

Observation from Aodhán & Michaela Ó Faracháin, Derrymore, Caherlistrane, Co. Galway H91E672.

We wish to make an observation regarding the proposed RWE Shancloon Windfarm, Case reference: 323699.

Our home is located in Derrymore, Caherlistrane, to the west and south-west of the proposed turbines T1, T2, T3, and T4. These four turbines lie within 1.5km of our property, with the closest positioned 1km from our home.

What we value most about Derrymore is the amazing biodiversity of the area, which is due in large part to the undisturbed boglands behind our house and the surrounding woodlands. While we are pro renewable energy, we are objecting to this development for the following reasons:

1. The overwhelming consensus of the local people we have spoken to is that engagement and communication from the company has been severely lacking. At no time were we consulted by RWE or any representative of theirs on this development, despite the fact that the proposed cabling connecting the turbines to the substation runs through our property. The proposed route for the cabling runs through our property at the roadside and this development would require our verge and subsoil to the center of the road to be excavated in order to lay the cables. The developer did not consult us about any part of the development, and did not seek permission to excavate our land. In addition to this, works at this site would prevent us from accessing our property as the approach road from the south east is the only passable road to access our home.

2. The destruction of the bogland and the associated carbon and hydrological impacts. The bogland these turbines are proposed to be sited on is an irreplaceable ecosystem that stores large amounts of carbon and hosts a wide range of endangered flora and fauna. It is illogical to site these turbines on bogland¹. Irish boglands are crucial to the environment for carbon sequestration, they act as carbon sinks holding the bulk of Ireland's carbon store, which is locked up in the peat soil. The proposed construction would cause large scale excavation and desiccation of the peat soil, disrupting the carbon accumulation process, and would lead to an increase in the amount of carbon dioxide released to the atmosphere. This is directly counter to climate and biodiversity goals.

Bogs such as these are also crucial to prevent flooding, as they soak up rainwater and release it slowly. Peat is an unstable, highly compressible substrate. Cutting it to make access roads, turbine pads and excavating for foundations radically alters local hydrology and shear strength. Scientific literature and peatland vulnerability assessments note that windfarm-related developments (roads, tracks, drainage) increase the vulnerability of peatlands to erosion, drying, and slope instability, which raises the risk of localised flooding, peat slumping and mudslides during extreme rainfall, which Galway experiences several times per year, and will likely experience more frequently in the future. Several incidents of bog bursts have occurred during the construction of wind farms despite reassurances from developers to the contrary. Bog bursts not only destroy the peatland habitat present but they also pose a

massive risk to drinking water supplies. They cause juvenile fish kills and the destruction of the aquatic environment when the displaced peat enters local water courses². A bogburst at this location is likely to result in pollution of the water table, and Lough Corrib, the major drinking water source for Galway city and surrounding areas.

The proposed windfarm has a planned operational life of 30 years. The RWE Environmental Impact Assessment states the large, reinforced concrete turbine foundations and site access tracks would be left in place permanently. Leaving turbine foundations buried in peatland causes long-term environmental harm by permanently disrupting bog hydrology, preventing rewetting and natural carbon storage, and increasing the risk of peat instability and erosion over time. These large concrete bases effectively become industrial waste deposits within sensitive ecosystems, locking the land into a state of permanent degradation. At the same time, a significant portion of wind turbine materials (particularly the large composite blades) cannot currently be recycled at scale, meaning they are typically landfilled or stockpiled at end-of-life³. Together, these impacts create an ongoing waste and carbon-emission legacy that contradicts the principles of sustainable renewable energy development.

3. The disruption of wildlife and flora. Operational wind turbines and the associated construction and maintenance activity create a collision risk to birds and bats, and disturbance to species that rely on intact bog hydrology. The Environmental Impact Assessment submitted by RWE detected a wide variety of birds which are present on the "Birds of Conservation Concern in Ireland 2020-2026" list. The vast majority of these are in the Amber and Red risk categories. The report acknowledges that these protected birds will be directly affected due to loss or alteration of habitat, disturbance and displacement, and the risk of collision with turbine blades as a result of the proposed windfarm. It should be noted that the list of detected birds is not exhaustive, and there are likely additional species and numbers in the area which were not detected during the survey.

In addition to this, the report failed to take into account the unique nature of the area by omitting in particular, details on the local turloughs and how the migratory patterns of species between these would be impacted by the development and operation of the proposed windfarm. We believe this area has not been properly explored and any proposed mitigation is flawed without a proper assessment being carried out. To this point, the Habitats Directive / Natura 2000 legal tests are strict: An Appropriate Assessment must be robust where there is any doubt regarding the effects of a development such as the proposed. The European Court of Justice has ruled that measures "intended to avoid or reduce the harmful effects" cannot simply be relied upon at screening: those measures must be tested in a full Appropriate Assessment⁴. We believe this has not been carried out in this instance.

4. The impact on local residents and the community. Large wind projects can reduce local amenity values (landscape, tranquillity, sense of place), these effects deter new households and encourage outward migration among people who value rural character. While the visual impact of this wind farm is not our main concern, the well-documented disproportionate nuisance from noise, visual intrusion, and

increased traffic associated with windfarms will logically make an area less attractive to newcomers, which erodes the social fabric over time and can lead to a decline in the rural population. This is exacerbated by the fact that the developer can object to local residential planning applications it feels may impact the windfarm, creating a barrier to entry for both locals and people who would otherwise wish to settle in the community.

Given the size of these turbines, we are also concerned about the effects of shadow-flicker, audible noise, and low-frequency noise, including infrasound, on both human and wildlife population in the area. We are especially concerned for our many neighbours who live even closer to the proposed turbines than we do. The RWE report shows the usage of a turbine setback distance of 720m, referred to as a "4x Tip Buffer" zone. However the 4x tip set back distance was introduced at a time when the turbines under consideration were smaller than those proposed here. We have concerns that it is not an appropriate guide when dealing with turbines of $\geq 180\text{m}$ in height. A review of international windfarm projects indicates that the multiplier tends to rise as turbine height increases. For example, due to the increased size of modern wind turbines, some areas in Germany have implemented a 10x turbine height set back distance for turbines $\geq 180\text{m}$ high.

The proposed destruction of intact bogland to develop this windfarm would cause significant long-term harm to the wildlife, and our rural community. For these reasons we feel we need to object to this development as proposed.

Thank you for considering our observation.
Aodhán & Michaela Ó Faracháin

¹ <https://www.mires-and-peat.net/article/128287.pdf>

² <https://www.ipcc.ie/a-to-z-peatlands/irelands-peatland-conservation-action-plan/peatland-action-plan/habitat-loss-of-peatlands/>

³ <https://www.mdpi.com/2071-1050/15/16/12557>

⁴ <https://irishriverproject.com/wp-content/uploads/2021/11/2021iehc390.pdf>