Án Coimisiún Pleanála

20 May 2026

Timothy Foster
Stoneridge House
Dromclogh East
Bantry
Co. Cork
P75 R206

timlfoster142@gmail.com

Dear Sirs

Ref ACP-324165-26, Maughanaclea Wind Farm

Applicant - Maughanaclea Ltd / Enerco

Description of Development - 10 year planning permission for Maughanaclea Wind Farm consisting of 14 no. wind turbines, a 110kV substation and 110kV underground cabling connection and associated works

Location - Maughanaclea, County Cork

Please consider my Observations in your assessment of the above application.

As stated in the Developer's EIAR, Án Coimisiún Pleanála's role is to assesses in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 11 of the Environmental Impact Assessment Directive, the direct and indirect significant effects of the Proposed Project on the following:

A. population and human health
B. biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC
C. land, soil, water, air and climate
D. material assets, cultural heritage and the landscape
E. major accidents and natural disasters
F. the interaction between the factors referred to in points (a) to (e).

A. Population and Human Health

The Cork County Council Development Plan sets out the standards for commercial wind energy development in areas that have been identified as "Open to Consideration" (County Development Plan Objective ET13-7).

The first point that is stated is that development should be "Open to Consideration" if it avoids adverse impacts on Residential amenity particularly in respect of noise, shadow flicker and visual impact.

i. Residential amenity.

I live in the Mealagh Valley, and my house is located within 3.5km of the wind turbines being erected on Maughanaclea.
The composite view picture No. 1 in the EIAR is the view that we shall get from our sitting room as our house is in line with the point at which the photograph is taken but elevated by approximately 50m.

We shall therefore be impacted by the view during the day and at night will have the lights shining into our sitting room. We do not have curtains nor intend to put them up.

We shall also be impacted by sound during construction.

We shall also have infrasound waves, generated by the development, in our house.

It is likely that we shall hear the turbines when the wind is from the North.

We have never been approached or consulted by the developer.

We moved to the Mealagh Valley because it was one of the last valleys in West Cork without turbines and were in an environment that was quiet, dark at night and peaceful.

As part of our consideration to move here was the fact that the area was a part of an area of High Landscape value (we can see from Sheep's Head Peninsular to out and beyond Knockboy Mountain and on up the Mealagh Valley) and therefore should not be at risk of development.

This development will undoubtedly change where we live for the worse.

ii. Population

A 2023 University of Galway study examining wind turbines and property prices along the West of Ireland found evidence of significant house price reductions associated with proximity to turbines, including reductions of up to 14.7% within 1km in certain cases, with the greatest impacts occurring near taller modern turbines. (Gillespie & McHale, Wind Turbines and House Prices Along the West of Ireland: A Hedonic Pricing Approach, CERIS Working Paper Series 2023/01) Human Health.

This is what we shall be getting.

Such an effect will not only affect the community, but may also mean that houses may become unsellable and therefore become uninhabited. This will result in a reduction in the population and consequently may result in schools being closed.

There is a petition of over 1000 signatures against this development. It is clearly not in the community interest.

iii. Human Health

a. Flicker

The EIAR identifies 73 houses within the proposed shadow flicker area.

This is 73 families whose rights to enjoy their property may be impinged by the development.

Can Án Coimisiún Pleanála ignore this fundamental failing by this proposal to satisfy the first point in consideration of the County Development Plan.

b. Light disturbance at night.

The turbines will have warning lights on them which will penetrate more than the houses within the flicker zone. These lights will penetrate throughout the valley. We, like many others do not have curtains in our rooms so we can enjoy the dark skies. This will be ruined.

It may also disturb our sleep and will have a detrimental effect on all the houses in the are.

Again, this cannot be ignored in the decision to be made by Án Coimisiún Pleanála.

c. Audible sound

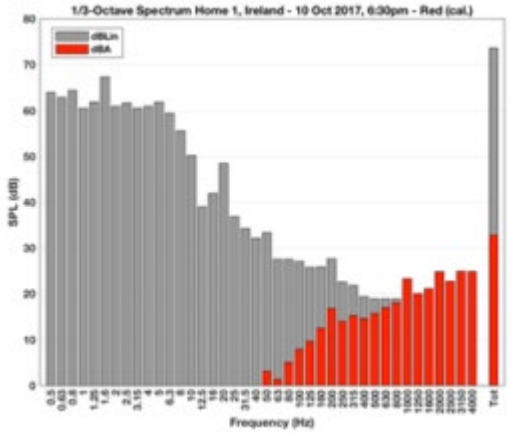
An article in The Proceedings of the Institute Acoustics (Vol. 46. Pt. 2. 2024),

Why A-weighting Network is inadequate for measurement of noise with high content of infrasound and Low Frequency Noise (ILNF)?

argues that the use of dBA is not appropriate in measuring the effects of wind turbines soundwaves.

In a field study in Ireland, January 2018, measurements taken demonstrate the difference between Db and dBA. Because dBA is a weighted measure that underestimates low and high frequency ranges in effect it only considers the sounds which can be heard by the ear. This means, for example, that at 10Hz there is a 70dB difference between the actual sound level and the dBA rating.

The image below demonstrates this effect as it plots the actual level of sound recorded in a child's bedroom against the dBA recorded value.



https://www.wind-watch.org/documents/infrasound-and-low-frequency-noise-does-it-affect-human-health/ January 25 2018.

It shows that for a person would perceive through the ear an overall A-weighted pressure-level of approximately 34 dBA (Tot – red bar), whereas it is exposed to an overall acoustic pressure-level of approximately 74 dB.

This level of exposure is not considered in the planning application.

The very Institute that provides support and the basis for the standards of measurement of sound is now challenging its own method of measurement. If such is the case then how can Án Coimisiún Pleanála accept that the sound risk to human health be considered as properly analysed?

d. Audible Noise during construction.

Turbine T07 to turbine T14 will be constructed at the top of the Mealagh Valley.

The bases for these turbines will be broken out using rock breaking equipment which, whilst the noise may not be outside the guidelines set down will continue daily during the construction phase.

Not only will this be what may be considered unreasonable interference on all the inhabitants in the valley (the sound will travel throughout the valley) but may also affect the children in the schools at Kealkill and Dromclogh East. They will be having to learn with machines breaking rock throughout their schooldays.

There will also be the sound of heavy traffic throughout the day and the pollution from the lorries and machines.

e. Infrasound. – From 2 to 200 Hz

- THE METHOD OF MEASUREMENT

The application for planning only investigates sound from 2Hz and above and has not measured sound below that. The EIAR omits consideration of Infrasound below 2Hz.

Also, The EIAR uses the dBA as its method of measurement of sound.

As support for this policy it refers to the Institute of Acoustics in the United Kingdom.

From the physical point of view, infrasound is defined as an acoustic wave in the frequency range of 0.1–20 Hz

And, due to its long wavelength, Low Frequency Noise (LFN) including infrasound, can travel over long distances and is almost unaffected by screens and other shadowing areas (Landstrom U. Human exposure to infrasound in Cheremisinoff PN, editor. Encyclopaedia of Environmental Control Technology. Vol. 7. High Hazard Pollutants. Gulf Publication, Huston; 1995, p. 431–53).

Technological innovation now allows this infrasound to be measured accurately, and this should be done and assessed to allow Án Coimisiún Pleanála to review the application.

- THE EFFECT OF EXPOSURE TO INFRASOUND.

Section 12.3.2.4.9 of the EIAR Planning Application states that

“low frequency noise and infrasound associated with wind turbines is expected to be below perceptibility thresholds and are not likely to result in any significant effects at NSLs. There are no criteria proposed for assessing low-frequency noise or infrasound as part of the EIAR; this approach is standard practice in Ireland when assessing wind turbine noise at planning stage.”

It uses as references for this claim the following:

The South Australian Environment Protection Authority (EPA) Infrasound Study 2013

A study for the National Institute for Public Health and the Environment (RIVM) in the Netherlands published in 2020Technical Research Centre of Finland 2020.

An Australian study funded by the National Health and Medical Research Council of Australia (NHMRC) which is not dated and with no adequate reference to allow review.

A 2024 statement from the Institute of Acoustics (a UK organisation that is heavily linked to the wind industry) that

> *"there is no need to assess infrasound as part of the noise impact assessment process, as the absolute levels are well below those reported to trigger physiological health effects based on peer reviewed research to date"*

What it does not state is that there is evidence to suggest that there are serious consequences to people's health from infrasound exposure.

In the paper Negative Effect of High-Level Infrasound on Human Myocardial Contractility: In-Vitro Controlled Experiment, Noise Health. 2021 Jun 30;23(109):57–66. doi:10.4103/nah.NAH_28_19, The study, carried out at The University Hospital, Mainz, Germany in 2021, aimed to evaluate if exposure to infrasound interferes directly with human cardiac function and contributes to pathological process.

It concluded that:

- Exposure to high levels of infrasound (more than 100 dBz) interferes with cardiac muscle contractile ability, as early as one hour after exposure.
- Numerous independent laboratory research from around the globe has been performed, resulting in similar findings supporting this conclusion.

It recommended that the level of infrasound no higher than 80dBz as the maximally tolerated limit for chronic exposure.

The planning application, in only reporting against dBA recordings can not demonstrate that it has considered this risk and the health implications to the community.

On 8 October 2025 at a seminar in Copenhagen, Ken Mattsson, Professor of Computational Science at Uppsala University, demonstrated the "physical propagation of infrasound up to 10km from wind turbines."

The model developed will be able to simulate frequencies below 1 hertz.

At the same conference Dr. Håkan Enbom, M.D., Ph.D., ENT specialist and otoneurologist, presented his lecture "Infrasound Affects the Brain".

Dr. Enbom is one of Scandinavia's leading otoneurologists.

He described how infrasound influences the brain both directly, through skull transmission, and indirectly via the inner ear. Everyone can be affected by the pulsating nature of infrasound from wind turbines. Highly sensitive individuals may experience symptoms after only brief exposure. Furthermore, approximately 25–30% of the population is believed to have a genetic predisposition to hypersensitivity, often associated with migraine and migraine-related disorders.

The wind turbines being proposed at Maughanaclea will be within 10km of not just households, of which over 70 are within 2 km of the turbines, but also schools, including Keakill National School 2km away and Dromclogh National School 4.5km away. The children at these schools are likely to be exposed to low frequency infrasound for 7 hours a day for 8 years and the consequences of exposure.

Teachers, also, will be exposed, maybe for their entire working lives.

It does not consider the article in 2009, Wind Turbine Syndrome, A Report on a Natural Experiment, by Dr N Pierpont of the University of Vermont which

> "*clinically defined a new group of human subjects who respond to low frequency, relatively high amplitude forces acting upon the sensory and other body systems who respond to low frequency, relatively high amplitude forces acting upon the sensory and other body systems.*" (F. OWEN BLACK, MD, FACS, Senior Scientist and Director of Neuro-Otology Research, Legacy Health System, Portland, Oregon)

According to Pierpont, people suffering from WTS reported serious symptoms, including insomnia, headaches, tinnitus, dizziness, nausea, panic attacks, and heart palpitations, that developed after wind turbines were erected near their homes.

Other recent research that is not considered is contained in the review paper

SHOULD LIMIT VALUES BE SET FOR INFRASOUND CAUSED BY WIND TURBINES? International Journal of Occupational Medicine and Environmental Health. 2025 Jan 1;38(1):3–17 refers to a paper by Flemmer C, Flemmer R. Wind turbine infrasound: Phenomonology and effect on people. SCS. 023;89:104308.10.1016/j.scs.2022.104308, which concludes that

> *"according to the official status of the Australian Senate Committee on Wind Turbines, there is credible evidence from people living near wind turbines complaining of adverse health symptoms".*

Also, that

> *"the Council of Canadian Academies, also cited in the above review, confirm that wind turbine infrasound can cause annoyance and sleep disturbance".*

Much of this research which goes counter to the statement in the planning application and the statement from the Institute of Acoustics, is after the references contained within the application and therefore contradicting the statements made in the application and those statements that there is no effect cannot be considered correct.

Indeed, the Position Paper on Wind Turbines and Public Health from the HSE Public Health Medicine Environment and Health Group in February 2017 concluded that

> *"further research is required to investigate the effects of wind farms on public health"*

As shown above, the further research requested by the HSE is now being undertaken and indications that wind turbine emissions are likely to damage human health.

Án Commission Pleanála has a duty of care to ensure the protection of these people and consider the latest research and discoveries and not limit itself to the research stated in the EIAR which do not consider the latest research.

In the light of these observations, the proposal would not be acceptable to the County Development Plan. Can Án Coimisiún Pleanála accept that the development satisfies the requirement under Section A of its obligations?

B. Biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC

Policy brief (D4.2) "Preventing the harmful effects of anthropogenic noise on biodiversity" was produced as part of the Horizon Europe PLAN-B project (Grant Agreement No. 101135308) in collaboration with its sister project AquaPLAN (Grant Agreement No. 101135471).
This policy brief provides strategic guidance for the European Union to take steps towards addressing noise pollution, recognising its adverse environmental impacts, and promoting science-based regulation.

Amongst the Key Messages to be taken from this brief are:

- Natural soundscapes are an integral part of nature, crucial for the environment and biodiversity.
- Noise pollution significantly impacts biodiversity.
- Anthropogenic noise and vibrations should be treated as potentially harmful across all media (air, water, and soil), with attention to the differences of these media.
- Environmental Impact Assessment (EIA) should consider the direct and indirect impacts of expected noise interference with activities on, at least keystone species and vulnerable species in the local environment.

- The human hearing range is limited to frequencies between 20 and 20,000 Hz, while many organisms have a completely different frequency dependent sensitivity within this range, and can even perceive sounds below (infrasound) and above it (ultrasound). Environmental noise assessments and mitigation measures should account for these biological differences to accurately evaluate ecological impacts and design effective interventions.

The surveys make no mention of any consideration as to the effect of sound both within human hearing and outside the range of the human ear in its assessment as to the harmful effect of the generated noises on the natural environment.

If the EIA does not consider this then the findings should not be considered accurate and in accordance with the latest directives.

With specific reference to the White-Tailed Sea Eagles there are known sightings of them in the area within the last twelve months.

The site is less than 20km away from Glengarriff, where there is a known breeding population.

White tailed sea eagles have a territory that can extend 70km from their nests so this development will be within their range.

In Donegal 3 white tailed sea eagles were killed in a year at sites.

Anarget wind farm, which killed two of the three, has three turbines less than 100m tip height.

This development comprises 14 turbines of 160m tip height. What chance do they have?

The report is consistent in saying that the development will have no overall effect on the wildlife, without considering all potential impact.

What is also consistent is that the development will be of no benefit to the wildlife. Wherever there is a likely change in the population it is always a negative impact. At what point do all the negative impacts become a tipping point and there is a dramatic fall-off in the population of the endangered species?

C. Land, soil, water, air and climate

The EIAR identifies many areas of risk to the hydrology of the area during construction and operation and the mitigation procedures. I spent my working life in the construction industry and have seen how, despite all promises and procedures, method statements and systems are “honoured more in the breach than in the obligation”. In these remote sites what are the procedures for monitoring and who is ensuring that methods are carried out? How is the community going to be kept informed as to the monitoring and correct application of these preventative measures?

Turbine blades degrade during operation, and the particles are carried across the wind. A recent study, https://www.wind-watch.org/documents/possible-ecotoxicological-effects-of-wind-turbines, collected particles from moss, water and sediment from lakes adjacent to wind turbine areas. The study also carried out controlled studies on the effect of milled turbine blades on fish in aquariums. These studies showed that fish, both in the field and in the laboratory, exposed to the particles displayed “unusual fat incorporation in the livers and the thyroid. The turbines are planned to be operational for 35 years which means that there will be a 35-year accumulation of particles from the blades. This research would suggest an inevitable harm to the species.

The study also investigated the effects of wind turbine oils (hydraulic and gear oil). This found that just 0.1% dilution of gear oil led to 100% mortality of copepods, small crustaceans found in rivers and lakes that are the essential bottom of the food chain.

There is no consideration to this recent research and any mitigation measures that the Developer will undertake to protect the environment and the community.

The recent killing of thousands of fish in the river Blackwater, shows the risk that we are taking when we develop and that we need to protect the watercourses from failures in our environmental protection systems and despite all the promises of developers and manufacturers they fail to carry out their obligations. How can we continue

D. Material assets, cultural heritage and the landscape

When cruise ships arrive in Bantry Bay they sail into a vision of unspoilt Ireland nestled around the town of Bantry. The erection of industrial scale wind turbines on the horizon will ruin this effect and may result in cruise ships no longer considering Bantry Bay in their itinerary.

Walkers visit the area and want to be able to walk along routes such as St. Finbarr's Pilgrim Path and the Beara Breifne Way in peace, quiet and without being disturbed by the constant hum of the wind turbines. And the views from the top of the hills are as good as you can get anywhere.

The proposed development at Maughanaclea would impact these routes. Introducing industrial-scale turbines prominently visible from this section of the trail would irreversibly compromise the visual integrity and quality of the routes and will undermine the plans to create walks of national and international significance
Donemark is considered by some to be the starting point for colonisation on the Island of Ireland and the trail of henges, standing stones and ring forts stretches up the valley.
Construction may damage the heritage, and the scale of the turbines will impede anybody who wants to investigate the deep history of the area.
Cyclists can travel the valley roads and by-ways in peace and enjoy nothing but the sound of the wind and the birds, admire the scenery and changing hedgerows and watch the spiralling battle between the rooks and the raptors.
In 2012 a survey by Bord Fáilte found that Wind turbines had a negative impact of over 20% on visitors on their sightseeing. There are a lot more turbines around now. Can Bantry afford to lose that 20% of visitors?
The placing of wind turbines into the scenery clearly affects visitors' reactions to the environment.
Although the proposed Maughanaclea development site lies within Landscape Character Type 15A, which is officially recognised in the current plan as a high value and high sensitivity landscape. However, in the plan it is now only described as being of 'local importance'.

Riddington, G., McArthur, D., Harrison, T., & Gibson, H. (2010). Assessing the economic impact of wind farms on tourism in Scotland: Gis, surveys and policy outcomes. International Journal of Tourism Research, 12(3), 237–252.
This article investigates the economic impact of wind farms on tourism in Scotland.
It discovered that at the local level, the potential impact on tourism jobs reached up to 5.77% of tourism-related jobs in Dumfries and Galloway.
The study also concluded that a "Fewer but Larger" strategy for wind farm development, with larger wind farms in less visually sensitive areas, could help to mitigate negative impacts on tourism.

Tverijonaite, E., Sæþórsdóttir, A. D., Olafsdottir, R., & Hall, C. M. (2022). How close is too close? Mapping the impact area of renewable energy infrastructure on tourism. Energy Research & Social Science, 90, 102574.
In both previous Cork County Development Plans — as well as in the Draft Plan — this very same landscape type was identified as having county-level importance, placing it in the higher High Value Landscape (HVL) category.

In assessing any Development in an area which falls within the "Open to Consideration" area designated in the Plan then the following has to be considered.

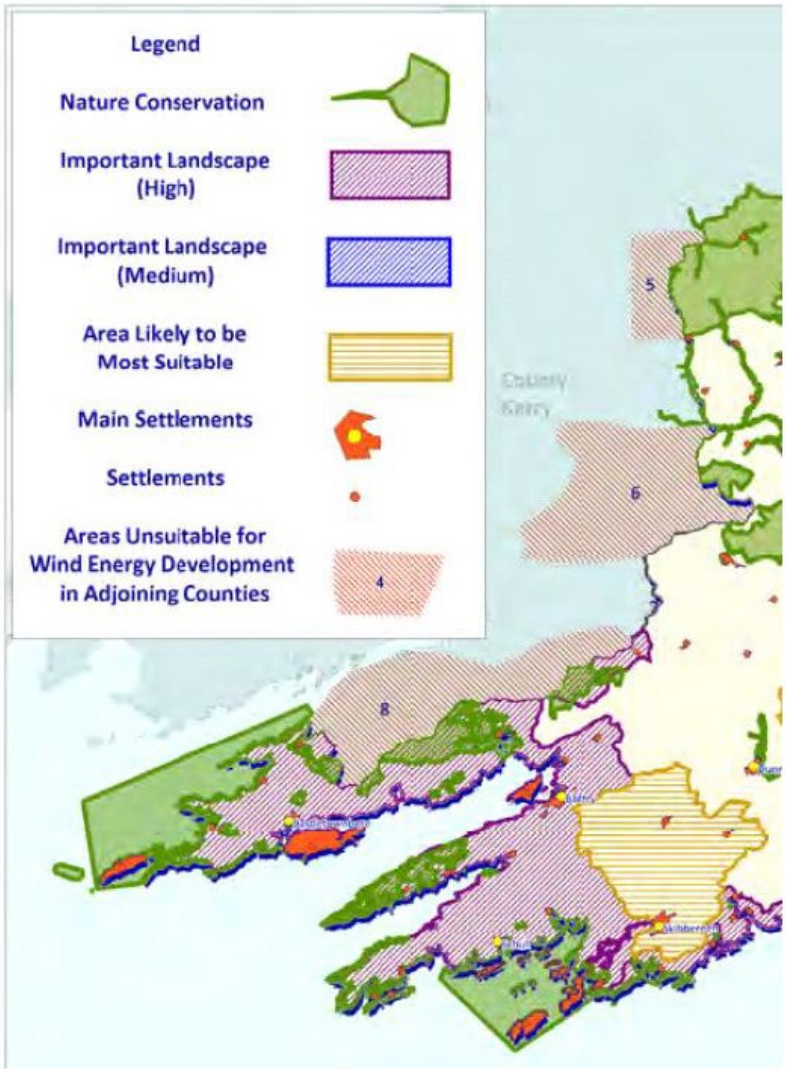
County Development Plan Objective
ET 13-7: Open to Consideration

Commercial wind energy development is open to consideration in these areas where proposals can avoid adverse impacts on:

- Residential amenity particularly in respect of noise, shadow flicker and visual impact;
- Urban areas and Metropolitan/Town Green Belts;
- Natura 2000 Sites (SPA's and SAC's), Natural Heritage Areas (NHA's), proposed Natural Heritage Areas and other sites and locations of significant ecological value.
- Architectural and archaeological heritage;
- Visual quality of the landscape and the degree to which impacts are highly visible over wider areas.

In planning such development, consideration should also be given to the cumulative impacts of such proposals.

The extract below is from the Cork County Council Development Plan:



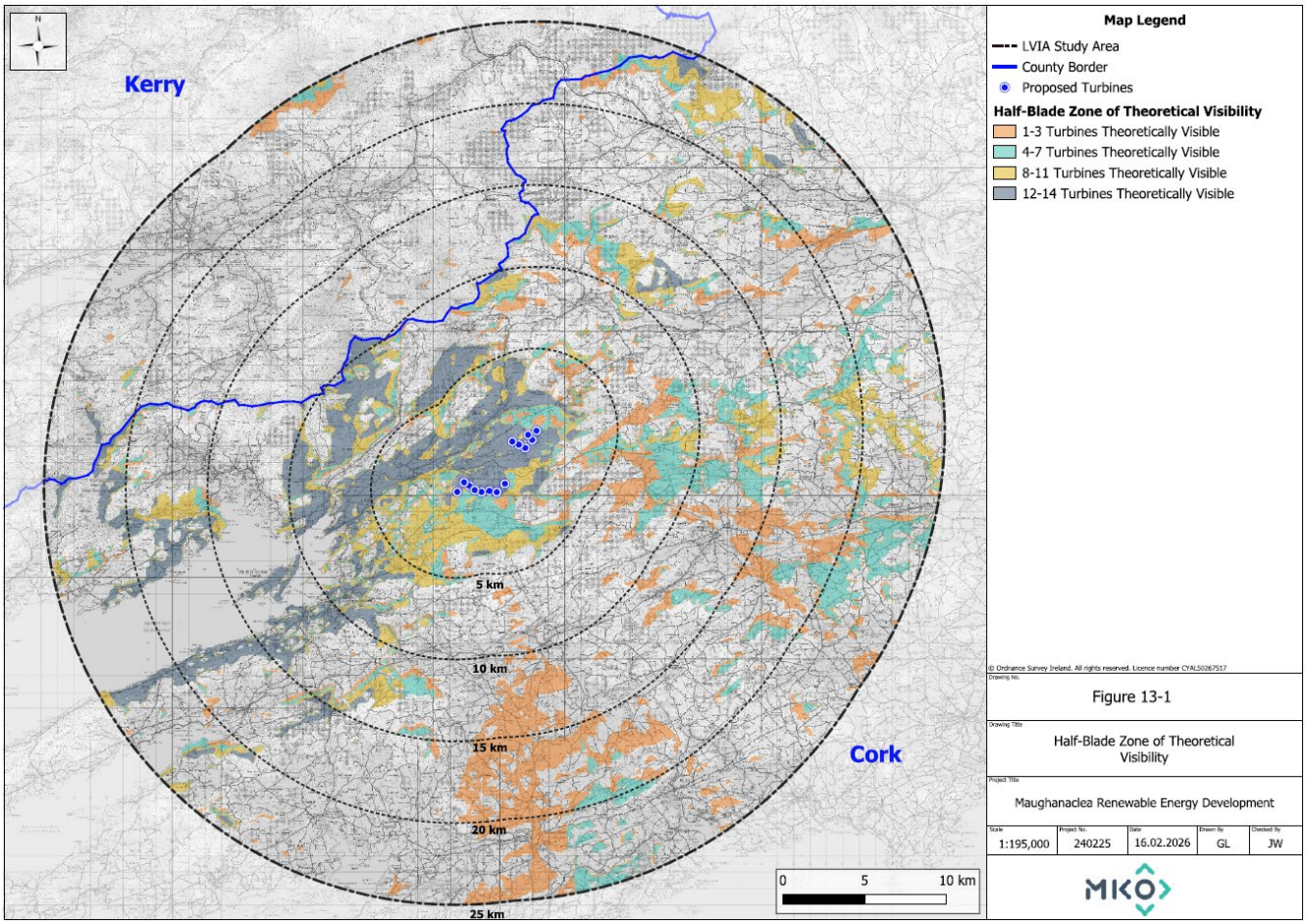
Policy Considerations for Wind Energy Projects

This shows where consideration of Wind Development may be considered. The proposed development is adjacent to an area of the County which is of High Importance.

In order to comply with the plan, the proposal needs to avoid adverse impacts on the visual quality of the landscape.

As the map shows below, the area identified that is a High level of Importance will be visually affected by at least 8 turbines and, in a large area within the 5km radius there will be 12 – 14 turbines visible.

Any reasonable assessment of this would be that this development falls outside the “Open to Consideration” Category and therefore would not be considered as an acceptable plan.



Economic Benefit
The driving argument for developing wind farms is that:

1 The country needs to satisfy the demand for electricity.

2 Investment in wind energy will bring down the cost of electricity.

3 The country needs to be to meet its net zero targets.

It is accepted that the electricity grid does not have the capacity to take the energy generated from wind farms and until we have a grid that is capable to take the supply we shall continue to over-supply and generators of electricity will continue to be paid to not provide electricity.

With the process of providing a guaranteed price to developers, savings in the overall cost of energy will not be passed to the domestic supplier.

Much of the demand for energy is from “Tech” companies for data centres and AI data centres. This demand is multinational and will be switched off as soon as they can find another country to provide a cheaper option.

Furthermore, AI investment is being driven by a demand that is not fully understood and is currently very exposed financially.

Net Zero in many EU countries and in the UK is being challenged as the correct solution to the global warming crisis. Until the United States, China and India buy into the principle then all we are doing is making ourselves uncompetitive in an international market.

It is therefore difficult to understand how the argument economic benefit is still relevant to the majority of these developments and until we fix the grid and create a more competitive pricing structure there is no gain to the community, the environment nor the economy.

On the basis of all of the above, I trust my concerns will be taken into consideration prior to a decision being reached on this planning application.

Yours Faithfully

Timothy Foster

Tim Foster