fossil fuel electricity plant installation needs to be doubled from 6 GW to 12 GW by 2050 in order to meet projected electricity Demand. They infer that we are incapable of reaching 2030 targets or Net Zero by 2050. These projections are based on science and engineering, not ideology.
- Ireland's electricity costs have become uncompetitive internationally, with consequences for households, industry and national competitiveness.
- These records and outcomes have not been fully published and therefore ACP decisions are being made by reference to incorrect data.

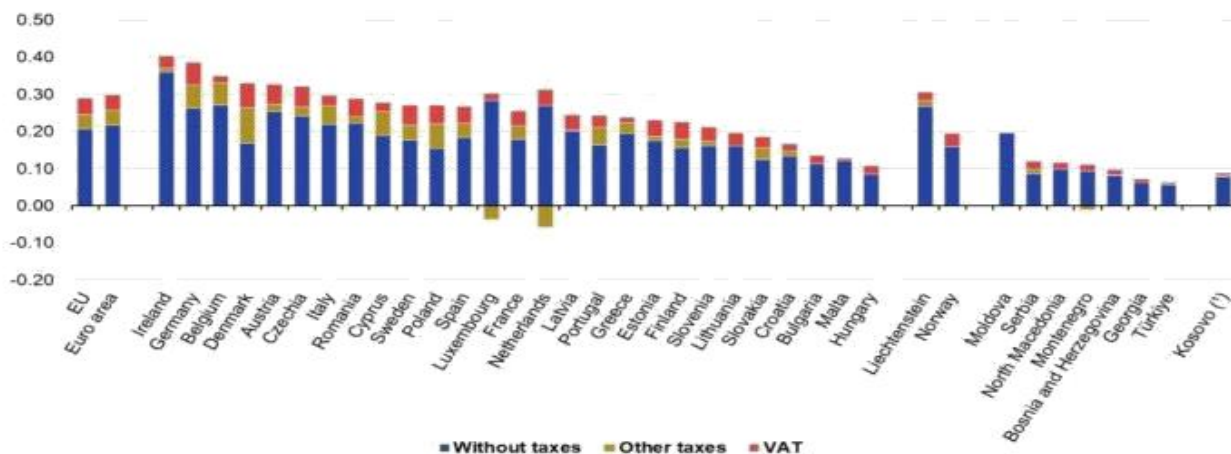
The cumulative ineffectiveness issues surrounding Renewable Energy are grounds for my objection to its installation. Wind Energy is proving not to be an effective replacement for fossil fuels and Ireland should review its overall Energy Policy in the light of new advances with Small Modular Nuclear Reactors.



The ineffectiveness of RE is reflected in the next graph. 30 years of RE and Ireland produces approx. 10% of its total energy from RE = Failure.



**Electricity prices for household consumers, second half 2025**  
(€ per kWh)



(\*) This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo Declaration of Independence.  
Source: Eurostat (online data code: nrg\_pc\_204)

eurostat

## 6. Landscape and Visual Amenity – EIAR Ch 12

### 1. The Nature and Topography of this landscape is totally unsuitable for wind turbines.

Listed immediately below are the Landscape Appraisal Parameters that should be considered in evaluating the landscape and visual amenity of an area where any development is being considered, subject to planning legislation.

- **Recognised scenic value of the view** (County Development Plan designations, guidebooks, touring maps, postcards etc.). **Intensity of use, popularity.**
- **Connection with the landscape.** This considers whether or not receptors are likely to be highly attuned to views of the landscape.
- **Provision of elevated panoramic views.** This relates to the extent of the view on offer and the tendency for receptors to become more attuned to the surrounding landscape at locations that afford broad vistas.
- **Sense of remoteness and/or tranquility.** Remote and tranquil viewing locations are more likely to heighten the amenity value of a view and have a lower intensity of development in comparison to dynamic viewing locations such as a busy street scene, for example:
- **Degree of perceived naturalness** Where a view is valued for the sense of naturalness of the surrounding landscape it is likely to be highly sensitive to visual intrusion by obvious human interventions.
- **Presence of striking or noteworthy features.** A view might be strongly valued because it contains a distinctive and memorable landscape feature such as a **promontory headland**, lough or castle.
- **Historical, cultural or spiritual value.** Such attributes may be evident or sensed at certain viewing locations that attract visitors for the purposes of contemplation or reflection heightening the sense of their surroundings.
- **Rarity or uniqueness of the view.** This might include the noteworthy representativeness of a certain landscape type and considers whether other similar views might be afforded in the local or the national context.
- **Integrity of the landscape character in view.** This criterion considers the condition and intactness of the landscape in view and whether the landscape pattern is a regular one of few strongly related components or an irregular one containing a variety of disparate components.
- **Sense of place.** This criterion considers whether there is special sense of wholeness and harmony at the viewing location.
- **Sense of awe.** This criterion considers whether the view inspires an overwhelming sense of scale or the power of nature. Those locations where highly susceptible receptors or receptor groups are present, and which are deemed to satisfy many of the view value criteria above are likely to be judged to have a high visual sensitivity and vice versa.

#### **Summary of Grounds for Objection:**

- This wind farm proposal is totally unsupported by Mayo County Councillors and Planners. In a Report presented by planners to Mayo County Councillors on 08 June 2026 they stated categorically that a wind farm in this area is inappropriate. They discuss the location of turbines relative to Designated Tiers. The import of their observations is to the effect that all of the North Mayo area should be redesignated as

unsuitable for a wind farm in the 2022 – 2028 County Development Plan. Furthermore, on page 48 Map 6.14 of The Draft Mayo Energy Strategy document (closed for observations – 26 May 2026) they propose that all of North and West Mayo be designated as unsuitable wind farm areas due to their Scenic Landscape Character and Visual Amenity.

- Locating turbines in this location is contrary to Section 2.5 of the Landscape Appraisal Document of County Mayo and also contradicts many of the Relevant Policy Statements in section 4.1.1 of the Landscape Appraisal Document as set out below.
- The nature of the landscape is totally unsuitable for the accommodation of wind turbines and siting them in an area of outstanding natural scenic beauty on the Wild Atlantic Way (WAW) will seriously undermine the credibility of the tourist industry.
- It is proposed to site the wind farm in relatively close proximity to 3 areas designated as Special Areas of Conservation (SAC/SPA) – namely Lacken Salt Marsh – Kilcummin Head and Downpatrick Head. These areas have been designated in order to protect their status. This proposal seriously undermines that status.
- All of the statements in section 2.5.4 of Mayo County Development Plan speak unequivocally and consistently when they state as follows:- “The main concern or natural linear features such as coastlines and **ridgelines** is to avoid penetration by development that will interrupt and reduce the integrity of such elements”. Is it possible to think of a more inappropriate development than a wind farm by reference to this statement?
- This application could actually be decided in one fell stroke by applying the Landscape Appraisal guideline for County Mayo with respect to Sub-sections 2.5 and 4.1 of ‘The Landscape Character Assessment’ of County Mayo.
- **Break the Ridge and Sky line.** The one major difference between the Ox Mountains, Killala and Ennischrone turbines is the fact that **the OX Mountain turbines do not break the ridge or skyline.** The proposed turbines on the Lacken Hills will break both the Ridge and Skyline and make a mockery of good planning rules. Anybody who has ever made a planning application in respect of a structure on the landscape will be totally aware of the need to blend it in with the landscape ridge and skyline. Applicants are invariably requested to erect a ‘Ridge Profile’. The photomontages (although inadequate) clearly demonstrate the serious unforgivable *impact on the ridge and skyline.* Why are these principles of good planning being abandoned now?
- The main concern for natural linear features such as coastlines and ridgelines is to avoid penetration by development that will interrupt and reduce the integrity of such elements.
- Development can have a disproportionate visual impact in such terrain, due to an inherent inability to be absorbed, physically or visually. Concerning the 2 previous statements, this proposal to site 135 M tall turbines on top of these hills breaks the Ridge and Sky Lines, reduces the integrity and has a disproportionate impact due to an inherent inability to be absorbed, physically or visually.

**Background:**

It is significant that ‘the applicants were advised in pre-planning consultations with MCC, albeit with a proposal for a greater number of turbines, that the proposed development would not be considered favorable at this location.’

A significant ground for my objection to An Commission Pleanala is that the nature of the landscape is totally unsuitable for the accommodation of wind turbines. Siting them in an area of outstanding natural beauty on the Wild Atlantic Way (WAW) will seriously undermine the credibility of the tourist industry along the WAW but also undermine the excellent promotional efforts of North West Tourism in that regard.

It should also be stated that the proposed wind farm is located directly in the path of the **Western Way Walking Route** (The Glebe to Conaghreagh and the cable route via Castlereagh townland.)

It is proposed to site the wind farm in relatively close proximity to 3 areas designated as Special Areas of Conservation (SAC/SPA) – namely Lacken Salt Marsh – Kilcummin Head and Downpatrick Head. Siting a wind farm in this location, just off the R5 coastal route from Killala to Ballycastle via Lacken Salt Marsh and Downpatrick Head (Dun Briste) will also have deleterious ecological impacts.

The area is also endowed significantly with numerous **archaeological, cultural** and tourism assets in the immediate locality and in the wider community. This is evidenced almost weekly with Facebook Posts initiated by North West Tourism, proclaiming the scenic beauty of the area and accompanied by panoramic photographs, depicting it vividly.

**Sense of remoteness and tranquility.** In recognition of the promotional and economic benefits that a scenic hinterland makes to the rural tourism industry and especially to tourism interests in the local towns of Ballycastle, Killala, Crossmolina and Ballina, North Mayo tourism highlights that scenery regularly in its promotional materials. The economic benefits of a wind farm in this specific location will be far outweighed by the significant damage to the scenic landscape and indeed the credibility of the WAW tourism promotional material.

In the interests of effective planning, each county in Ireland was requested to undertake an evaluation of the various landscapes and characterize them appropriately using specific scientific criteria. The objective of this exercise was to identify areas suitable for developments and areas that are unsuitable due to their scenic landscape. County Mayo did so and the resultant Landscape Characteristic Assessment has been published in The Mayo County Development Plan 2022- 2028 – specifically, Volume 4 refers.

**Photograph at Carrowtrasna Lane with the Lacken Hills on the far side. This is one of my suggested VP locations for a photomontage photograph.**



The location where it is proposed to establish the Tirawley Wind Farm is mainly covered by Section 2.5.- Area D: 'North Coast Plateau'. A small portion of the southern end of the proposed wind farm area is located and designated in Area G – North Mayo Drumlins. However, as the latter area is insignificant overall, I will confine my comments to Area D: 'North Coast Plateau'.

The Critical Landscape factors are outlined in sub-section 2.5.4 and 7. Policies are outlined in sub-section 4.1.1. (Policy Area 1: Montaine Coastal Zone). This document is published in the Mayo County Development Plan 2022 – 2028.

Much research and effort has gone into producing these landscape guidelines for the protection of scenic landscapes. It would seem pointless and actually dismissive to then ignore them in the current context.

**This application could actually be decided in one fell stroke by applying the Landscape Appraisal guideline for County Mayo with respect to Sub-sections 2.5 and 4.1. of 'The Landscape Character Assessment' of County Mayo.**

All of the statements in section 2.5.4 speak unequivocally and consistently when they state as follows:- "The main concern for natural linear features such as coastlines and **ridgelines** is to

avoid penetration by development that will interrupt and reduce the integrity of such elements”.

Is it possible to think of a more inappropriate development than a wind farm by reference to this statement?

While all of the 7 Policies outlined in the document in sub-section 4.1.1 are desirable and laudable, Nos 2, 5 and 7 are specifically relevant in that they advocate tourism business development, while protecting the landscape from inappropriate initiatives. They speak for themselves with clarity and vision and with a clear objective of protecting the landscape from industrial scale developments in inappropriate locations that have disproportionate or dominating visual impacts on the surrounding environment.

The word ‘mitigation’ is used extensively in almost every paragraph of this document and its recurrent use suggests that the proposed wind farm is indeed impacting harshly and disproportionately on this pristine landscape.

#### **Selection of Statements from section 2.5:**

- The main concern for natural linear features such as, coastlines and ridgelines, is to avoid penetration by development that will interrupt and reduce the integrity of such elements.
- Development can have a disproportionate visual impact in such terrain, due to an inherent inability to be absorbed, physically or visually.
- This inability to absorb development identifies low vegetation as a critical landscape factor.

#### **Relevant Policy Statements in section 4.1.1 of the Landscape Appraisal Document:**

- **Policy 2** - Facilitate appropriate tourism and amenity development in a progressive and clustered manner, where feasible, that reflects the scale, character and sensitivities of the landscape.
- **Policy 3** - Encourage development that will not have a disproportionate effect on the existing character of the coastal environment in terms of location, design, and visual prominence.
- **Policy 4** - Consider development that does not significantly interfere or detract from scenic coastal vistas, as identified in the Development Plan, when viewed from areas of the public realm.
- **Policy 5** - Encourage development that will not interrupt or penetrate distinct linear sections of primary ridge lines and coastlines when viewed from areas of the public realm.
- **Policy 6** - Preserve any areas that have not been subject to recent or prior development and have retained a dominantly undisturbed coastal character.
- **Policy 7** - Consider development on steep slopes, ensuring that it will not have a disproportionate or dominating visual impact on the surrounding environment as seen from areas of the public realm.

The objective of these policies speaks for themselves and if applied appropriately, a wind farm cannot be located in this area. It would be incongruous to do so.

There is clearly a conflict of interest in this location between those who wish to produce energy from wind farms and those who wish to protect the scenic landscapes for residents, tourism interests and the common good. The Landscape Appraisal guidelines were devised solely for the purpose of adjudicating sensibly between the conflicting objectives of commercial interests of wind farms and preserving scenic landscapes and the environment.

In order to allow a wind farm in this location, the guidelines must be totally abandoned and that equates to a free for all to meet the panacea for wind energy in the wrong locations, at any price.

#### **The Scale of the Turbines and their Visual Impacts:**

From most locations in Lackan Parish at present one can view 3 distinct sets of wind turbines. The most extensive one is on the OX Mountain Range in County Sligo running parallel to the north coast road from Ballina to Ballisodare. Six turbines are also obtrusively visible near Killala Town and three are similarly visible, East of Ennischrone Town.

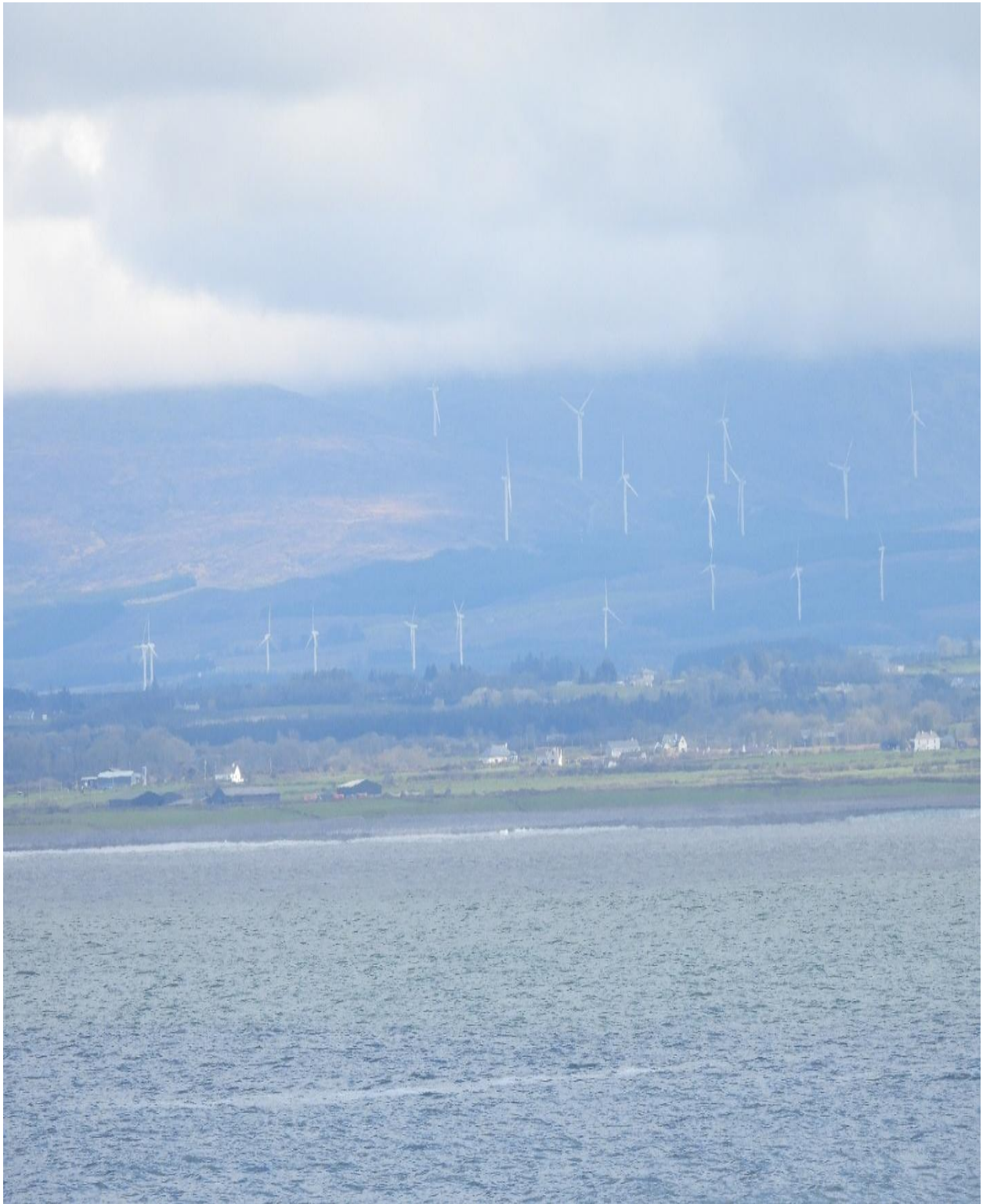
The one major difference between the Ox Mountains, Killala and Ennischrone turbines is the fact that **the OX Mountain turbines do not break the ridge or skyline** and therefore in good planning parlance they blend into the background scenery. The others, due to their scale, stick out and break the ridge and skyline and do not merge into the landscape.

It is a fundamental principle of good planning practice to blend developments into the background landscape. Turbines placed in Lackan parish will similarly be a blight on the landscape, as the nature of the landscape is such that it is impossible to absorb or blend them in. This is also exacerbated by the industrial scale of the proposed turbines – 135 M to Tip Height. The contrast between turbines that break the ridge and sky line is demonstrated by the following 3 photographs.

The Ox Mountain Turbines are half the height of the proposed ones and do not break the Ridge or Sky Line. This planning principle seems to have been unwisely abandoned. In the case of the topography of the Ox Mountains, due to the absence of scattered housing, it was possible to locate the turbines in the lee of the hills and below the ridge and sky line. The turbines are also much lower. That is clearly impossible in Lackan parish, North Mayo (regardless of turbine height) due to the location of houses in the lee of the hills and the nature of the topography. The proposed wind farm site should never have been designated 'Open to Consideration', as it leads to unreasonable expectations.



**OX Mountain Turbines viewed across Killalla Bay from Kilcummin North Mayo**





**Killala Turbines Viewed from Kilcummin Pier North Mayo:**



**These turbines clearly break both the ridge and skyline and appear taller and seriously impact the view of the Nephin mountain range in the background. Their presence should not establish any precedent and are a warning as to how not to damage scenic landscape vistas.**

**Ennischrone and Ox Mountain Turbines, viewed from Kilcummin Pier North Mayo:**



While the Ennischrone 3 turbines are tall, they do not break the Ox Mountain Ridge or Skyline. They are however obtrusive.

Mayo Planners and County Councillors do not support locating a wind farm in this area.

**The Planners' Report presented to Mayo County Councillors on 08 June 2026, unequivocally states this.**

Chapter 8.0 represents the situation as follows:

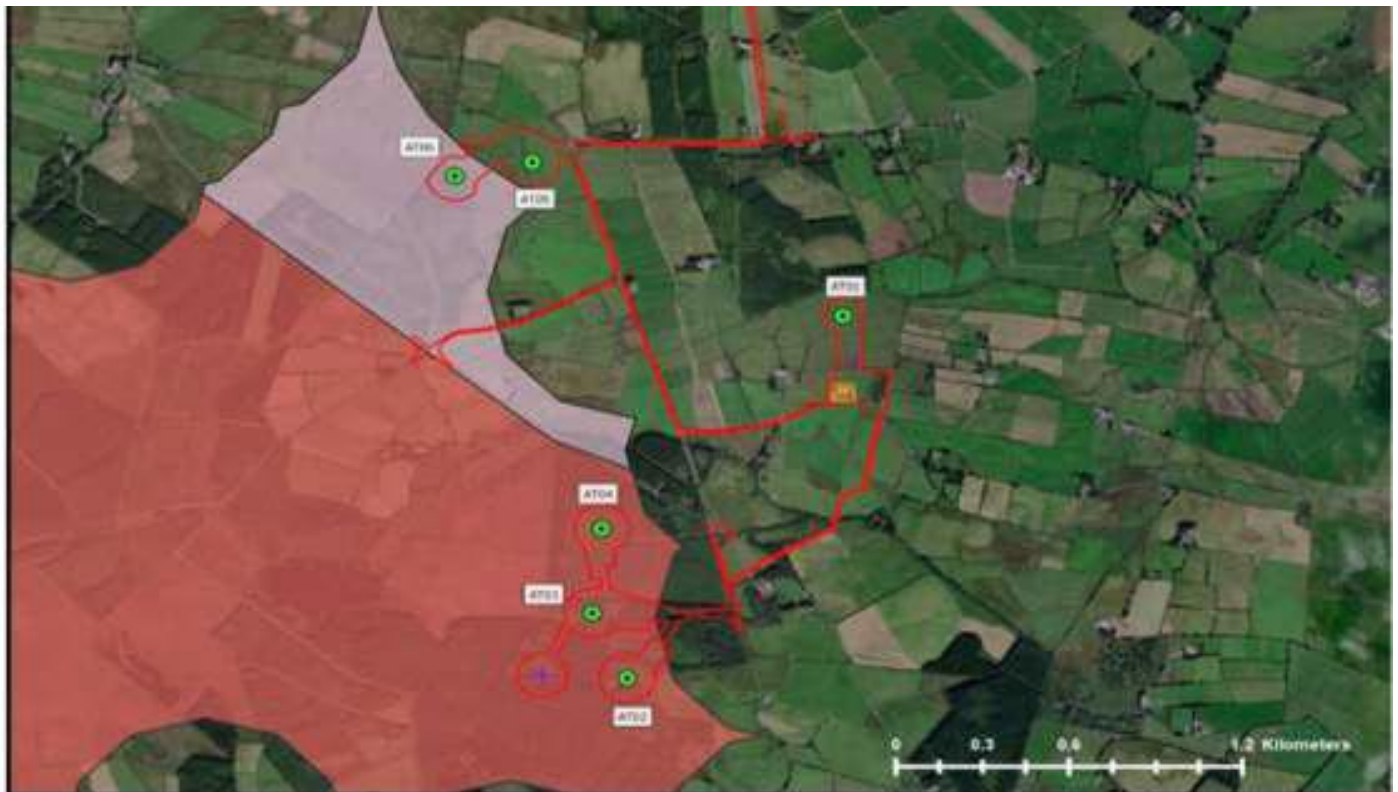
**Chapter 8.0 of the Planners' Report refers as follows:**

*8.1 Provisions of the Mayo Renewable Energy Strategy 2011*

Figure 4.1 provided in the submitted planning statement illustrated a more accurate overlay of the proposed development.

This of course will be achieved on a more significant scale if the policies suggested on Pages 48 and 50 (Map 6.10 and 6.14) of the **Draft Mayo Energy Strategy document** are carried through – closed for public observation on 26 May 2026.

**Figure 4.1**



Quoting from the Planners Report - **The following is noted:**

**Of the 16 no. turbines,**

- only 3 no. turbines (AT02, AT03 and AT04) are located within a preferred area i.e. *Tier 1 Preferred Large Wind Farms*.
- 8 no. turbines (AT17, AT18, AT16, AT15, AT13, AT12, AT11 and AT06) are located within an area identified as 'Tier 2 Open for Consideration',
- 5 no. turbines (AT01, AT05, AT09, AT10 and AT14) are located in the open countryside, an area that is unclassified as per the Mayo Renewable Energy Strategy 2011.

**Note: That the turbine numbering is not 100% correct** as stated and stems from the fact that 18 turbines were referred to in the original Constant Energy application, corrected later to 16 turbines (AT 07 and AT 08 of the original were removed).

"In principle, only a small portion of the proposal is considered acceptable in principle i.e. turbines located within *Tier 1 Preferred* lands.

In relation to Tier 2 lands - The Mayo RES 2011 states that lands within the *Tier 2 - Open for Consideration* classification may be considered for wind farms or small clusters of wind turbines but the visual impact on sensitive or vulnerable landscapes, listed highly scenic routes, scenic routes, scenic viewing points and scenic routes (as defined in the Landscape Appraisal for Co Mayo) will be the principal consideration.

In this regard, it is of concern despite advice at preplanning stage that half of the proposed development (8 no. turbines) are proposed to be located on *Tier 2* lands and another 3 turbines are to be located in the open countryside."

**Draft Mayo Renewable Energy Strategy 2026**

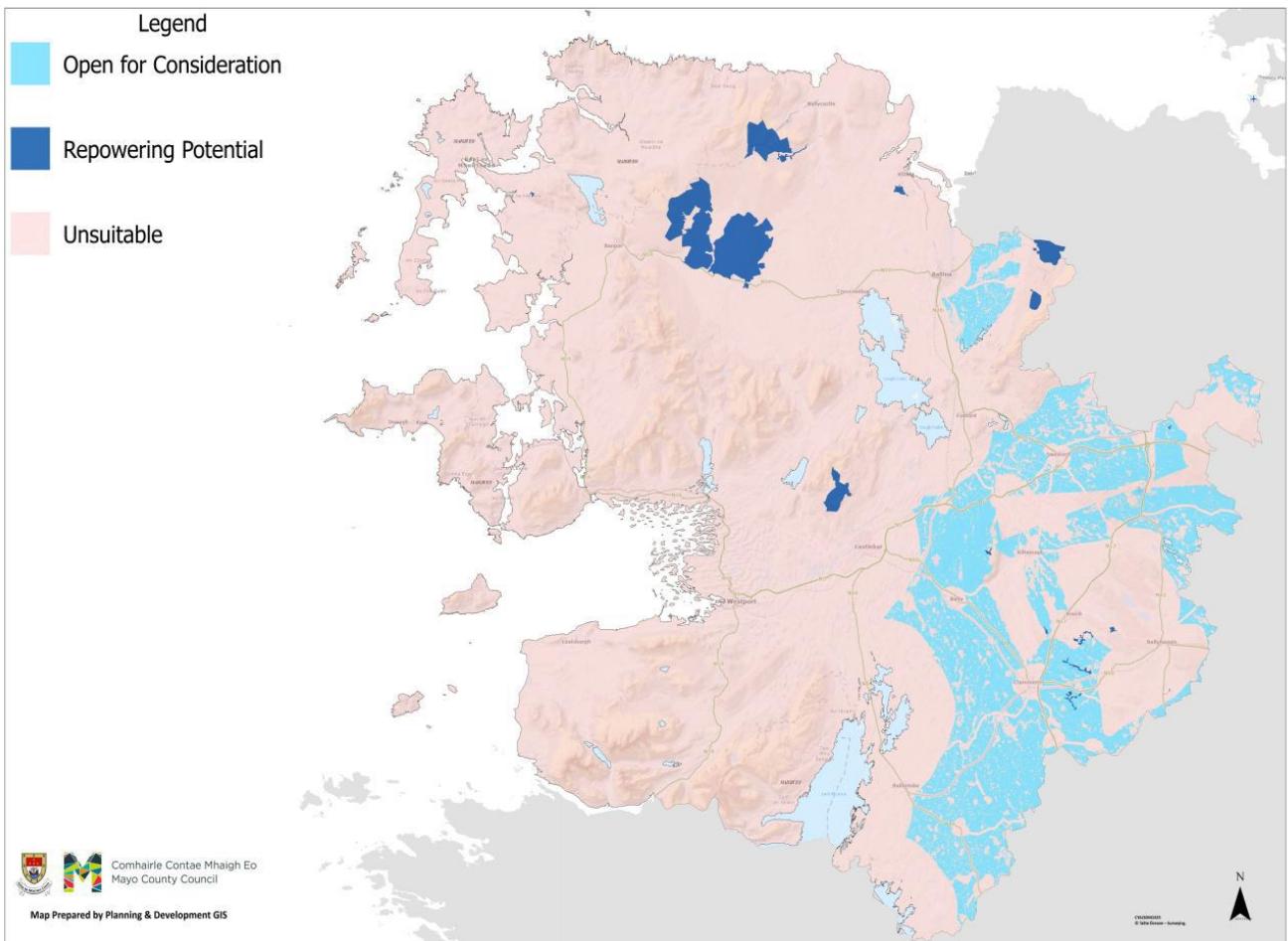
Notwithstanding the comments above regarding the 2011 RES, the public consultation period has recently ended in relation to the Draft RES – 26 May 2026. The Draft RES proposes significant changes to

Mayo Co. Council's approach to the assessment of wind energy developments within the county. Most significantly, as regards the current application, the areas identified as "Open for Consideration" for windfarm developments are predominantly located in the east and south of the county, whereas the areas further to the north and west, where there are considerable existing clusters of wind energy developments, are designated as having "Repowering Potential". The areas outside of these designations, within which the current proposal is located, are designated as "Unsuitable."

The Draft Renewable Energy Strategy, when adopted, will replace the 2011 RES and will form part of the County Development Plan 2022-2028 and ongoing.

While it is put forward by the applicants that the RES makes provision for the Local Authority to

consider proposed renewable energy developments on a case-by-case basis. It is observed that in pre-planning consultations, An Coimisiún note that a robust planning justification is required for the wind turbines proposed outside of the designated area for wind energy.



Wind Suitability Map

## 7. Inadequacy of Photomontages:

The purpose of Photomontages is to demonstrate the impacts of proposed developments on the landscape. The photomontages are set out in 4 Books. For the purposes of evaluating their inadequacy, I will confine my comments and illustration to Books 1 and 2 that are in the immediate vicinity of the wind farm. Extensive guidelines are provided with regard to how to provide photomontages.

For the sake of brevity, the following excerpt from the **Draft Wind Energy Guidelines 2019** illustrates the photomontage standards to be applied:-

**‘APPENDIX 3 - LANDSCAPE AND VISUAL IMPACT ASSESSMENT OF WIND ENERGY DEVELOPMENT PROPOSAL’ - Page 151 sets out the most important 4 pointers.**

**The following guidance should be followed in the preparation of photomontages:**

1. A camera lens focal length of 50-70mm is recommended for taking photographs for preparation of photomontages.
2. Panoramic photographs included to illustrate the context in which the development might be visible should be prepared by splicing photographs taken with a 50-70mm lens and not by inclusion of views taken with a wide-angle lens.
3. **Unless specifically requested to do so by the relevant planning authority or by statutory consultees, the vast majority of photomontages should be prepared from places that do provide views of the proposed wind energy development.** The Zone of Theoretical Visibility is prepared to highlight places from where views are not provided and they generally do not need to be considered further thereafter.
4. **The landscape depicted in the photomontage should represent the most open view possible in the direction of the wind energy development.** Care should be taken so as not to place an object such as vegetation or structures between the wind energy development site and the camera.

**Items 3 and 4 are the most pertinent and to an extent self-evident.** However, while a plethora of photographs are displayed, some with View Points (VPs) from cemeteries and to the West of the Lacken Hills, where the turbines are screened by the ridge line, they fail to identify the most vital VPs.

Lacken parish is divided by Lacken Strand into two approximate sections – one on the East side and one on the West side. The proposed wind farm is located on the West side of the parish on the ridge of the hills. The best views of either side are from the directly opposite side of the strand. In that regard VP 10 = Carrowmore Beach (The Back Strand) and VP 17 = Carrowtrasna, show 2 views from the East side (The Kilcummin side). Firstly, the view at VP 10 is not the best view and for years North Mayo Tourism has been using one with more panorama, 1 KM back from the sea front, at a higher elevation. The only other relevant views taken on the East side are at Templemurry Cemetery, beside Rathfran Abbey and cemetery (under the brow of a hill and the turbines are screened by the obstacle of Carbed townland) and VP 17 at Carrowtrasna.

**Other suitable and appropriate VPs on the Kilcummin side of Lacken parish should have been taken as follows;**

1. **In Carrowtrasna** near the top of a laneway that goes to the strand
2. **Carrowtrasna** at the bottom of this lane as it enters the strand
3. **At Foghill** where the Salt Marsh meets the strand
4. **At Cloonalaghan**



5. **At Cloonboy**, near to Mullagh Cross
6. **At Cashel**
7. **At Tooreen and Breastagh.**

These would have shown the full panoramic impact and would have been much more revealing than many of the others. One additional photograph would have been appropriate and taken as one drives from Conaghrea towards Lacken Hill. **This road follows the Western Way** designated walking route and has panoramic views towards Ennischrone, Sligo and Donegal. The location of 4 turbines in this area will impede this panoramic sea and hill view. By the time people have walked on the Western Way through Owenwinny and Glenora Wind Farms, **perhaps it will then be appropriate to change the name from the Western Way → ‘The Turbine Way’**. As people become more educated about audible noise and infra noise, it is likely that this walk will actually be abandoned by the public.

## 8. Negative Impacts on Tourism and Recreational Activity Context

### Summary of Grounds for Objection:

- This is an area of outstanding natural beauty and is regularly used by North Mayo Tourism in its online promotional advertising and brochures. It is the beautiful vistas of the coastal drive along the WAW that attracts the tourists.
- The Lacken Hills are a **promontory headland**, jutting into the WAW and overlooking Castlelacken Castle, Lacken Salt Marsh and beautiful Lacken Strand.
- Photographs of its significant natural beauty are regularly used by various County Mayo People’s Associations in both Ireland and indeed New York. Desecrating it by installing wind turbines will be a blight on its landscape.
- **“The Western Way”** (Sli an Iarthar) walking route through Galway and Mayo, also goes right through the proposed wind farm area and cable route and designated walking routes that are used by both locals and tourists have also been developed in association with North West Tourism. In this instance, one arm of the State appears to be at cross purposes with the other. Via Conaghreagh to Ballycastle. <http://thewesternway.ie/> Other walking trails in the vicinity of the wind farm include the **Kilcummin Loop Walks**, the **Ballycastle Loop Walk**, the **Moygownagh Loop Walk** and the **Belleek Nature Trail**.
- Of course, the **Wild Atlantic Way** Drive route and the EuroVelo Route speak for themselves.
- **The Gazebo** adorns its ridge line and the installation of turbines will irreparably damage this vista. One of the local walks passes immediately by the Gazebo.
- **Castlelacken Castle** also lies in the shadow of the Gazebo, sandwiched between it and **Lacken Salt Marsh**. Locating turbines beside the Gazebo and overlooking Castlelacken Castle, Lacken Salt Marsh and Lacken Strand is contrary to Development Plan policy.
- It is the beautiful vistas of the coastal drive along the WAW that attracts the tourists.
- The Lacken Hills are a promontory headland, jutting into the WAW and overlooking Castlelacken Castle, Lacken Salt Marsh and beautiful Lacken Strand.

- Photographs of its significant natural beauty are regularly used by various County Mayo People's Associations in both Ireland and indeed New York. Desecrating it by installing wind turbines will be a blight on its landscape.
- **"The Western Way"** (Sli an Iarthar) walking route through Galway and Mayo, also goes right through the proposed wind farm area and cable route and designated walking routes that are used by both locals and tourists have also been developed in association with North West Tourism. In this instance, one arm of the State appears to be at cross purposes with the other. Via Conaghreagh to Ballycastle.  
<http://thewesternway.ie/>
- Other walking trails include the **Kilcummin Loop Walks, the Ballycastle Loop Walk, the Moygownagh Loop Walk** and the **Belleek Nature Trail**.
- Of course, the **Wild Atlantic Way** Drive route speaks for itself.
- Locating a wind farm in this area will negate much if not all of North Mayo Tourism's considerable efforts in tourism promotion. While towns like Ballina, profits from tourism bed nights, it is the unspoiled coastal WAW scenery and walking routes that attracts them.

**Chapter 12 of the EIAR also refers to the 'Presence of striking or noteworthy features.** A view might be strongly valued because it contains a distinctive and memorable landscape feature such as a promontory headland, lough or castle.'

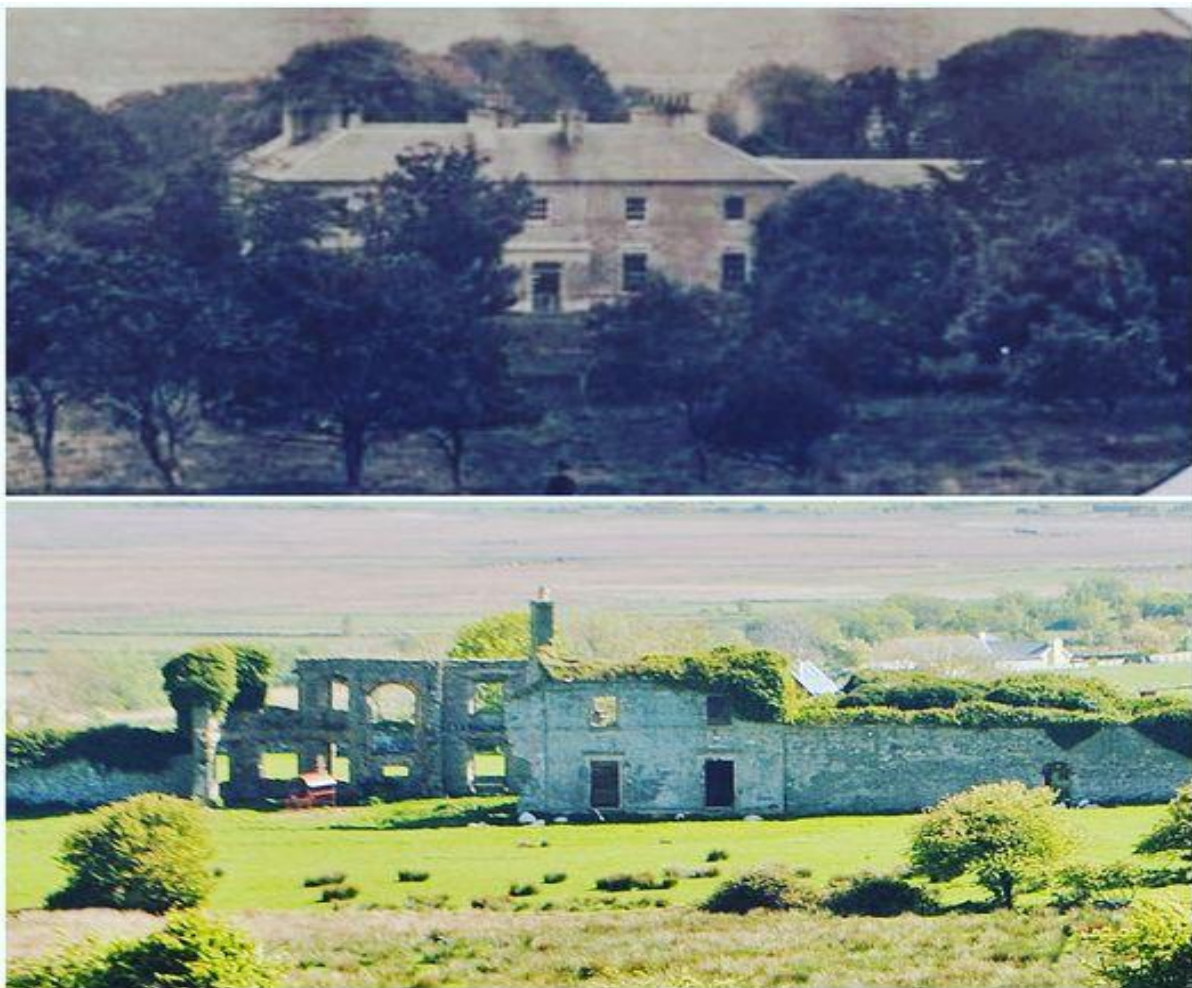
The Palmer family was a landed gentry family who owned large estates in County Mayo. While the family owned most of the Big Houses in Templemurry (now part of Killala parish) and Lacken parishes, the family resided in nearby Carrowmore House. They tended to lease most of the others estate houses to Knox and Bourke families (eg, Summerhill House and Heathfield House to Bourke's). Castlelacken was occupied into the early 1920s by a Colonel Knox who was related to the Belleek and other extensive Knox families in North Mayo. However, it fell into ruin after the Civil War period. Surprisingly I have not read of its direct involvement in any of the events during the 1798 French Expedition, while events at Summerhill House and The Glebe (a protestant Clergyman's dwelling near Lacken Hill) are mentioned in historical accounts and of course Killala is referenced profusely in a Booklet at Bishop Stock, where he anonymously recounts what transpired. A Plaque, referred to as Garrai Francach was later erected in Killogeary townland (at the periphery of Castlelacken Castle) in memory of the first French soldier who died there. Its installation is recorded in this U Tube Video - [\(6\) Unveiling of Garraí Francach - YouTube](#)

**Historical, cultural or spiritual value.** Such attributes may be evident or sensed at certain viewing locations that attract visitors for the purposes of contemplation or reflection heightening the sense of their surroundings. The following photographs show **'The Gazebo'** that overlooks what is now the derelict Castle Lacken Castle. One of the more recently established local loop walks **funded by North West Tourism**, from St Patrick's Church Lacken, overlooks the castle and goes right through the middle of the proposed wind farm by the Gazebo and by Rathlacken Court tomb.

The area where the Tirawley wind farm is proposed to be located in County Mayo is designated under the County Development Plan as “Open to Consideration”. Many other areas of similar topography and scenic uniqueness in Erris, Achill, Westport, Newport, etc, are designated as “Unsuitable” for Development.” One must wonder why the proposed area was not similarly designated and fully protected. One can only hope that common sense prevails and this application is rejected as totally inappropriate.

**Recognised scenic value of the Views** - North Mayo Tourism appears to appreciate fully the positive importance of scenic landscape in promoting tourism in the North Mayo area. They also understand that natural, unspoiled scenic landscape is a major asset in attracting national and international tourists to North Mayo and indeed Ireland. While Hotels, Guest-Houses, Air B and Bs, Restaurants and pubs based mainly in towns are the most significant beneficiaries, it is the rural coastal scenery along the **Wild Atlantic Way** and the **Euro Velo Route** that attracts the tourists. <https://euroveloireland.ie/route/eurovelo1/section-32#historic-site>

**Castle Lacken House, site of earlier castle: Habitable into the 1920s.**





**The Gazebo also referred to as a Folly**



- This rare and unique view cannot be replicated - RPs 016

**North West Tourism** is very alert to the impact of scenic landscape on attracting tourists. They use photographs and videos of the landscape in effective tourism promotion. They are also involved on the ground with positive initiatives in helping to establish trails/walks in scenic rural areas. These walks are regularly availed of year-round by local and visiting walking groups. It is unfortunate that much of their good tourism efforts are undermined by policies that install inefficient and ineffective wind farms in inappropriate scenic locations.

**A lot of excellent tourism promotional work is being carried out as instanced in the following link:**

<https://paradisepossible.ie/Mayo/Areas-Routes/North-Mayo>

This area is routinely promoted by North Mayo Tourism with panoramic online and brochure photographs and commentary. A panoramic photograph of the Lackan Hills appeared on the cover of a **Brochure of the Mayo Society of New York Ball of December 2024.**



A similar photograph was recently posted on Facebook by a member of a Mayo People's Association based in Dublin. This iconic landscape is recognized locally, nationally and internationally.

A number of additional scenic trails have recently been established around the Kilcummin side of the parish and indeed Kilcummin Head. It is also intended in the near future to link these trails with 'The Western Way' trail. Establishing these walking trails to facilitate outdoor activity and then proposing a wind farm in the middle of these trails is just not coherent planning policy. Our beautiful scenery is recognized and appreciated worldwide and it should also be appreciated and protected by our politicians and in this instance by our planners.



The next photograph features Michael Mc Andrew of Bessie's Bar, Kilcummin, MC of proceedings and CLLR, Michael Loftus Chairman of Mayo Co Council speaking to the attendance.



#### **Lacken Strand:**

Quoting directly from North Mayo Tourism Posts and displaying promotional photographs:  
"Lacken Strand is also special. With its miles of beautiful, vast expansive shoreline and some of the best unspoiled beaches. Its scenic beauty is simply unrivalled. Because it's off the beaten track, it's completely unspoiled. It's here you go to breathe, to revel in the open space, and blow away the cobwebs. The strand here is so vast that it's been used to host the Lacken Races, and Band on the Strand (BOTS) an annual Foróige concert and Charity Tractor Runs".



**Again, quoting from their Face Book posts:** “Lacken nestles along the rugged North Mayo coastline along the Wild Atlantic Way, between the towns of [Killala](#) and [Ballycastle](#). Lacken Strand provides the Parishes center piece and divides it equally into the East side referred to as Kilcummin and the West Side, referred to locally as ‘The Other Side’ and more generally as Lacken.”

**Presence of striking or noteworthy features.** The Tourist Board also posts photos and commentary of the area on Face Book. **“The previous photograph, taken from the Lacken Side of the Strand** shows a true hidden treasure in Kilcummin Back Strand and The Burrough in Carrowstellagh in the background, where the French soldiers camped following their landing at Kilcummin in Ballinlena Townland. “Our own secret beach, this is a sea fisher’s and a surfer’s paradise but excellent surfing can also be found at the rear of Kilcummin Pier and at Castlemagee and Steelaun townlands opposite Ross north facing beach. The Back Strand is nestled away and isn’t easy to find, but boy, is it worth the search and as it is well sheltered from the South, it is an ideal place for a stroll.”

The Back Strand is regularly used by locals and visitors alike and at times it is difficult to get a parking place. Should a wind farm be placed on the Lacken Hills, one can only imagine how it will impact negatively on these totally unspoilt natural, panoramic scenes.



Because of its natural scenic beauty, interesting history and proximate location in the hinterland of Ballina, Killala, Ballycastle and Crossmolina, North Mayo Tourism, in the context of promoting the Wild Atlantic Way regularly refer to the beauty of Lacken parish in their promotional literature and indeed on line.

“Here’s a sneak preview of the treasure that awaits, once you reach the crest of the hill on your way from Kilcummin Pier to the Back Strand.”



### A Sense of Allure and Mystery:



### Conflict between Tourism Promotion and the impacts of wind farms on the landscape:

There are definite conflicts of interest between the facilitation and promotion of tourism and the installation of industrial scale wind farms. **The Wild Mayo Destination and Experience Development Plan (DEDP)** is a good example of this conflict. It is a five-year sustainable tourism development plan for the North Mayo region that stretches from the Mullet Peninsula to Ballina and Foxford, via Ballycastle and Killala.

The plan has been prepared within the context of the wider tourism and sustainability policy environment and has considered relevant national and international best practices. The proposed actions are grounded in the principles and policies of sustainability and the VICE model, thereby ensuring that full consideration is given to a balanced and synergistic approach that delivers on four key pillars: The Visitor Experience, Industry Growth, Community Benefit, and Environmental Protection. The model applies to all aspects of tourism planning, destination management, and policy making.

## **Wild Mayo Summary - DEDP:**

### [Wild Mayo Tourism Plan Launched – A Game Changer for North Mayo - Visit North Mayo](#)

A major new chapter for tourism in the region has begun with the official launch of the **Wild Mayo Destination and Experience Development Plan (DEDP)**. This is a bold five-year roadmap set to shape the future of North Mayo as a leading sustainable tourism destination. The DEDP was launched on 02 May 2026 at the Ballinglen Museum of Art and the plan was unveiled by Minister of State at the Department of Enterprise, Tourism and Employment, Alan Dillon TD, in partnership with Fáilte Ireland. Two days later the award of planning permission for a 22-turbine wind farm in Glenora beside Ballycastle was also announced. It remains to be seen if tourism and the proliferation of wind farms are compatible. The visual intrusion on the landscape of industrial scale turbines is just one aspect of the conflict. Greater wariness will continue to rise, as more people become educated to their impacts on people's health from infra noise the knowledge of which has been mostly suppressed to date.

One can only hope that policy makers can distinguish appropriately between the obvious conflicts with siting wind turbines in Scenic Landscapes such as Lacken parish, North Mayo and the conflict with tourism promotion.

## **9. Cultural Heritage, Archaeology and Historical Landscape – EIAR Chapter 14**

### **Objection to the Proposed Tirawley Wind Farm Development (Application Ref. 324258)**

#### **Introduction**

The purpose of this chapter is to demonstrate the extraordinary archaeological, historical, architectural and cultural significance of the wider Lacken, Kilcummin, Rathfran, Carn and Ballycastle hinterland and to outline why the insertion of sixteen industrial-scale wind turbines into this landscape would constitute a profound and irreversible adverse impact on the cultural heritage of the area.

The issue is not simply one of isolated monuments or archaeological features. Rather, the concern relates to the integrity of an interconnected historic landscape extending across the North Mayo uplands and coastal hinterland. The proposed development would industrialise a landscape that contains archaeological evidence spanning almost 6,000 years of human occupation, settlement, ritual activity, agriculture, ecclesiastical development and social history.

The cumulative effect of turbines approximately 135 metres in height, together with associated roads, excavations, crane pads, hardstands, substations, drainage works and grid infrastructure, would fundamentally alter the historic character, visual coherence and archaeological integrity of this culturally rich landscape.



## 9.1 Summary Grounds for Objection

The principal grounds for objection to the proposed Tirawley Wind Farm, insofar as cultural heritage is concerned, may be summarised as follows:

1. **Risk of damage to undiscovered archaeology and paleoenvironmental material.**  
The EIAR itself acknowledges the likelihood that subsurface archaeological remains survive throughout the site and surrounding lands. The wider area exhibits many characteristics associated with the Céide Fields field-wall system and associated Neolithic settlement patterns.
2. **Industrialisation of a highly sensitive archaeological landscape.**  
The proposed turbines would introduce large-scale moving industrial structures into a historic landscape characterised by archaeological complexes, ecclesiastical remains, vernacular heritage and protected structures.
3. **Severe visual and setting impacts on monuments and protected structures.**  
The EIAR itself acknowledges likely significant indirect operational effects on the settings of Carn archaeological complex, Carn House and Rathfran Abbey.
4. The EIAR acknowledges that a structure at Leacarrowntemple would be directly impacted during construction resulting in a permanent negative direct effect that is irreversible.
5. **Destruction of archaeological context.**  
Even where archaeology is excavated and recorded prior to construction, the destruction of archaeological stratigraphy and landscape context represents a permanent loss of scientific and interpretative value.
6. **Incompatibility with the historic landscape character of North Mayo.**  
The insertion of sixteen turbines across the skyline would fundamentally alter the historic visual relationship between monuments, settlements, uplands, ecclesiastical sites and the Atlantic landscape.
7. **Failure to adequately account for cumulative cultural impacts.**  
Existing wind turbines already visible in the wider area have altered important views and ridgeline character. The proposed development would intensify that cumulative impact to an unacceptable degree.
8. **Adverse impacts on intangible cultural heritage.**  
The landscape contains important associations with local folklore, saints, oral traditions, the 1798 French Expedition, emigration history and internationally significant historical figures.
9. **Contradiction with stated heritage protection objectives within the Mayo County Development Plan 2022–2028.**  
The Development Plan specifically seeks to protect archaeological monuments, their settings and the tentative UNESCO significance of the Céide Fields landscape.
10. **The EIAR attempts to minimise these effects** by asserting that such impacts are “reversible” at decommissioning stage. This conclusion is fundamentally flawed.

11. **The archaeological significance of this broader landscape has not yet been comprehensively investigated.** Much of the terrain remains unexcavated and poorly understood. In such circumstances, a precautionary approach should apply.
12. Existing wind turbine developments already visible within the wider landscape have altered the visual character of portions of the North Mayo uplands. The proposed Tirawley Wind Farm would substantially intensify this cumulative effect.

## **9.2 Archaeological Significance of the Wider Landscape**

The proposed wind farm is located within one of the richest archaeological landscapes in County Mayo. The wider region surrounding Lacken, Rathfran, Carn, Kilcummin and Ballycastle contains archaeological evidence extending from the Neolithic period through the medieval and post-medieval eras.

The EIAR confirms that there are approximately 85 recorded archaeological sites located within 1 kilometre of the Wind Farm Site. This concentration alone demonstrates the exceptional archaeological sensitivity of the area.

The cultural landscape is not defined merely by isolated monuments but by a connected archaeological terrain in which field systems, burial monuments, ecclesiastical sites, ringforts, enclosure complexes and vernacular settlement patterns collectively contribute to a coherent historic environment.

### **9.2.1 The Céide Fields Context**

The archaeological importance of North Mayo cannot be considered without reference to the Céide Fields complex, recognised internationally as the oldest known field system in Europe.

The Céide Fields were first identified in the 1930s by Patrick Caulfield and later extensively investigated by Professor Seamus Caulfield during the 1960s and subsequent decades. Archaeological investigations demonstrated the existence of extensive Neolithic field systems, habitation areas and ritual landscapes preserved beneath blanket bog.

The EIAR acknowledges that the Céide Fields complex lies approximately 9.5 kilometres west of the proposed site. However, the archaeological landscape associated with Céide Fields does not abruptly terminate at a modern administrative or study area boundary.

Research and local archaeological investigation strongly suggest that elements of the same Neolithic landscape system extend eastwards through the wider Lacken and Rathlacken hinterland. The archaeological excavations undertaken at Rathlacken Court Tomb during the 1990s identified settlement structures, field boundaries and associated archaeological features which closely resemble those found within the Céide Fields complex.

The archaeological significance of this broader landscape has not yet been comprehensively investigated. Much of the terrain remains unexcavated and poorly understood. In such circumstances, a precautionary approach should apply.

### **9.3 Recorded Archaeological Constraints**

The EIAR identifies numerous archaeological constraints and areas of heightened sensitivity within and adjoining the proposed development lands.

#### **These include:**

- Area of heightened archaeological sensitivity at Carrickanass Castle and Bawn site (MA014-057--- and MA014-057001-)
- Enclosure MA014-030---
- Ringforts MA014-008---, MA014-035---, MA014-056---, MA014-058---, MA014-059--- and MA014-060---
- Souterrain MA014-008001-
- Carn archaeological complex MA014-061001- to MA014-061005-
- Carn House (RPS 187)

The EIAR specifically notes that the grouping of monuments at Carn is subject to Preservation Order Ref. 11/1983 and constitutes National Monument Ref 389.

The archaeological significance of Carn is particularly important. The monument grouping includes:

- Enclosures
- A cross inscription
- Potential church remains
- Children's burial grounds
- Possible ecclesiastical enclosure features

Collectively, these indicate the likely presence of an early medieval ecclesiastical complex of considerable archaeological and historical significance.

#### **The EIAR further acknowledges that:**

“Given the large volume of recorded archaeological monuments within the Study Areas, as well as the scale of the Proposed Development, it is likely that sub-surface archaeological remains or features continue to survive with no visible surface trace.” This is a highly significant admission. The proposed development therefore risks disturbing or destroying currently unknown archaeological deposits, paleoenvironmental evidence and landscape features that have never been archaeologically examined.

## 9.4 Risk to Undiscovered Archaeology and Paleoenvironmental Evidence

The archaeological sensitivity of blanket bog landscapes is now well recognised internationally.

### **Peat environments frequently preserve:**

- Ancient field walls
- Timber structures
- Pollen records
- Environmental sequences
- Wooden artefacts
- Ancient land surfaces
- Human and animal remains
- Evidence of prehistoric farming systems

EPA Research Report No. 494 highlights the importance of boglands in preserving paleoenvironmental and archaeological evidence and emphasises that archaeological interpretation depends heavily on preservation of landscape context.

The construction of wind turbines involves extensive ground disturbance including:

- Deep excavations for turbine foundations
- Access roads
- Crane hardstands
- Borrow pits
- Drainage systems
- Cable trenches
- Substation infrastructure

These interventions would permanently disturb archaeological stratigraphy and environmental deposits.

Even where archaeology is identified and excavated in advance of construction, preservation “by record” is not equivalent to preservation in situ. Excavation is itself a destructive process. Once archaeological context is removed, the original landscape evidence can never be recreated.

The EIAR repeatedly relies upon mitigation through archaeological excavation, monitoring and recording. However, such mitigation does not avoid destruction. It merely records information prior to loss.

## 9.5 Impacts on Setting, Landscape and Visual Integrity

One of the most serious deficiencies in the proposal is the underestimation of landscape setting impacts upon archaeological and historic sites.

The archaeological landscape of North Mayo derives much of its significance not merely from individual monuments, but from the visual and spatial relationships between:

- Uplands
- Coastline
- Ecclesiastical sites
- Ringforts
- Court tombs
- Historic houses
- Historic routes
- Agricultural landscapes
- Open skyline vistas

**Appendix 14.1 referring to Cultural Heritage Plates** provides some illustrative photographs.

The proposed turbines would dominate these relationships.

The EIAR acknowledges: “There is predicted indirect Significant effect at operational stage at Carn House and Carn archaeological complex and at Rathfran Abbey.”

This admission is of major importance. Rathfran Abbey, Rosserk Abbey and Moyne Abbey are among the most important medieval ecclesiastical sites in North Mayo. Their significance derives not only from the surviving structures themselves but also from their landscape setting and visual dominance within a historically rural and undeveloped environment. The introduction of industrial-scale turbines onto surrounding ridgelines would fundamentally alter the character and atmosphere of these monuments.

The EIAR attempts to minimise these effects by asserting that such impacts are “reversible” at decommissioning stage. This conclusion is fundamentally flawed.

A landscape subjected to:

- decades of industrialisation,
- extensive excavation,
- altered hydrology,
- road construction,
- visual intrusion,
- habitat disturbance, and
- cumulative landscape transformation



cannot realistically be described as fully reversible.

Archaeological landscapes derive significance from continuity and integrity across time and a thirty-five-year period of industrial domination cannot simply be erased.

### 9.6 Architectural Heritage

The EIAR identifies six protected structures located within 1 kilometre of the Wind Farm Site. These include:

- Heathfield House (RPS 226)
- Carn House (RPS 187)
- Castlelacken House (RPS 188)
- Castlelacken Folly / Gazebo (RPS 016)
- Carrowmore House (RPS 190)
- Palmerstown Bridge

The EIAR also notes the architectural significance of the Castlelacken Folly, locally known as the Gazebo, which retains landmark status within the landscape. The Gazebo occupies an elevated and visually prominent position overlooking the wider Lacken landscape. It forms part of the historic designed landscape associated with the Castlelacken estate. The surrounding panoramic views towards the Atlantic coastline, uplands and historic landscape are central to its significance.

The introduction of sixteen industrial turbines into these views would fundamentally compromise the historic character and visual integrity of this protected structure and its setting.

Similarly, Carn House, Heathfield House, Carrowmore House and Lissadrone House all derive significance not merely from the buildings themselves but from their surviving relationships with the historic rural landscape. The proposed development would introduce moving turbine structures, aviation lighting, access roads and associated infrastructure into these historic settings.

### 9.7 Designated Architectural Heritage:

The Mayo County Development Plan 2022-2028 lists **six protected structures located within 1 km of the Wind Farm Site.**

- **Heathfield House** (RPS 226) is a rectangular, single fronted gabled country house constructed in c.1780. The walled garden at Heathfield House is also protected (RPS 226).
- **Carn House** (RPS 187) is a detached, three bay, two storey country house with a L-shaped plan which was constructed in c.1850. Carn House is located at the southern portion of the Study Area, 135 m east of the Site Access Track to AT02, AT03 and AT04 (within forestry).

- **Castlelacken House** (RPS 188) comprised a three bay, two storey country house that was constructed in c.1880 and is now in ruins. The former estate at Castlelackan also has an associated **folly, and obelisk** (RPS 16) built c. 1840 on elevated ground (known locally as the Gazebo) that still retains a landmark quality to the area. In 1912, Castle Lacken Co. Mayo was advertised to let as having 3 large sitting rooms, 10 bedrooms, servants' rooms and domestic offices. By 1925, it was said that 'there was nothing at all left in Castle Lacken - windows or anything else except a few stone walls'.
- **Carrowmore House** (RPS 190) is a detached, three bay, two storey house which was constructed in c.1810 and incorporates element of an 18th century dwelling.
- The NIAH also lists a 19th century two arch road bridge located within the Study Area (ref. 31301409) which is not listed as a protected structure.
- **Lissadrone House** (Townland: Lissadrone East) - Described as follows in Landed Estates NUIG: 'Described at the time of the first Ordnance Survey as a plain building ornamented with a few trees and shrubs and held on a lease for ever. In the 1850s it was occupied by Matthew Flynn and is now a ruin.' It has since been restored. It is linked historically to Sir Alexander Fleming.
- **Billoose Bridge**

## 9.8 Vernacular and Undesignated Heritage

The EIAR identifies several undesignated vernacular structures within the Redline Boundary, including nineteenth-century farmhouses at:

- Lackanhill
- Carn
- Leacarrowntemple

The EIAR acknowledges that the structure at Leacarrowntemple would be directly impacted during construction resulting in a permanent negative direct effect - **Appendix 14.1 Cultural Heritage Plates**. These structures are important survivals of the vernacular rural landscape of North Mayo. While individually modest, collectively they contribute to the authenticity and historical continuity of the area.

### Such structures reflect:

- traditional settlement patterns,
- local construction techniques,
- agricultural history, and
- social history associated with the rural population.

Incremental destruction of vernacular heritage contributes significantly to long-term erosion of local identity and landscape character.

## 9.9 Ecclesiastical and Religious Heritage

The wider landscape contains a dense concentration of ecclesiastical heritage.

**This includes:**

- Rathfran Abbey
- Rosserk Abbey
- Moyne Abbey
- Kilcummin Church
- Early ecclesiastical features at Carn
- St Patrick's Well at Foghill
- Historic graveyards and burial grounds

These sites collectively illustrate the continuous religious history of the area from the early medieval period onwards.

**Kilcummin Church** is associated with St Cuimin and remains an important historic and cultural landmark within the parish. **St Patrick's Well at Foghill** retains strong folkloric and devotional associations. According to local tradition, St Patrick returned to the area after hearing the voices of the people of Foghill calling him back. These intangible cultural associations form part of the living cultural heritage of North Mayo and should not be dismissed as incidental or secondary considerations. The wider landscape setting contributes directly to the spiritual and historic atmosphere associated with these sites.

## 9.10 Historical Associations and Intangible Cultural Heritage

The cultural significance of the landscape extends beyond archaeology and architecture. North Mayo possesses exceptionally rich historical and intangible cultural heritage linked to:

- local folklore,
- saints and pilgrimage traditions,
- the 1798 French Expedition,
- the Land League,
- emigration history,
- genealogy,
- oral history, and
- internationally significant historical figures.

### 9.10.1 The French Expedition of 1798

The wider Lacken and Kilcummin area was directly associated with General Humbert's French Expedition during 1798.

Historic houses throughout the area were visited by French forces in search of provisions and horses. These events form part of an important chapter in Irish revolutionary history.

Commemorative plaques and monuments associated with these events remain within the locality and continue to form part of the area's heritage identity.

### **9.10.2 Land League and National History**

The wider region also has important historical connections to the Land League movement and to figures associated with Irish political and cultural nationalism.

**Michael Mac Ruaidhrí of Foghill**, a mentor and confidant of **Patrick Pearse** is commemorated locally. These associations contribute to the historic identity and collective memory of the area.

### **9.10.3 Genealogical and Diaspora Connections**

The North Mayo landscape also possesses considerable significance for the Irish diaspora.

Many emigrant families throughout the world retain strong ancestral associations with this landscape and regularly return to visit ancestral homes, monuments, graveyards and historic sites.

The historical association between Lissadrone House and the family of Lady Sarah Fleming, wife of Sir Alexander Fleming, illustrates how local family histories intersect with internationally important historical figures. The landscape itself forms part of this connection.

Its visual integrity and historical atmosphere are integral components of heritage tourism, genealogical research and diaspora engagement.

## **9.11 Incompatibility with Planning and Heritage Objectives**

The Mayo County Development Plan 2022–2028 contains explicit objectives requiring protection of:

- Recorded monuments,
- Archaeological settings,
- Protected structures,
- Historic landscapes,
- Vernacular architecture,
- Archaeological integrity, and
- The significance of the Céide Fields landscape.

### **The Development Plan specifically states:**

“To protect the tentative World Heritage Site in Mayo on the UNESCO Tentative List – The Céide Fields – from inappropriate development.” The proposed development conflicts with the spirit and intent of these objectives. While the EIAR repeatedly proposes mitigation through archaeological recording and management measures, such mitigation does not resolve the fundamental incompatibility between industrial-scale wind energy infrastructure and an archaeological landscape of exceptional sensitivity.

### **9.12 Cumulative Landscape and Cultural Impacts**

Existing wind turbine developments already visible within the wider landscape have altered the visual character of portions of the North Mayo uplands. The proposed Tirawley Wind Farm would substantially intensify this cumulative effect.

The issue is not merely one of visibility but of landscape domination.

#### **The proposed turbines would:**

- break historically undeveloped skylines,
- dominate ridgeline views,
- alter the visual relationship between monuments and topography,
- reduce landscape coherence,
- industrialise historically rural settings, and
- diminish the experiential quality of heritage sites.

The cumulative effect upon the wider cultural landscape would therefore be profound.

### **9.13 Conclusion**

The archaeological, historical and cultural landscape of the wider Lacken, Rathfran, Carn and Ballycastle hinterland is of exceptional significance.

#### **The proposed development would introduce sixteen industrial-scale wind turbines and extensive associated infrastructure into a landscape characterised by:**

- prehistoric field systems,
- court tombs,
- ecclesiastical complexes,
- ringforts,
- vernacular settlement,
- protected structures,
- historic designed landscapes,
- folklore traditions,

- revolutionary history, and
- internationally important archaeological context.

**The EIAR itself acknowledges:**

- significant operational impacts on important heritage receptors,
- heightened archaeological sensitivity across the site,
- the likelihood of surviving undiscovered archaeology,
- direct impacts upon vernacular heritage structures, and
- significant indirect impacts upon the settings of archaeological monuments.

The proposal therefore represents not merely a local planning issue but a fundamental question concerning stewardship of an internationally significant historic landscape. Once archaeological context is destroyed, it cannot be recreated. Once historic skylines and landscape relationships are industrialised, their integrity cannot genuinely be restored. The proposed development would fundamentally and irreversibly alter the cultural heritage character of this remarkable North Mayo landscape.

For all of the foregoing reasons, it is respectfully submitted that planning permission for the proposed Tirawley Wind Farm should be refused.

**Local Historians:**

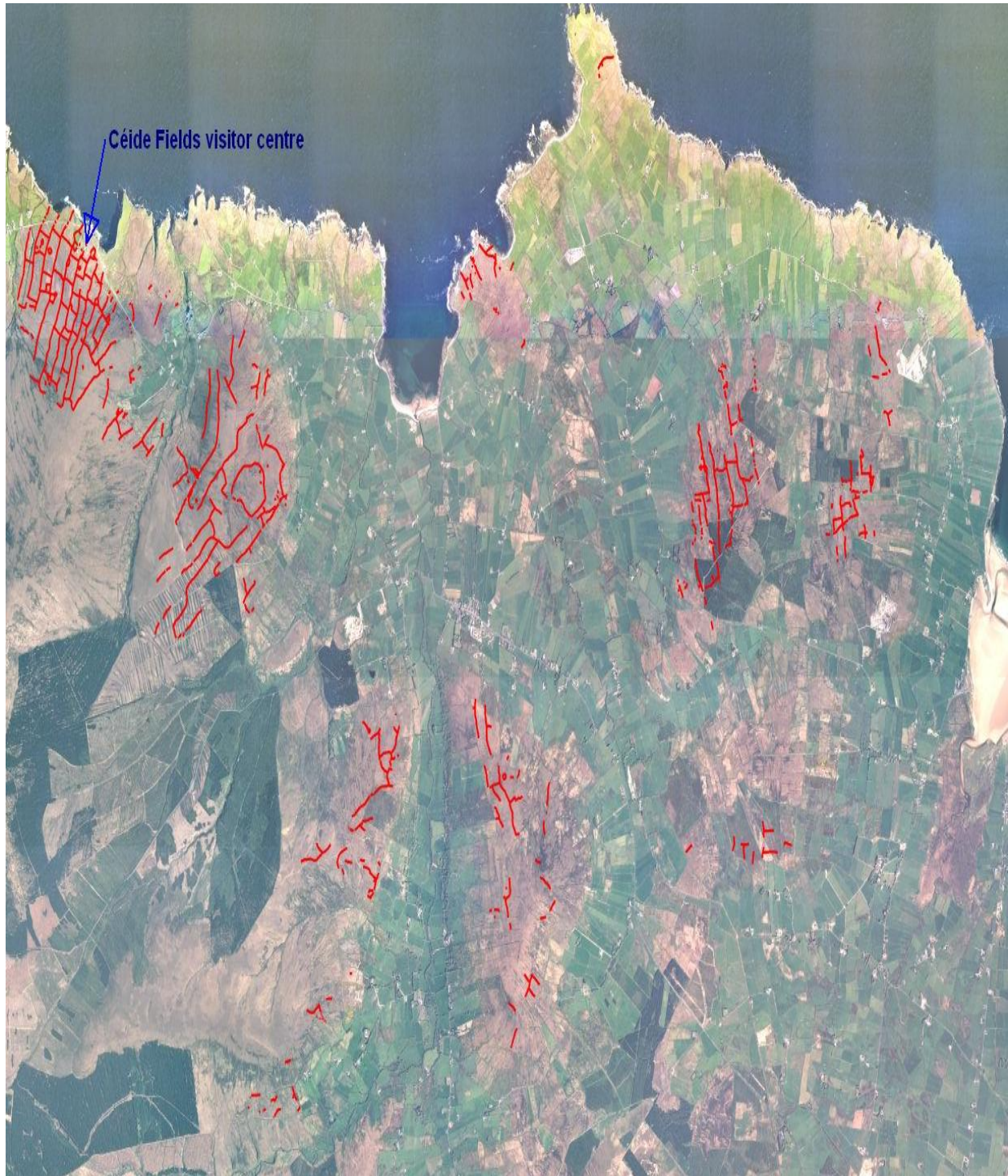
**Appreciation expressed to local historians who displayed their insight and appreciation of the local cultural artefacts and history. They have all gone to their reward and it is now up to the living communities to ensure that their recorded legacies continue to be preserved in the landscape and archeology.**

- Canon Mc Hale, Killala was a noted historian and features in many videos recorded by Sean Lavin, NT.
- Sean Lavin, NT also wrote a booklet describing the rich archeological heritage of the area and wrote extensively about local history and recorded numerous videos focusing on the history and archeology that are now available on U Tube.
- John Lynott, NT also wrote a Booklet that focused on the principle archeological features of Lacken and surrounding Parishes.
- John Cosgrove, NT published a book entitled 'The Life and Times of Lacken Sarsfields' in 2015. It set out to outline the history of the local GAA Club but luckily was expanded to also provide a comprehensive history of the people and their cultural heritage.
- Stephen Dunford, author and historian also engaged extensively with the history and landscape of the locality, with particular emphasis on The French Expedition of 1798.



## Cultural Heritage – Photographs depicting the Archeology and History:

The Discovered Field Wall System in Ballycastle and Lacken area where archeological investigation has already been carried out.





## The Ruin of Rathfran Abbey





**St Cummins's Church** located in the ancient Anglicized Kilcummin Parish – Ballinlena Townland



**Rathlacken Court Tomb:**





**Ruin of Summer Hill House – former property of the Palmer Landlord Family**



**It features in the historical accounts of the French Expedition of 1798 by Bishop Stock.**

**Castlelackan Folly (RPS 016) locally known as the Gazebo and overlooking Castlelacken House and site of former castle.**

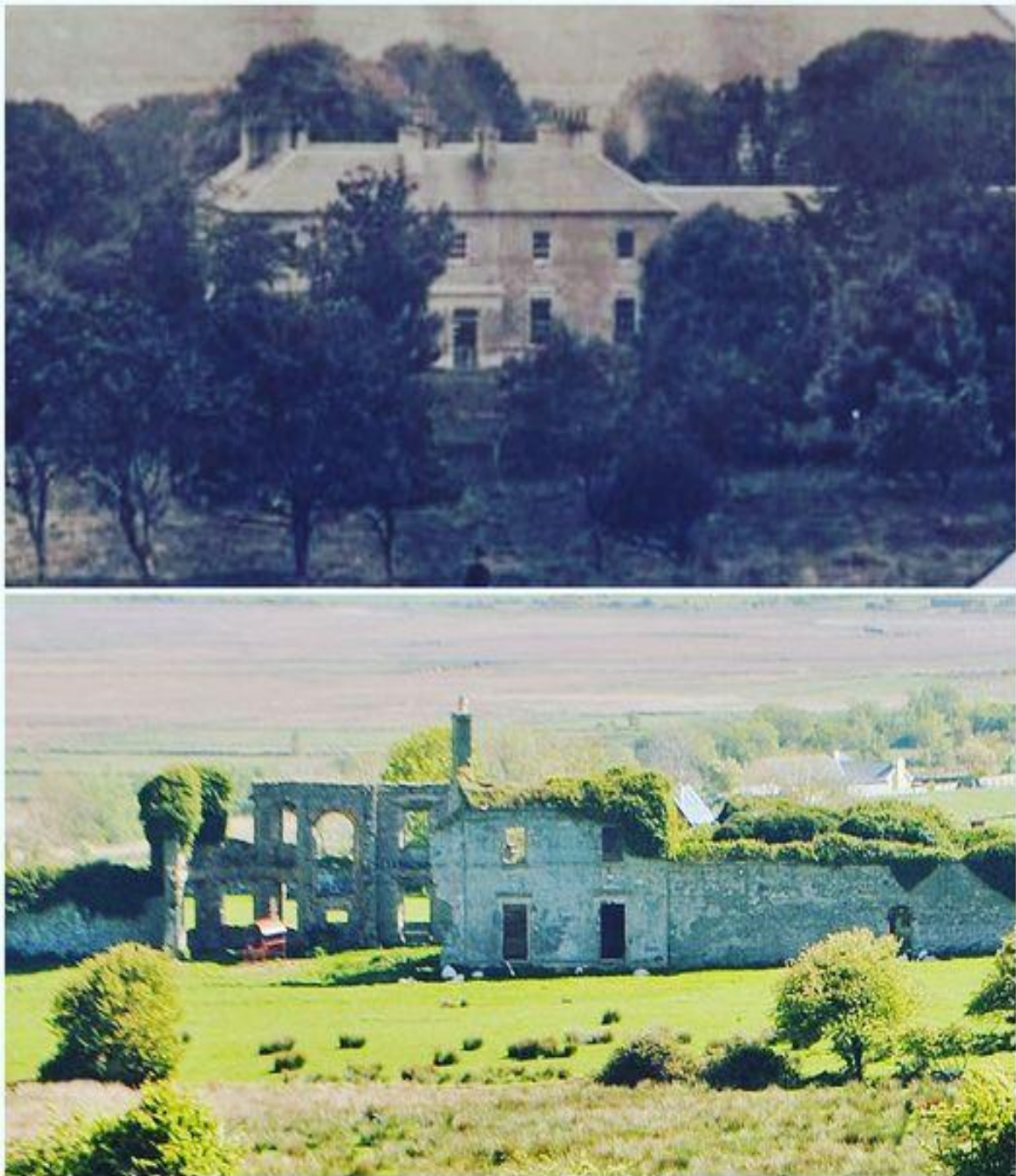




**The Lacken Hills from Foghill townland, beside St Patrick's Holy Well with panoramic views over the Gazebo.**



**Castlelacken House in its original state on the site of a former castle. It was advertised for sale in 1912 but abandoned by 1925.**





## Lissadrone House





## Garrai Francagh - Commemorating the death of a French Soldier in 1798





**'French Soldiers' posing in front of The Humbert Monument erected in Kilcummin.**



**'The Lawrence Collection' photograph of Kilcummin about 1905.**



**Panoramic Iconic photograph of the Lacken Hills – used regularly in promotions by North Mayo Tourism**



## **10. Ornithology – Grounds for Refusal Arising from EIAR Chapter 7**

### **Introduction**

This submission concerns the ornithological assessment contained in Chapter 7 of the Environmental Impact Assessment Report (EIAR) for the proposed Tirawley Wind Farm.

The EIAR confirms that the proposed development area supports a range of protected and conservation-priority bird species, including Hen Harrier, Merlin, Peregrine, Kestrel, Buzzard, Curlew, Golden Plover, Brent Goose and Whooper Swan. Several of these species are listed under Annex I of the Birds Directive and/or are Birds of Conservation Concern in Ireland.

The principal concern arising from the EIAR relates to the adequacy of the assessment of Hen Harrier, a species whose conservation status in Ireland has deteriorated significantly and which is acknowledged within the EIAR to utilise habitats within the proposed development area.

The grounds for refusal set out below are based upon information contained within Chapter 7 of the EIAR and associated appendices.

### **Ground 1**

#### **Inadequate Baseline Survey Data for Hen Harrier**

The EIAR acknowledges that Hen Harriers utilise the proposed development area during the autumn and winter period and that the site provides suitable winter habitat.

The assessment further acknowledges:

- the existence of a winter roost at Lacken Bay;
- evidence linking birds recorded within the wind farm area to that roost;
- winter foraging activity within the development area;
- observations of birds landing on and rising from bog habitats within the study area.

Despite the importance of the site for wintering Hen Harriers, the winter roost survey effort was limited.

The survey programme does not appear sufficient to establish with confidence:

1. Peak winter occupancy levels;
2. Annual variation in roost use;
3. The existence of additional roost sites within the wider study area;
4. The importance of bog habitats within the development area for roosting purposes;
5. The principal commuting routes between roosting and foraging locations.



The EIAR itself records observations suggesting that individual birds may roost on bog habitats within the study area. However, no comprehensive programme appears to have been undertaken to identify and assess all potential roost locations within the wind farm area.

As collision risk, disturbance effects and displacement effects depend fundamentally upon understanding how birds use the site. The absence of sufficiently robust baseline information undermines the reliability of the subsequent impact assessment.

Accordingly, the competent authority cannot be satisfied beyond reasonable scientific doubt that all significant effects on Hen Harrier have been identified and assessed.

## **Ground 2**

### **Failure to Adequately Assess Functional Connectivity Between the Wind Farm Site and Hen Harrier Roosting Areas**

The EIAR accepts that:

- an active winter roost exists in the Lacken Bay area;
- birds recorded within the wind farm site are likely to utilise that roost;
- the development area provides suitable winter habitat;
- Hen Harriers forage within and around the turbine locations.

The existence of a winter roost together with confirmed foraging activity establishes functional connectivity between the roosting resource and the proposed turbine array.

However, the EIAR does not adequately demonstrate:

- how birds commute between roosting and feeding areas;
- which turbine locations intersect those movements;
- whether all regularly used flight corridors have been identified;
- the extent to which the proposed turbine layout overlaps with critical winter habitat.

Where uncertainty remains regarding movement patterns of an Annex I species, it is not possible to conclude with confidence that collision risk and disturbance effects have been fully assessed.

The assessment therefore fails to provide a sufficiently robust evidential basis upon which An Coimisiún Pleanála can conclude that significant effects on Hen Harrier will not arise.

## **Ground 3**

### **Inadequate Assessment of Displacement and Habitat Avoidance Effects**

The EIAR recognises that operational wind farms may result in avoidance behaviour and displacement by sensitive bird species.

This issue is particularly important in relation to Hen Harrier because the species depends upon extensive areas of suitable winter foraging habitat.

Published research cited in numerous Irish wind farm assessments demonstrates that Hen Harriers may avoid otherwise suitable habitat in the vicinity of turbines.

While the EIAR acknowledges the possibility of displacement, it does not adequately quantify:

- the area of suitable habitat likely to be functionally lost through avoidance behaviour;
- the cumulative effect of avoidance around multiple turbines;
- the implications of reduced habitat availability for wintering Hen Harriers;
- the consequences of habitat fragmentation within the development area.

The assessment focuses primarily on direct habitat removal while insufficiently addressing the potentially much larger area of habitat that may become unattractive or unsuitable due to turbine operation.

As a result, the true scale of habitat loss experienced by Hen Harrier may be significantly greater than that presented within the EIAR.

The assessment of displacement effects is therefore incomplete.

## **Ground 4**

### **Uncertainty Regarding the Cumulative Effects of Habitat Loss, Disturbance and Displacement**

The proposed development involves:

- removal of substantial areas of forestry;
- removal of areas of blanket bog;
- construction of turbine bases, hardstands and access roads;
- long-term operational disturbance from sixteen turbines.

The EIAR assesses these impacts individually but does not adequately evaluate their combined effect on Hen Harrier habitat utilisation.

The assessment does not satisfactorily address the cumulative interaction between:

- direct habitat loss;
- habitat fragmentation;
- turbine avoidance behaviour;
- disturbance during construction;
- collision risk;
- reductions in prey availability.

For a species already experiencing significant national population decline, the cumulative effect of multiple pressures may be more significant than any individual pressure considered in isolation.

The EIAR does not demonstrate that the combined effects of these pressures have been comprehensively assessed.

Accordingly, significant uncertainty remains regarding the overall impact of the development on Hen Harrier.

## **Ground 5**

### **Reliance on Post-Construction Monitoring to Resolve Existing Scientific Uncertainty**

The EIAR proposes extensive post-construction monitoring, including:

- collision monitoring;
- carcass searches;
- flight activity surveys;
- operational monitoring of bird activity.

While monitoring may assist in recording actual impacts after construction, monitoring is not a substitute for impact assessment prior to consent.

The purpose of the EIAR process is to identify and assess likely significant effects before a development is authorised.

Where uncertainty exists regarding:

- roost locations;
- commuting routes;
- displacement effects;
- habitat utilisation;
- collision risk;

that uncertainty must be resolved during the assessment process rather than after development has commenced.

The reliance upon future monitoring demonstrates that important uncertainties remain regarding the likely effects of the project on protected bird species.

In circumstances where significant scientific uncertainty persists, the precautionary principle requires that such uncertainty be resolved before consent is granted.

## Conclusion

The EIAR confirms that the proposed development area supports important habitats used by Hen Harrier and other protected bird species.

However, significant concerns remain regarding:

1. The adequacy of baseline survey information;
2. The assessment of roosting and commuting behaviour;
3. The assessment of displacement and habitat avoidance;
4. The cumulative effects of habitat loss, disturbance and operational impacts;
5. Reliance upon post-construction monitoring to address unresolved uncertainties.

The information presented in Chapter 7 does not provide a sufficient basis upon which An Coimisiún Pleanála can conclude, beyond reasonable scientific doubt, that the proposed development will not give rise to significant adverse effects on Hen Harrier and other conservation-priority bird species.

For these reasons, planning permission should be refused.

In addition to the hen harrier, the site supports several **protected / Annex I / red/amber-list** species (notably **merlin, peregrine, kestrel, buzzard** and several waders and wintering water birds at nearby Lacken Bay).

- The **main risks** to migratory and locally-migrating birds are **collision, displacement, avoidance, construction disturbance, and habitat loss**. Collision risk modelling indicating **kestrel, buzzard and lesser black-backed gull** as species with higher predicted mortality and kestrel highlighted as the most significant predicted impact pre-mitigation.
- The EIAR concludes that local winter visitors and passage flocks (e.g., **curlew, golden plover, Brent geese**) do occur and are factored into the assessment.

## Summary on Migratory Bird Risks and Recommendations:

The Environmental Impact Assessment (Chapter 7 – Ornithology) confirms that the proposed wind farm area supports a range of protected and migratory bird species, including **Hen Harrier**,



**Merlin, Peregrine, Kestrel, Buzzard, Curlew, Golden Plover, Whooper Swan, and Brent Goose.** Several of these are **Annex I species under the EU Birds Directive or Red/Amber-listed Birds of Conservation Concern in Ireland.**

Although the EIAR concludes that no major migration corridors pass directly through the site, the area is used seasonally by **locally migrating and wintering birds** moving between feeding, roosting, and nesting areas — particularly **Hen Harriers and waders from the nearby Lacken Bay and Killala Bay/Moy Estuary SPA systems.**

The report's own collision risk modelling predicts measurable turbine strikes over the project lifetime, notably for **Kestrel, Buzzard, and Lesser Black-backed Gull**, with smaller but non-negligible risks to **Hen Harrier, Sparrowhawk, and Peregrine.** These impacts are described as “long-term moderate adverse” before mitigation.

**Migratory and locally moving birds** face additional risks from:

- Disturbance and displacement from suitable habitat during construction and operation.
- Loss or degradation of bog, rough grassland, and feeding areas.
- Potential barrier effects altering flight lines between inland roosting and coastal feeding zones.
- While the EIAR proposes mitigation, it relies heavily on post-construction monitoring rather than preventive measures. **Given the known sensitivity of species like Hen Harrier and Kestrel to turbine proximity, this approach will underestimate long-term population impacts.**

**Brent Geese grazing beside Kilcummin Pier in Ballinlena.** Brent geese migrate every winter from **northeast Canada** to Ireland, a non-stop journey of over 3,400 miles (5,500km). Do we wish to welcome their arrival and departure by placing deadly turbines in their pathways ?



**Whooper Swans taking a break on Lacken Strand beside the Salt Marsh. While they are not Annex 1 or Red List birds, who would wish to see them collide with wind turbines.**







**Whooper Swans in flight over Carrowstellagh (The Burrough beside Lacken Salt Marsh)**

## **11. Bio Diversity - EIAR - Ch 6 – General + Bats**

### **A. Summary of general Biodiversity Grounds for Objection;**

- Effectively all of the turbines are located in bog. Removing bog material to save the environment is counter-productive.
- All of the rivers draining the catchment area are in pristine condition, apart from the Cloonavarry river which is polluted. The other rivers are described as physically suitable for salmonid and lamprey habitats and also show the presence of brown trout and eel.
- The Report refers to the runoff of sediments and the increase in the levels of nutrients in receiving streams. This can result in the enrichment or eutrophication of the affected streams and catchment areas further downstream, and a possible change in overall water quality status.
- The Report also refers to 'Suspended solids or sediment in a river is also a major concern and can have serious negative effects on aquatic invertebrate and instream flora.'



- On balance the suggested mitigations do not remove the valid environmental threats to a unique protected environment.
- All of these alone or combined are valid grounds for a planning refusal.

#### **Back ground:**

It is ironic that most if not all Wind Farm sites are located in bogs or boggy areas within productive farmland. If one examines the location of the 16 turbines, they are invariably located in a bog. Farmers do not wish to sacrifice productive grassland to turbines but see merit in procuring an income from turbines located in boggy areas.

*“The Environmental Protection Agency (EPA) has recently published a report on large scale illegal peat extraction in Ireland, where it discovered nearly 40 illegal sites nationwide. The 38 sites are across seven counties – Offaly, Kildare, Tipperary, Westmeath, Roscommon, Longford and Sligo – where large-scale commercial peat extraction is being carried on without any of the necessary authorisations from the local authorities. These illegal operations are contributing to an export trade of 300,000 tons of peat annually, valued at almost €40 million.”* The Irish government is currently being taken to court by the EU in this regard. **Unfortunately, it is the Irish tax payers who pay the fines** for the environmental neglect and failures by the Irish government – not the culprits who have profited or the government.

Ireland appears to have a great propensity to drafting environmental legislation and guidance. We pay lip service however to implementation, monitoring and imposing effective penalties on non-compliance. The government (tax payers) fund over 40 Environmental NGOs. However, I note that their main role is to advocate for better protection but they invariably fail to act effectively where the environment is actually under threat. This is the case particularly where the government and its agencies are actually causing the threat. I read today 14 October 2025 that half of Irish rivers are polluted by farming and industry and domestic sewage. We have the protective legislation but we invariably fail to apply it effectively.

Peatlands were “ultra-high-value ecosystems”, said Dr Kemen Austin at the Wildlife Conservation Society, who led the study – but levels of protection were “dangerously low”. Peatlands not only store carbon, but also trap water, helping to prevent floods and droughts, and harbour many mosses and flowers, birds, fish and butterflies. “Their value for people, both locally and at the global scale, is just enormous,” she said.

“The carbon in peatlands took hundreds to thousands of years to accumulate and cannot be replaced on timescales relevant to climate change action,” Austin said. “That’s why peatlands are sometimes referred to as a carbon bomb, because once you ignite that bomb, those emissions are going to continue, and we’re not getting that carbon back.”

A recent EPA Report is also instructive concern the environmental benefits of preserving bogs.  
**Peat Hub Ireland Authors: EPA Report No 494** - Florence Renou-Wilson, David Wilson and Kate Flood  
 Flood Lea Organisation: University College Dublin.

[https://www.epa.ie/publications/research/epa-research-2030-reports/Research\\_Report-494.pdf](https://www.epa.ie/publications/research/epa-research-2030-reports/Research_Report-494.pdf)

Locally the Wind Farm Site is mapped in 3 no. WFD river sub-basins: • The majority of the Wind Farm Site is located in the **Cloonalaghan\_010** river sub-basin. This area is drained by the Carn River and several 1st and 2nd order streams all of which discharge into the Cloonalaghan River, which flows in a northeast direction before discharging into Lackan Bay.

- The northeast of the Wind Farm Site is located in the Knockboha\_010 river sub-basin. This area of the Wind Farm Site is drained by several 1st order streams which flow downslopes to the east into Lacken Strand. The watercourses in the vicinity of the Wind Farm Site are locally unnamed and are referred to by the EPA as the Castletown stream. This watercourse is mapped to originate ~250 m northeast of wind turbine AT17.

Some relatively intact blanket bog remnants, as well as **Cutover bog** (PB4), occurs in the northern (Lackanhill) and north-central sectors (Cloonanass-Lissadrone). It is noted that more extensive blanket bog occurs on Knockboha Hill outside of the Wind Farm study area.

The nearest designated European site to the Wind Farm Site is the Lackan Saltmarsh and Kilcummin Head SAC/SPA and the Lackan Bay component of the Killala Bay/Moy Estuary SPA (both just over 1 km distance from northern-easternmost sector of the Wind Farm Site), with hydrological connectivity between the two locations. The Killala Bay/Moy Estuary SAC and the Killala Bay/Moy Estuary SPA receive drainage from the route of the Grid Connection and from the sector of the TDR extending from Ballina to the Wind Farm Site.

This site was located on the 3rd order Cloonalaghan river (EPA code: 33C01), on the border of the townlands of Carrowmore and Cloonalaghan townlands. **There is an EPA monitoring station (Site reference RS33C010700) here.** The river was classified as having 'Good' status, with a Q4 rating when last assessed in 2020. This was the same rating assigned in the current survey. Class A Heptageniid may fly larvae were present. This river site has been modified in the past but is physically suitable for **salmonid and lamprey habitats**. Good numbers of Brown trout were recorded during the electrofishing survey. Good numbers of European eels were also recorded. No juvenile salmon or lampreys were recorded. **Overall, this site was considered to be meeting 'Good status criteria.**

Site 13 Site 13 was located on the 1st order **Carn river** (EPA code: 33C44). The site was located in the townland of Billoos, at the confluence of the 2nd order Billoos river (EPA code: 33B36) An EPA water quality monitoring station (Station code: RS33C010300) is located c. 0.8 km downstream at the Bridge southeast of Billoos crossroads. This station was rated as 'Q4 - Good' status' in 2005. **This is a small stream but has some habitat suitable for salmonids, and nominal numbers of juvenile Brown trout were recorded during the survey confirming that this is a salmonid nursery stream.**

Site 15 was located on the 1st order **Cloonavarry river** (EPA code: 33C43), c. 0.8 km upstream of its confluence with the 2nd order Moneen river (EPA code: 33M22) at St Patrick's College, Lackan Cross. This site is heavily impacted by agricultural pollution (rated Q2-3). No fish were recorded during the current survey.

Comment: 'I note that the status of all of the rivers is good, apart from the Cloonavarry river heavily impacted by agricultural pollution.'

The Report goes on to state that 'Any engineering works which cause runoff of sediments can also increase the levels of nutrients in receiving streams. This can result in the enrichment or eutrophication of the affected streams and catchment areas further downstream, and a possible change in overall water quality status. Suspended solids or sediment in a river is also a major concern and can have serious negative effects on aquatic invertebrate and instream flora.'

The extensive documentation submitted by Jennings O' Donovan provides all of the evidence that one needs to identify the great risk to a sensitive environment posed by their proposals.

The irony is that while it is supposedly legal to extract significant peat to accommodate bases for turbines, it is illegal to do so otherwise for any purpose. GAEC 2 and the accompanying maps are designed to protect these carbon sequestration areas.

- They identify the proximity of the turbines to the Lacken Salt Marsh and Kilcummin Head SAC and they identify the extensive drainage from the WF hinterland via the Cloonalaghan and the local Palmerstown rivers and a number of smaller streams that flow directly into the Salt Marsh from Carrowmore, Lissadrone, Lacken Hill and Conaghreagh.
- They also emphasize the wider threats to the Killala Bay and the Moy Estuary SAC and SPAs.
- They provide extensive details concerning the extent of peat removal and its replacement with equal quantities of stone and concrete.
- They refer to almost 12 KM of cable buried to 1.3 M from the wind farm site to Killala. They do not quantify the cabling required within the site but given that the site extends approximately 6 KM, South to North, the total trench cabling must easily exceed 20 KM.
- They refer to the removal of approx 40.2 hectares of trees.

The word that recurs in almost every paragraph if not almost every sentence is **MITIGATION**. The fact that the word has to be used repeatedly points to the serious implications and risks of every aspect of the proposal and it justifiably raises alarm bells. Of course, they state that they can all be mitigated. The only effective mitigation in this instance on balance is the refusal of planning permission.

## B. Grounds for objection concerning the Bat Population:

The strongest bat-related grounds for objecting are as follows:

1. The consultant's own classification of the site as "**High Risk**".
2. **Presence of Leisler's bat**, a globally significant Irish population and recognised high-collision-risk species.
3. Requirement for **curtailment of 12 of 16 turbines**, indicating substantial acknowledged collision risk.
4. Loss of approximately 40 ha of forestry and associated commuting/foraging habitat.
5. Presence of multiple protected bat species and **nearby roosts**.
6. Questionable treatment of autumn (October) activity data.
7. Potential **inadequacy of cumulative impact assessment** and demonstration of compliance with strict species protection law.
8. There is **insufficient evidence presented to demonstrate that commuting routes** between these roosts and feeding areas will not be disrupted.

### Background:

1. **The Developer's Own Assessment Classifies the Site as "High Risk" for bats**
2. **Seven Protected Bat Species Were Recorded as follows:**

- Common Pipistrelle
- Soprano Pipistrelle
- Nathusius' Pipistrelle
- Leisler's Bat
- Natterer's Bat
- Brown Long-eared Bat
- Lesser Horseshoe Bat (single record).

"All bats recorded during surveys are protected under the EU Habitats Directive Annex IV and Wildlife Acts." As these bat species are also mainly tree roosters, they are particularly vulnerable to habitat disruption due to tree removal and indeed turbine blade collision and barotrauma. Wind turbines pose a serious threat to bats through **direct collisions, barotrauma, and habitat disruption**, particularly affecting migratory tree-roosting species during late summer and autumn.

### 3. The Presence of Leisler's Bat is A Particularly Significant Issue

- **The report identifies Leisler's bat as one of the most frequently recorded species and Ireland is considered the world stronghold for Leisler's bat.** It is one of the species most frequently killed at wind farms across Europe.
- The report itself identifies **Common Pipistrelle, Soprano Pipistrelle and Leisler's Bat** as high collision risk species.



- The presence of one of Europe's most turbine-sensitive species, within a site classified as high risk, creates a material risk of mortality contrary to the Habitats Directive.

#### 4. Extensive Habitat Removal

- The EIAR confirms that approx 40 hectares of conifer plantation will be felled and over 4,000M of hedging will be removed. In addition, approximately 10 Ha of land will be removed by road widening and the installation of new roads. Overall this amounts to major environmental disruption in a quiet rural environment.
- As these are used as key commuting and foraging corridors, they will have significant impact on bat populations. Removal of habitat and habitat fragmentation cannot simply be compensated by future planting elsewhere.
- **There is insufficient evidence presented to demonstrate that commuting routes** between these roosts and feeding areas will not be disrupted

#### 5. Reliance on Curtailment Indicates Significant Residual Risk

- Due to the high bat population identified, the consultant **proposes substantial operational restrictions to 12 of the 16 turbines**, including feathering turbine blades and curtailment.
- This of itself is an admission of considerable risk. This of itself calls into question site suitability. The site is clearly very rich in biodiversity and ecologically constrained.

#### 6. Known Bat Roosts Close to Turbines

The report identifies:

- a roost approximately 800 m from AT01 and a roost approximately 1.5 km from AT12.
- It also identifies historic roosts approximately 900 m east of the site and approximately 2.3 km west of the site.

Under Irish and European case law, protection extends not merely to roosts themselves but also to the ecological functionality of the roost and the routes used to access feeding habitat.

**There is insufficient evidence presented to demonstrate that commuting routes** between these roosts and feeding areas will not be disrupted.

#### 7. Lesser Horseshoe Bat Record

- The report acknowledges a recording of Lesser Horseshoe Bat and "a single recording from this species was recorded." The consultant attempt to downplay this because it was recorded outside the final site boundary and because the species is considered outside its normal range. Lesser Horseshoe Bat is an Annex II species. A verified record demonstrates presence in the wider area.

- **The precautionary principle** suggests further investigation rather than dismissal.

#### 8. Survey Data Potentially Shows a More Important Site than the Final Conclusion Suggests

- A notable feature of the report is the statement - "**Soprano Pipistrelle and Leisler's bat shows moderate activity**".
- The consultant's conclusion that mitigation is not required at some locations relies partly on **exclusion of October data**.
- One must wonder why October data was excluded from the risk assessment. This raises the question whether excluding autumn migration/swarming activity artificially lowers the perceived risk.
- **This suggests that a precautionary approach should have included all recorded activity.**

#### 9. Potential Conflict with Strict Species Protection Requirements

- The report correctly states that development affecting bats can only proceed where there is no satisfactory alternative; overriding public interest exists and favourable conservation status is maintained.
- Significant collision risk clearly exists; substantial curtailment is clearly required; protected species are present throughout the site and habitat removal is proposed.
- However, the application has not demonstrated beyond reasonable scientific doubt that favourable conservation status can be maintained.
- **Considering the level of turbine curtailment required and outlined by the applicant, it would appear that a planning refusal is the only appropriate outcome here.**

#### 10. Cumulative Effects Assessment Appears Weak

- The Planning and Development Act 2024 and Habitats Regulations require consideration of cumulative effects.
- The bat report largely dismisses cumulative impacts because there are no other commercial wind farms within 5 km.
- However, bat populations operate at much larger landscape scales than 5 km.
- **Considering the cumulative mortality on Leisler's bats**, the cumulative habitat loss, forestry removal and the definite prospects of future renewable developments in North Mayo, the cumulative impacts have been seriously underplayed.

These are the ecological objection under the Habitats Directive, Wildlife Acts, and **the precautionary principle** applied by Irish planning authorities and the courts.

## 12. Hydrology, Hydrogeology, Soils and Geology – EIAR Chapters 8 and 9

### Grounds for objection:

- **Chapters 8 and 9 identify risks in** during the construction phase: the EIAR itself identifies a *likely, short-term, significant* indirect effect on Lackan Saltmarsh.
- NPWS site documentation shows the SAC contains water-dependent habitats that are sensitive to changes in sediment and hydrology.
- Risks to the fish and aquatic life in the Cloonaghmore-Palmerstown rivers are also identified.
- The bogland areas where it is proposed to locate these turbines has already been designated under GAEC 2 by the Department of Agriculture and planning permission is required in order to alter that status.
- Removal of 40.2 Ha of forestry will have negative consequence for bird life and CO<sub>2</sub> sequestration. **Total project CO<sub>2</sub> losses are estimated at ~175,100 tCO<sub>2</sub>e.**
- It is the view of the local community that the overall risks to the local environment of locating turbines in this area outweighs the unlikely and uncertain benefits attributed to a wind farm in this pristine scenic location. Planning permission should be refused on these and indeed many other bases.

These risks among others outweigh the unlikely benefits that will accrue. Planning Permission should therefore be refused on this and indeed the many other grounds for so doing.

### Background:

There **is** a credible risk that construction works for Tirawley Wind Farm could cause short-term increases in suspended sediment and associated water-quality impacts that could reach and temporarily affect Lackan Saltmarsh (Lackan Bay) via the Cloonalaghan/Cloonaghmore drainage network. The EIAR's Hydrology & Hydrogeology chapter finds a *pre-mitigation* effect on Lackan Saltmarsh that is "negative, significant, indirect, short-term, likely"; the report then sets out mitigation (silt traps/settlement ponds, 50 m buffers, CEMP, no direct discharges, etc.) intended to reduce that to non-significant if implemented. Below I've summarised the **risk pathways, likely consequences, and the EIAR's proposed safeguards**, with the most relevant citations:

### Key risk pathways to Lackan Saltmarsh

1. **Sediment/suspended solids from earthworks and forestry felling**
  - Large-scale earthworks (track construction, hardstands, turbine bases, cable trenches) and ~40.24 ha of clear-felling create exposed soils that are a source of suspended sediment which can be entrained in runoff and enter local watercourses. If that sediment reaches the Cloonalaghan River it is hydrologically connected to Lackan Saltmarsh (Lackan Bay).
2. **Runoff from temporary construction compounds, haul routes and TDR works**
  - Road widening, temporary works on the Turbine Delivery Route, and upgrades to public roads can generate sediment and localized drainage changes that have

pathways to downstream waterbodies. Directional drilling is proposed in places to avoid direct crossings but the chapter notes an indirect risk from sediment-laden runoff if not controlled.

**3. Pollutant release (low probability but possible)**

- Concrete, hydrocarbons and other construction materials can affect surface water quality if spills occur or if washout is uncontrolled — these are secondary but relevant risks to the estuarine system.

**4. Hydrological changes (rare / design-dependent)**

- Altered drainage patterns (if poorly designed) could change freshwater inputs to the estuary, locally affecting salinity/turbidity regimes that saltmarsh communities rely on. The report states design aims to avoid altering downstream flows.

**Likely negative consequences for Lackan Saltmarsh:**

- **Short-term increased turbidity and sedimentation** on intertidal flats and the saltmarsh fringe — can smother plants, reduce light, and alter sediment composition where fine sediment deposits.
- **Nutrient pulses** attached to sediment could change community composition and encourage opportunistic species.
- **Disturbance to water bird foraging habitat** through temporary loss/quality changes of intertidal flats (the area is part of SPA/SAC designations).
- **Localized changes in hydrology/salinity** if construction drainage is poorly managed (more of a potential medium-term effect only if mitigation fails).

These are all described in the chapter as plausible *pre-mitigation* impacts because the Wind Farm Site is hydrologically connected to the designated sites including Lackan Saltmarsh.

**Practical interpretation**

- **Risk exists and is real** during the construction phase: the EIAR itself identifies a *likely, short-term, significant* indirect effect on Lackan Saltmarsh.
- NPWS site documentation shows the SAC contains water-dependent habitats that are sensitive to changes in sediment and hydrology.

**Risks to fish and aquatic ecology of the Cloonaghmore and Palmerstown Rivers:**

The main risks to fish and aquatic ecology at Palmerstown / Cloonaghmore are **increased sediment / turbidity, contamination (fuel/concrete/peat runoff), habitat loss / damage to spawning and invertebrate communities**, and **temporary or permanent barriers to fish passage** from culvert/haul-route/bridge works.

**Risks:**

**Sediment influx / increased turbidity during construction** — excavations for tracks, turbine bases, crane pads, culvert works and cable trenches can mobilise soils/peat and increase



suspended solids in the Cloonaghmore/Palmerstown channel. Fine sediment smothers eggs, reduces feeding success of fish, and degrades macro-invertebrate prey. The EIAR highlights siltation risk from track/earthworks as a primary pathway.

**Pollution (fuel, concrete, cement wash, sewage/greywater, accidental spills)** — concrete works (large volumes for foundations), machinery refueling on haul routes, or wastewater from compounds could introduce deleterious matter to the rivers if not controlled; the Aquatic Ecology appendix reminds that any polluting matter entering waters is an offence and suspended solids/oil are specifically problematic.

**Hydrological change / drainage effects** — regrading, new drains, changes to peatland or forestry removal can alter surface run-off patterns and local flows (increasing peak flows or changing base flow), with knock-on effects on channel morphology and habitat.

Chapter 9 flags drainage and run-off management as critical to avoid altering the existing regime.

1. **Physical disturbance of river bed / banks and loss of habitat** — new culverts, bridge strengthening or temporary works for the haul route (Palmerstown Bridge area is on the proposed haul route) may require in-stream works; disturbing the bed can damage spawning gravels and invertebrate communities. The Palmerstown Bridge report confirms the bridge crosses the Cloonaghmore River on the haul route.
2. **Barriers to fish passage and altered connectivity** — poorly designed or installed culverts/temporary crossings can form velocity or depth barriers for salmonids or lampreys, blocking access to upstream spawning/rearing areas. The EIAR notes the need to manage crossings and often uses directional drilling where avoidance is needed (example: a different river crossing in the EIAR).
3. **Effects on protected/priority species** — the aquatic report specifically checks for salmonids, lampreys, eel and other protected species and notes legal protections; damage to spawning/nursery areas would have legal and ecological consequences. Works that disturb spawning/nursery areas require engagement with Inland Fisheries Ireland (IFI) and appropriate licences.
4. **Peat / DOC / water quality changes** — peat disturbance may mobilise dissolved organic carbon or acidic runoff, changing water chemistry and reducing habitat quality (this is a common noted pathway in hydrology assessments of peatland sites). The EIAR flags peat/soil management as a sensitive issue to be mitigated.

#### **Removal of 40.2 Ha of Forestry:**

The development requires removal and felling of commercial conifer plantation within the site. The EIAR/Forestry Report records c. **40.2 ha** to be felled and ~49 ha of forestry within the redline. Felling and construction will remove locally important woodland habitat and risk disturbance to red- and amber-listed species recorded on sit, including snipe, merlin and other raptors. This is a direct ongoing local loss of habitat that supports breeding and wintering birds.

Further, felling of plantation generates a substantial carbon loss: the EIAR's carbon modelling records **~18,600 tCO<sub>2</sub>e** attributable to forestry felling and **total project CO<sub>2</sub> losses ~175,100 tCO<sub>2</sub>e**. The application does not commit to re-establishing long-term woodland carbon stocks on the felled areas or to specifying the fate of harvested timber. Removing intact plantations therefore causes both local biodiversity harm and a one-off loss of carbon storage that must be clearly justified and minimised in any consent. I request that the planning authority: (1) require precise mapping of all trees/stands to be felled, (2) require legally binding pre-construction bird surveys and exclusion buffers (using the distances set out in the EIAR), (3) require a timber-fate and replanting/land-use restoration plan that restores carbon stocks (or converts felled areas to native habitat).

### **World's largely unprotected peatlands are ticking 'carbon bomb', warns study**

Bogs and swamps are a colossal carbon store but their continued destruction would blow climate change targets. **Damian Carrington** *Environment editor* Thu 13 Feb 2025. Most of the 16 turbines are to be located in bogland. They are in effect damaging natural bogland environments with the objective of saving them.

### **GAEC2 Implications:**

The proposed wind turbines in the Tirawley Wind Farm are intended to be located in areas designated under GAEC 2 and therefore proposing to locate turbines in these protected areas is in contravention of national and EU legislation, where planning permission is required for limited activities on these bogs. Environmental policies are clearly at cross purposes. The objective of GAEC Designation is to protect carbon sinks and save the planet. The objective of installing WE installations in bogs is also supposedly to reduce CO<sub>2</sub> output and save the planet but the objectives are at cross purposes and carbon sinks are being removed and damaged in the process.

**Why is protection of these soils necessary?** 'Climate change (mitigation and adaptation) is the main environmental issue this standard aims to address through 'Protection of carbon-rich soils'. It is well-recognised that high carbon soils are important stores or "sinks" for carbon. **At approximately 20% of the country, these sinks are akin to Ireland's rainforests and thus must be protected.** In addition, wetlands and peatlands are very valuable ecosystems for habitat, biodiversity, water quality and the protection and quality of soil."

### 13. Health Concerns – EIAR Noise - Ch 11 – Shadow Flicker – Ch 15

#### Summary of Grounds for Objection:

- In the Tirawley WF area - 8 houses are less than 600M from a turbine – 24 are less than 700M – 47 are less than 800 M – 59 are less than 900 M – 80 are less than 1 KM - 100 are less than 1.170 KM = 10 X the rotor diameter Table 15.1 – Chapter 15 refers.
- It is quite clear from these admissions in chapter 11 that there are serious noise issues from at least 6 turbines from a number of wind directions, including the prevailing wind. When it is well recognized that the current noise limits are totally inadequate these noise admissions are concerning.
  - It is also recognized that the rule of thumb distance from residences of 4 times the Tip Height, in this instance 540 M, is arbitrary and totally inadequate and a minimum distance of at least 1.5 to 2 KM would be more appropriate to ensure health safety. There are research scientists who would not reside within 10KM of a wind farm. These issues present real grounds alone for a refusal of this planning application.
  - **Important Broader Implications:**
  - In this application 73 Properties are Within 5 dB of the 43-dB noise Limit. Of these, 100 houses are within 1170 M of a turbine. This suggests a densely populated rural hinterland and a very large zone of potential noise and Shadow Flicker sensitivity and essentially suggests that this is basically an unsuitable location for a wind farm.
  - **Houses Affected by Specific Turbine Operational Noise for the lifetime of the wind farm**
  - The report identifies the following receptors as exceeding the night-time 43 dB limit H3, H4, H5, H6, H10, H11, H13.
  - **The turbine-specific references show that AT08, AT09 and AT10 have the greatest cumulative effects.** They are dependent upon active mitigation and the developer relies on post-design operational controls to achieve compliance. In effect this places the house residents at the long-term mercy of the wind farm company.

#### Wind Direction Predicted Noise Before Curtailment After Curtailment Reduction

|            |         |         |        |
|------------|---------|---------|--------|
| North-East | 44.1 dB | 42.6 dB | 1.5 dB |
| East       | 44.7 dB | 42.9 dB | 1.8 dB |
| South-East | 43.9 dB | 42.7 dB | 1.2 dB |

- Of course, having a house surrounded by 3 large turbines in close proximity has cumulative effects.
- A reasonable technical estimate is that the from AT08 + AT09 + AT10 could increase the total potential exposure at H3 by approximately **20%–60% above the single-turbine dominant estimate**, depending on geometry and screening.

## Construction Phase References

- The chapter also specifically references House 3 in relation to construction activity. It states that construction activities at approximately **555 m to H3** may generate **32–46 dBA** depending on activity.

## Implications

This indicates House 3 is among the nearest sensitive receptors to turbine construction noise at 3 turbine installation sites. Construction noise impacts may be prolonged and H3 experiences both operational and construction-phase impacts.

House 4 and 5 also will have severe noise and shadow flicker issues. These will impact significantly on future house values and indeed land values and potential for future house planning permissions.

## **You will also be aware of the submission concerning Turbine Spacing as established by Mr Con Sheehan, Land surveyor /Fellow, “Society of Chartered Surveyors Ireland”**

The issue is not merely that turbine spacing departs from Wind Energy Guideline guidance spacing. The more important issue is that **the reduced spacing may create cumulative wake turbulence and amplitude modulation effects, causing turbines to emit noise under operating conditions materially different from those assumed in the EIAR noise model.** Consequently, the EIAR assessment may underestimate actual operational noise impacts on nearby receptors.

I outline next, turbine pairings that should have the 7 rotor diameter separation based on the wind rose and its prevailing winds per WEDG 2006 requirement:

- AT3 to AT4 has only 2.86 rotor diameters
- AT6 to AT5 has only 2.34 rotor diameters
- AT7 to AT8 has only 2.43 rotor diameters
- AT9 to AT10 has only 2.38 rotor diameters
- AT11 to AT13 has only 2.87 rotor diameters
- AT13 to AT14 has only 3.13 rotor diameters
- AT11 to AT14Has only 4.30 rotor diameters

I would also include AT2 to AT3, AT10 to AT11, AT15 to AT16 & AT12 to AT13 in those 7 rotor diameter separation requirement as they have not a much lesser prevailing winds from the South Southeast and the West northwest directions.

The Environmental Impact Assessment Report for the proposed Tirawley Wind Farm fails to meet the legal, scientific, and procedural standards required under EU and Irish planning law. The developer's continued reliance on the obsolete ETSU-R-97 methodology, the exclusion of WHO 2018 Environmental Noise Guidelines, and the superficial treatment of human health impacts all point to a flawed and incomplete assessment.

- Furthermore, the lack of meaningful community engagement, the absence of analysis on amplitude modulation and tonal characteristics and the high likelihood of exceedance of health-based noise thresholds reinforce the legal and ethical obligation to reject the application in its current form.
- The EIAR does not reflect current best scientific knowledge, neglects meaningful engagement with affected communities, and disregards key national policy — most notably, National Planning Framework Objective 94, which requires the proactive management of noise where adverse health impacts are likely.
- Given the precedent set by recent Irish High Court cases and the clear guidance set out in Directive 2014/52/EU, the precautionary principle must be upheld.
- The collective failures undermine the credibility and sufficiency of the assessment. In line with the precautionary principle, applicable case law, and national planning priorities, the application should be refused unless and until a scientifically robust, health-centered, and policy-compliant EIAR is submitted.
- Many imminently qualified professors worldwide have clearly identified that noise from wind turbines is a serious health issue (Infra sound and shadow flicker) and they recommend that turbines should not be located close to residential homes, schools, hospitals, etc. The recommended setbacks vary from 3 KM to 10 KM. It is only a matter of time before people and politicians with their heads buried in the sand recognize this and take affirmative action.

### **Background:**

It is now well recognized worldwide that wind turbines have negative impacts on people's health and wellbeing. The knowledge is well known and understood but denied by proponents of Wind Energy in Ireland who feel that wind energy can reduce the use of fossil fuels and reduce CO2 output. Many also suffer from the illusion that it can achieve Net Zero which is logically impossible in practice. Meanwhile, many rural houses will be abandoned, become unlivable and unsaleable due to the recognized health perils of close proximity to wind farms.

This submission outlines material deficiencies in the Environmental Impact Assessment Report (EIAR) submitted for the Tirawley Wind Farm project. Particular focus is placed on the inadequate assessment of operational noise, population and human health and the EIAR's failure to comply with obligations under Directive 2014/52/EU (the EIA Directive). The assessment methodology relies on outdated and non-health-protective guidance, specifically ETSU-R-97, and disregards relevant case law, 2018 World Health Organization (WHO) guidelines, and best available scientific knowledge. There are a number of aspects to this phenomenon.

### **1. Use of Obsolete ETSU-R-97 Standard – Incompatible with EIA Directive Requirements**

The EIAR relies on ETSU-R-97 and the IOA 2013 Good Practice Guide, both of which are outdated. This was verified in the October 2022 WSP report commissioned by the UK



Department for Business, Energy & Industrial Strategy, which concluded that ETSU-R-97 is no longer fit for purpose in assessing wind turbine noise impacts, particularly in rural environments. ETSU-R-97 was formulated for obsolete turbine technology and lacks current understanding of noise propagation, annoyance, and health impacts. This reliance violates Article 3 of the EIA Directive, which requires the use of best available scientific knowledge and a health-protective, precautionary approach.

## **2. WHO 2018 Environmental Noise Guidelines Are Ignored**

The WHO 2018 guidelines recommend  $L_{night} \leq 40$  dB to prevent adverse health effects. The EIAR neither models nor references  $L_{night}$  or  $L_{den}$  levels (the internationally accepted metrics for assessing population health impacts from noise exposure) and instead relies solely on  $LA_{90}$ , undermining the assessment's credibility and legal sufficiency under EU environmental health principles.

The 2018 WHO Environmental Noise Guidelines recommend a wind turbine daytime noise limit of 45 dB  $L_{den}$ , equivalent to approximately 37 dB  $LA_{90}$ . New South Wales applies 33 dB  $LA_{90}$  with penalties for special audible characteristics. The Irish 2006 Wind Energy Development Guidelines, twenty years old and still in force, permit 43 dB  $LA_{90}$  at night with no penalty for amplitude modulation or tonal noise. A ten-decibel difference is perceived as roughly twice as loud.

## **3. Human Health Chapter Is Superficial and Lacks a Medical Basis**

The human health assessment relies on outdated and selective literature, omitting authoritative sources such as the WHO 2018 Guidelines, and fails to conduct any quantitative, medical, or risk-based analysis of long-term health outcomes.

No quantitative or epidemiological analysis is presented, and vulnerable populations are not considered. This breaches Annex III(g) and Annex IV of the EIA Directive.

## **4. Lack of Engagement with Affected Communities – Legal Precedent**

Recent Irish High Court cases (e.g. *Webster v Meenacloghspar*; *Byrne v ABO Wind*) confirm that wind turbine noise can constitute a nuisance even when noise predictions comply with ETSU-R-97. Courts highlighted amplitude modulation, lack of engagement and failure to mitigate noise as central to rulings against operators.

## **5. Violations of Irish and EU Planning Policy**

The EIAR breaches multiple planning and legal obligations, including:

- **Directive 2014/52/EU** – particularly Article 3, Article 5, and Annex IV – which require that human health be robustly assessed using up-to-date scientific knowledge and in line with the precautionary principle;

- **Annex III(g)** of the same Directive, which specifically mandates consideration of risks to human health from environmental impacts such as noise;
- **National Planning Framework (NPF) Objective 94** (April 2025) - replaces the former Objective 65 (2018) and now mandates *the “proactive management of noise where it is likely to have significant adverse impacts on health and quality of life,”* and further supports alignment with the Environmental Noise Regulations through the use of *“Strategic Noise Maps, Noise Action Plans, and national planning guidance”*.

The revised Objective reflects the Government’s commitment to integrating environmental health into spatial planning. The EIAR fails to meet this obligation. It does not model or assess health-relevant noise indicators such as L<sub>night</sub> or amplitude modulation, nor does it address chronic sleep disturbance or cumulative exposure in rural, low-background-noise environments. As such, it does not comply with national policy and undermines the precautionary approach required by both Irish and EU law.

As a statutory policy instrument under Project Ireland 2040, NPO 94 imposes clear obligations on planning authorities to refuse development where the precautionary principle is not observed in the face of clear and foreseeable environmental health risks. The EIAR’s omissions are not only scientifically and procedurally deficient, they are also contrary to Ireland’s national planning policy framework and to EU law.

- **Draft Wind Energy Development Guidelines (2019)**, which move away from ETSU-R-97 and instead endorse the application of **WHO 2018 noise thresholds** and robust community protection. I must point out that draft guidelines such as these have no legal status and the government is clearly and explicable operating outside of the legislation. These draft guidelines were cynically not accepted and signed off by the government because it was recognized that while protecting human health, they would reduce the number of turbines that could be installed.
- **Spatial Plan 2021:** A Spatial Plan was carried out in 2021. Departmental records set out the conclusions of the 2021 SEAI-commissioned RPS Spatial Modelling exercise. It was finalised that year and formally transmitted to the Department of Housing in January 2022. The objective of the exercise was to establish the capacity to install wind turbines by reference to acceptable noise standards = 2018 WHO Environmental Noise Guidelines for the European Region.

#### **It concluded as follows:**

- The implementation of the upper limit of 43 dB(A) proposed by the 2019 Wind Energy Development Guidelines would limit the additional land available for the development of wind energy to 587 km<sup>2</sup>.
- Due to an assumed planning attrition rate of 30 percent, only **an additional 2.6 GW of wind energy** could be deployed = 6.8 GW in total onshore.
- At least **3.5 GW of the 4.2 GW** of the then installed wind capacity was at risk of failing to have planning permission renewed.

### Departmental Response to this feedback:

- The inter-Ministerial correspondence on record between November 2021 and April 2022, was not to revise the target downwards to align with land capacity.
- It was to revise the noise limit moving to ETSU-R-97, a 1997-vintage standard, that is 11 years older than the current 2006 Guidelines.
- That decision in principle was taken without the Strategic Environmental Assessment that EU law requires. It is therefore illegal but as the 2019 guidelines were not legally introduced they have no legislative clout in any case.
- Collectively, these omissions result in an EIAR that is inconsistent with both Irish national policy and EU environmental law.

### Setbacks: 10km

While audible noise is accepted as a real problem, it is not correctly addressed by applying the 2018 WHO Noise Guidelines. Infra Noise however is totally ignored. This inaudible noise under 20 hertz is recognized by reputable scientists as damaging to health of people and animals. However, due to its serious impacts on the placement of turbines in proximity to people and animals it is also totally ignored.

[https://www.windconcerns.com/experts-call-for-serious-setbacks-to-protect-humans/?utm\\_source=newsletter&utm\\_medium=email&utm\\_campaign=experts\\_call\\_for\\_serious\\_setbacks&utm\\_term=2025-10-16](https://www.windconcerns.com/experts-call-for-serious-setbacks-to-protect-humans/?utm_source=newsletter&utm_medium=email&utm_campaign=experts_call_for_serious_setbacks&utm_term=2025-10-16)

In her video testimony before the AUC,<sup>8</sup> Dr. Bellut-Staeck essentially called for a moratorium on any future project approvals to review the science, “because the evidence is high... of the direct findings” of harmful impacts. The Commission asked Dr. Bellut-Staeck what she regarded as a “safe setback from a wind turbine?” Her response:

Based on the studies... a safe distance would be over 10km, given the size and the frequencies emitted.

When you get into anything below 20 Hz, you have exited the realm of noise and sound; you’re now in the dangerous vestibular domain of *air pressure fluctuations*. The human vestibular system along with various regulatory mechanisms in blood vessels are extremely sensitive to anything below 20 Hz.

**Dr. Calvin Luther Martin, PhD; [email to Wind Concerns](#), October 9, 2025**

Some of the most recent peer-reviewed research comes from Dr. Ursula Bellut-Staeck, a German doctor and science writer specializing in vascular physiology and microcirculation. She recently appeared before the Alberta Utilities Commission (AUC) as a sworn expert on the health effects of *infrasound*.

Infrasound generated from wind turbines is noise/sound pressure waves below 20 Hertz. These “pressure fluctuations” are rapid and can travel distances of 50km or more.<sup>3</sup> Infrasound is also used as a sonic weapon for defensive applications or crowd control.

**Dr Mariana Alves-Pereira** of the Lusofona University in Portugal, has degrees in physics, biomedical engineering and a PhD in environmental science. Her team has been researching vibroacoustic disease since 1980 – initially focused on the low frequency noise (LFN) that impacted aeronautical technicians.

Late in 2013, Dr Alves-Pereira presented a case study from Portugal where a family was found to be exposed to LFN caused by the operation of nearby wind turbines (2006-2013). On-Off testing showed the increase in LFN inside the home was indeed associated with turbine operation. Medical tests showed the people who were living inside the home had impaired brain function in relation to responding to stimuli as well as their control of breathing.

Recently in Copenhagen, **Professor Ken Mattsson**, a leading expert in scientific computing, blew the lid off how wind turbine noise is being covered up. Mattsson and his team have spent 25+ years developing SoundSim360 — a world-class model showing that real turbine noise can be up to 20 dB higher than what’s claimed by manufacturers or agencies. Infrasound from wind turbines travels at least 10 km, and levels have been proven to affect the human brain and body. These low-frequency, pulsating waves pass through walls and concrete, disturbing sleep and concentration. Sound levels fluctuate by more than 20 dB over the course of a single day, yet agencies still rely on desk-based estimates instead of real measurements.

The A-weighted dBA scale used by industry doesn’t even register infrasound properly — it hides the problem. Mattsson’s lecture, “Separating Myth from Fact on Wind Turbine Noise,” exposes how flawed models like Nord2000 massively underestimate real-world impacts, allowing turbines to be built dangerously close to homes. He suggests the safe distance from large turbines should be at least 5–10 km.

[https://www.sciencedirect.com/science/article/pii/S0003682X25006280?ssrnid=5165452&dgcid=SSRN\\_redirect\\_SD](https://www.sciencedirect.com/science/article/pii/S0003682X25006280?ssrnid=5165452&dgcid=SSRN_redirect_SD)

The second talk, “Infrasound Affects the Brain,” by Dr Håkan Enbom (M.D., Ph.D., E.N.T., otoneurologist), explains exactly how this low-frequency energy disrupts brain and inner-ear function.

- It is time agencies stopped ignoring the evidence.
- It is time for independent measurements, not industry-controlled desk calculations.
- It is time to protect our communities and landscapes.

## 14. Shadow Flicker: EIAR Ch 15

### Grounds for my Objection:

- 8 houses are less than 600M from a turbine – 24 are less than 700M – 47 are less than 800 M – 59 are less than 900 M – 80 are less than 1 KM - 100 are less than 1.1 KM = **10 X the rotor diameter**. It is well recognized that turbines should not be placed in proximity to houses. Of course, mitigation is the answer apparently to every risk. Feedback from people who have already experienced shadow flicker and noise suggests that the only answer is to move from your house – invariably without compensation.
- House 3 is exposed to 3 turbines AT08, AT09 and AT10. The additional cumulative impact could therefore increase by **20%–60% above the single-turbine dominant estimate**.
- There is no correct legal basis at present for ACP to decide any cases by reference to outdated and undermined 2006 Guidelines. The draft 2019 Guidelines (referenced regularly) are irrelevant as they have never been agreed to or signed into law. I object to any decisions made by reference to spurious guidelines.
- The government have been dragging their heels on amending the 2006 guidelines for years. It seems quite clear that the purpose of the feet dragging is to allow inappropriately sited turbines to be installed. The current Taoiseach advocated for legislation to protect people's health in a parliamentary question in June 2013. It is hypocritical and cynical that in power he has not delivered although he is fully informed. **The basis for ACP decisions are therefore spurious and baseless.**
- If ACP was an ethical organisation it would refuse to make decisions on the current spurious basis.
- If rural communities are being dealt with in this 'cleansing manner' houses within 1 KM should at least be made an offer of the outright purchase value of their house, including site value and disturbance.

### Background:

The references to the draft 2019 Guidelines in this application documents are irrelevant, as it was never signed into law, it is not legal. In the intervening 7 years, for spurious political reasons it has deliberately not been advanced either in order to give carte blanche to what are therefore illegal turbine installations. Meanwhile ACP make decisions that are based on spurious legislation, in order to make awards where refusals would be the correct decision if correct Noise Guidelines were put in place. I understand that ACP are placed in an invidious position by politicians, who are undermining their credibility. In circumstances like this, ACP



should refuse to make decisions until such time as the Guidelines are satisfactorily updated to reflect good practice that protects people's health.

Planning decisions in every sphere should be made independently of political influence. By all means allow politicians to feed into planning and energy policy. However, there the line should be drawn and planners should not be subject to political control in the decisions sphere. Decisions taken in a planning context by ACP should then be subject to appeal to a superior independent appeals board. As of now any decision taken by ACP is not appealable and this allows politicians (The Minister) to interfere. In this scenario. Politicians are now also trying to influence our courts and undermine our planning rights by trying to bring about a situation where Climate Change legislation is regarded as superior to other legislation, eg, environmental protection legislation. A glance at the EPA Website concerning Ireland's delivery on environmental standard issues is alarming.

It is stated that shadow flicker may have the potential to cause disturbance and annoyance to residents if it affects occupied rooms of a house. Persons with photosensitive epilepsy can be sensitive to flickering light between 3 and 60 Hertz (Hz).

The Study Area is defined as 10 times the maximum potential rotor diameter (10 x 117 m = **1,117 m**). According to the documentation there are 123 No. receptors within 1.17 km of any proposed wind turbine location.

H3 is exposed to 3 turbines AT08, AT09 and AT10. All are visible from principal habitable rooms or amenity areas.

It can therefore be argued that H3 represents a sensitive receptor exposed not merely to isolated shadow flicker from a single turbine, but to cumulative sequential shadow flicker effects arising from multiple turbines in close spatial association.

One important criticism is that the EIAR summary tables appear to identify only the "nearest" or "dominant" turbine for each receptor, whereas the cumulative experience for occupants may arise from several turbines acting at different times.

AT09 and AT10 could add additional flicker periods during:

- different seasons,
- slightly different morning/evening periods,
- and differing sun azimuths.

A reasonable technical estimate is that the cumulative effect from AT08 + AT09 + AT10 could increase the total potential exposure at H3 by approximately:

- **20%–60% above the single-turbine dominant estimate**, depending on geometry and screening.

H3 already approaches the highest daily flicker levels identified in the EIAR.

**Mitigation:** the documentation then goes on to conclude ‘The implementation of mitigation to cease operation of the turbines during periods of potential shadow flicker will ensure that no shadow flicker effects above the recommended guidance are experienced at any sensitive receptor within the Study Area.’

**To state the obvious:** None of the receptors (**people have now become receptors = actually real people and their homes**) are currently experiencing Shadow Flicker, nor will they ever experience it unless these huge industrial structures are imposed in their vicinity. I note ironically that a number of houses that are owned by wind farm proprietors in close proximity will remain vacant for obvious reasons for the duration of the wind farm’s existence.

### **Overall Conclusion:**

It is very clear that the promoters of this wind farm proposal do not have any support at Administrative, Planning or Political level in County Mayo. The legitimate reasons for the absence of support were clearly outlined to the promoters at the initial planning stages by Mayo County Council, yet they have pursued it relentlessly to national level and via the SID process and avoided a planning application to Mayo County Council.

The inadequacies of their community engagement and consultation clearly demonstrates that they are not at all concerned about the negative impacts on communities. They clearly hope to override local democracy and indeed all of the reasoned grounds for objection from all legitimate sources.

I have clearly outlined my ‘grounds for objection’ in this document and I also support the detailed submission made by the **Lacken Ballycastle Community Landscape Protection Group**. It is quite clear that this wind farm cannot be correctly evaluated in isolation from the cumulative impacts of all wind farm development proposals across North and indeed West Mayo.

In addition to the impact on local communities, it is obvious that many of these wind farm proposals impact negatively on the various tourism initiatives in the North Mayo area that are being promoted positively by Failte Ireland and indeed North Mayo Tourism. In that regard, they seem at cross purposes.

While I do not repeat those detailed grounds made by the Lacken Ballycastle Community Landscape Protection Group, I request that they also be considered in the context of this submission.