

Submission of Sheila Higgins, Beaghmore, Belclare, Co Galway

An Coimisiun Pleanála Case Number 323699 Shancloon Windfarm Co Galway

The following are my Concerns on the development of this windfarm.

Wind energy Guidelines.

The wind energy guidelines state very clearly that due regard must be given to houses, farmsteads, schools and centres of population. Sufficient distance from buildings must be established to avoid dominance of the wind energy development. This proposed development lies close to many houses within 2 km radius. The proposed location of the turbines is in bogs with a peat depth of 10 to 15 meters. An estimated 193,000 cubic meters of peat will have to be moved to storage locations at a height of 2.5 meters (20,000 truckloads) The possibility of a landslide the same as Derrybrien is inevitable. The proposed development will dominate the landscape for a 30km radius, and this will impinge negatively on people's everyday lives.

Connemara National Park has developed recreational facilities on Knock Ma. This development will impact on the enjoyment and mental health of the people from all parts of Galway who use this recreational facility. It will destroy the scenic views people enjoy from their homes. 65 meters higher than Knock Ma.

Renewable Energy Target

The European target for 2030 is 42.5%

There is no specification on Methods to be used to attain this target. There are more efficient alternatives to achieving these targets. The installation of air to water heat pumps, solar panels and there is a wide variety of small wind generators available, these combined with battery storage would make every house, school, farm and business in the country self-sufficient. The money used to fund the 70% inefficient wind turbines should be used to grant aid these projects. Ireland would overachieve the EU target of 42.5%. Under the current situation people who invest to be self-sufficient will be paying tax to bail out foreign companies using outdated inefficient windfarms.

The installed capacity of a windfarm is not a true measurement of the electricity generated. The Shancloon windfarm has an installed capacity of 72mw, based on 5756 measurements of wind (**winter conditions**) (SEAI REPORT 2020) the actual output is 27.63 mw. This represents a 44.37 mw loss on installed capacity

Efficiency of 38,37 % Inefficiency of 61.62 %

When summer wind measurements are included, the efficiency will drop significantly. Windfarms are not a sustainable solution to Irelands reduction in CO2 based on efficiency and the volume of CO2 released in the construction process will not be offset over the lifetime of the windfarm

Past Governments destroyed the bogs in the midlands to generate energy. The current Government want to destroy all the bogs and communities in the rural Ireland to fix the same issue and leave our children with the same issue down the line.

No lessons learned from past mistakes.

Please see enclosed (Appendix A) the output figures for the SHANCLOON WINDFARM

ACP need to be satisfied that the advantages outweigh the disadvantages when considering this development.

Erecting 180 Metre Wind Turbines in Bogland.

Erecting Wind Turbines on peat soil for the purpose of reducing CO2 emissions is contentious. Research published in the prestigious Journal Nature in 2012 stated that “Windfarms on peatlands will probably not reduce emissions, unlike those on mineral soils”.

Peatland has a very sensitive ecosystem and the Wake effect from the Turbines will destroy this and dry out these wetlands. The bogland around the site have vast sheets of karst limestone which is also a very vulnerable rock formation unique to the area. There are many Turloughs in the vicinity of this development drain through the Clare River to the largest Special Area of Conservation in the republic of Ireland SAC00297 The Corrib Lake which supplies drinking water to over 100,000 people. The potential for contamination of people’s water is extremely high. ACP must take this into account in the final decision on this planning application as this has the potential to turn Co Galway into a waste land due to water contamination. The European Commission through E.U. Directive establishes a framework for protecting inland surface waters, transitional waters and groundwater by preventing their further deterioration, preventing pollution as well as protecting and enhancing water dependent ecosystems. The European Water Framework Directive demands that Ireland needs to improve on this. The Water Framework Directive requires all inland and coastal waters reach a “Good” status by 2027. We believe that if this development is given permission the whole ecosystem which leads into the Corrib, our largest waterway could be contaminated causing a major disaster.

Threat to Wildlife

The proposed Windfarm is near two S.A.C. areas. SAC 000295 and SAC000297. This is a main thoroughfare for migrating birds such as whooper Swans, which are protected under European directive.

In December 2023, the Irish Government allocated 25 million to farmers as part of a European Innovation Partnership to conserve breeding waders which have declined by as much as 90% in recent decades across the Country. The many wetlands surrounding the proposed Shancloon Windfarm Site has recorded these threatened waders such as Lapwing, Golden Plover and Curlew.

One Wind Turbine alone has the potential to kill between 1 and 3 birds per day and 40 million insects per year. Being a migratory thoroughfare, The potential for Bird deaths is great. The “wake affect from the Wind Turbines will lower ground temperatures for up to 40 kilometres the windward side of the Turbines and this will have a disastrous effect on foraging habitats for wild birds in nearby Turloughs and Callows.

This proposed development contravenes all conservation measures the E. U. wish to implement across this Country , Under article 15 of E.U. Directive of 2023 and by 21st February 2026, a competent authority on planning shall ensure that excluding Natura 2000 sites and areas designated under natural protection schemes for nature and biodiversity conservation, major bird and mammal migratory routes as well as other areas be identified on the basis of sensitivity maps referred to in the point.

Under Article 6.3 of the Habitats Directive an SEA must be undertaken for any plan or programme that is likely to have a significant effect on the conservation objectives of a Natura 2000 site. This fact proves that the E.I.A.R report submitted by the applicant has many flaws and the Environmental Company behind the report lacks local knowledge of the site and a total lack of understanding of EU directives and legislation which is vital to the integrity of the report. This is not a proper location for a windfarm and ACP needs to ensure article 15 of EU directive 2023 be complied with.

Human Health

Infrasound is a low-level noise that travels for several kilometres from Wind Turbines at a low frequency under 20 decibels. It can travel through concrete walls. Hakan Enborn, an Ear, Throat and Nose specialist from Sweden stated that “infrasound from Wind Turbines affects the inner ear and therefore is a health risk for people with tinnitus, migraine and other types of central sensation. The author also stated that the legal framework for the creation of new Wind Farms should be considered noting this fact. Most people do not hear this sound, but Infrasound can be very annoying to human beings and to animals alike. The infrasound wavelengths are even more profound at nighttime as studies have shown that the wavelengths travel more profound with moisture in the air. Infrasound is a net cause of sleep deprivation to many people. One in 36 children in Ireland are diagnosed each year in Ireland with some form of Autism. People with Autism have higher than normal sensory levels and will be affected by infrasound.

Individual variability is particularly important. Even during short-term exposures to very high-pressure fluctuations, the sensitivity of subpopulations can be significant. During earlier experiments (Mohr et al. 1965) involving intense infrasound simulations of space flight for only 2 min, reports included “tickle sensations” of the tympanic membrane, causing middle ear pain, mild nausea, salivation, transient headache, and testicular aching. At very specific frequencies, such as 12 Hz with pressure fluctuations typical of natural infrasound, some subjects within an office setting reported instantaneous and very intense ill-feelings (Bruel and Olesen 1973).

A recent High Court decision (15.3.24) by Judge Emily Egan found that levels of noise generated at certain times of the day from a nearby windfarm constituted a nuisance. The windfarm operators could not control the unpredictable noise from the Wind Turbines. The noise was characterised as erratic and intermittent.

SHADOW FLICKER.

Wind Turbine shadow flicker occurs when the rotating blades cast intermittent shadows on nearby areas. Under 2006 guidelines, which are completely outdated and 18 years old, a threshold of 30 minutes per day for 30 days in a year is the limit a home should be subjected to Shadow Flicker. However, as the terrain is relatively flat and the houses are close to the wind Turbines we fear that the daily allocation of 30 minutes per day will be easily exceeded. Shadow Flicker will affect homes within 1.85 Kilometres of a given Turbine. Prolonged exposure to shadow flicker will affect a person’s health and is linked to epileptic seizures

Sulphur Hexafluoride Gas (SF6 Gas)

This is the most poisonous man-made Gases on this Earth which is banned in many countries worldwide and is being phased out in Europe by 2030. The gas is used in the switchgear of the electrical components of the Wind Turbine Generators. Up to 6kg of the Gas is in every Turbine on the proposed site. **If a turbine went on fire either by a malfunction or Lightning strike the SF6 gas would contaminate the ground below for 3500 Years and the Ground Water will flow into Lough Corrib rendering the water unfit for consumption by man or animal. This has the potential to turn Co Galway into a wasteland.** Fire brigades in Co. Galway and Co. Mayo have got the resource's or is equipped to deal with a Wind Turbine generator Fire 100 Metres above ground level.

Devaluation of Property

It is well known fact that properties offered for sale close to windfarms are being avoided by people concerned about health and shadow flicker issues. As a result, property is not fulfilling its proper market value prices.

A study for conducted for the Centre of Economic Research by Professors Tom Gillespie and Patrick McHale, University of Galway for Wind Turbines and House pricing along the West of Ireland found a 14 per cent devaluation on hose prices on homes less than 1 km from a Wind Turbine. **Banks are now refusing Mortgages to people wishing to build houses in the vicinity of windfarms as the estate agents cannot give a market value for the house when completed.**

It is our strong contention that the proposed development would contravene the policies of the Galway Development Plan 2022 to 2028. The proposed development would seriously injure the visual and residential amenities of the area and in particular residential dwellings adjacent to the site. The proposed development would result in an increased traffic hazard from the increased volume of trucks and machinery on the roads for a 20km radius.

Conclusion

ACP has the responsibility to ensure this proposed development complies with EU law ECJ Ruling C24/19 and EU directive 20001/42-en and to protect the environment and the health and welfare of all the people living in the community

Signed Sheila Higgins

Appendix A

Schancloon Windfarm Output /contribution to Pick Demand

Statical Analysis of Wind Electricity Generation capability for a 72mw installed capacity windfarm based on Irish wind speed Data. Frequency measured every 15 minutes for 62 days. Total no. of frequency's measured = 5756

Ref. SEAI report 2020

Frequency	MW	% Time	% output	No	Total Output
756	6.5	13.13	0	11	0
914	6,5	15.87	10	11	1.45
1110	6.5	19.28	20	11	2.75
1074	6.5	18.65	40	11	5.33
1108	6.5	19.24	60	11	8.25
794	6.5	13.79	100	11	9.85
5756		100			27.63 MW
Lost Electricity Output					44.37 MW
Efficiency	38.37%				
Inefficiency	61.62%				

(This analysis is based on Winter Wind Measurement. Summer Wind Measurement would be lower and will reduce the % output.)

Peak Demand

8 Hours per day	33%	9.11 MW	Contribution to Peek.
16 Hours per day	67%	18.51 MW	Non-Peek Generation

Mission Statement

Sustainable Development that PROTECTS Communities the Environment and is compliant with Irish and European Law

Strategic Infrastructure Development (SID) Planning Application for the development of a Wind Farm consisting of 11 no. turbines (and all associated works) in the townlands of Beagh More, Cloonbar, Cloonnaglasha, Corillaun, Derrymore, Shancloon, Toberroe and Tonacooleen, County Galway. Dear Sir / Madam RWE Renewables Ireland Ltd wish to confirm that part of the Proposed Development that is the subject of this application (i.e the Works associated with the connection of the wind farm to the national electricity grid, which will be via a loop-in 110 kV underground cable connection 650 m in length to the existing Cashla - Dalton 110 kV overhead line in the townland of Tonacooleen, with two new 16m high steel loop-in lattice tower end masts for loop-in connection at the connection point will be carried out by a statutory undertaker will have a right or interest to provide or carry out works for the provision of electricity services. Cliona O Sullivan (Director)

Reference the above addendum C

If the applicant plans on using powers of the statutory body to connection the windfarm to the national electricity grid, the fact is that this development is an electricity generating facility, this application is therefore a component of a government public plan or programme for energy to which the SEA Directive applies. This is also compounded by the fact that this development will receive payments for any electricity produced by Renewable Energy Feed in Tariff which is administered under the control of the Electricity Supply Board (ESB) being the system owner and Eirgrid the System operator. This application is therefore further demonstrated to be a component of a government public plan or program for energy to which the SEA Directive applies. (Ref. ECJ ruling C24/19 and European Parliament Directive 2001/42-en-ur-Lex) This would mean there should be an environmental assessment including examination of the need for this development and the location of the development in relation to environmental damage and public health risks and must be subject to public participation under Article 6. The public have the right to be informed when all options are considered and reasons given for any decisions made.

In conclusion, Planning Application 323699 should be refused as it cannot be considered by the Coimisiun Pleanála at this time because the project is not compliant with European law.