

Environmental Planning and Ecological Observations on the Proposed Tirawley Wind Farm Development

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Introduction and Context

I am a resident of Carrowmore, Ballycastle and am employed within the environmental consultancy sector, specialising in ecology, environmental assessment, hydrology, planning compliance and Natura 2000 assessment. These observations are submitted in a personal capacity as a local resident. However, my professional experience has informed many of the concerns outlined below.

Renewable energy infrastructure must be appropriately located and designed in a manner that avoids significant adverse impacts on environmental receptors, heritage assets, landscape character and local communities. Having reviewed the available planning documentation relating to the proposed Tirawley Wind Farm, I have significant concerns regarding the suitability of the proposed location and the potential implications for the wider receiving environment.

Archaeological Landscape Context

The archaeological significance of the Ballycastle, Belderrig and Lacken area is internationally recognised.

While the Céide Fields Visitor Centre represents the most visible manifestation of this heritage resource, the archaeological significance of the area extends considerably beyond the excavated field systems. The wider landscape functions as an archaeological setting. This includes blanket bogs, upland ridgelines, historic routeways, associated monuments and numerous archaeological features that collectively contribute to the significance of the Céide Fields landscape.

Particular regard should be afforded to the Rathlacken Court Tomb, a monument dating from the same Neolithic period as the Céide Fields field systems. The importance of such monuments is derived not only from their physical presence but also from their relationship with the surrounding landscape.

In my opinion, insufficient weight has been given to the cumulative impact of introducing multiple large-scale turbines and associated infrastructure into a landscape whose value is fundamentally linked to its archaeological integrity and historical continuity.

Landscape Character and Visual Sensitivity

The receiving landscape exhibits a high degree of sensitivity from both a landscape planning and tourism perspective. The area forms part of a broader landscape resource associated with the Céide Coast, Downpatrick Head, the Wild Atlantic Way and the wider North Mayo uplands.

The visual characteristics of the landscape are defined by openness, expansive views, topographic simplicity and a relatively undeveloped skyline. **The proposed development would introduce a substantial industrial element into this landscape.** The height, scale and movement associated with the proposed turbines would inevitably alter the character of the receiving environment and would become prominent features within numerous visual catchments extending across North Mayo.

Particular concern arises regarding cumulative effects - Landscape change rarely occurs through a single development. Instead, it occurs incrementally through the accumulation of projects over time. When considered alongside existing and proposed wind energy developments throughout the wider region, there is a risk that the cumulative effect will fundamentally alter the character and perception of the North Mayo landscape.

Hydrology and Catchment Connectivity

One of my principal environmental concerns relates to hydrological connectivity between the proposed Tirawley Wind Farm development site and sensitive downstream European sites designated for nature conservation. The proposed wind farm occupies elevated lands that form part of a wider catchment draining towards environmentally sensitive downstream SAC, SPA and multiple aquatically dependent Qualifying Interest species receptors (well over 120m elevation direct to the saltmarsh at Castle Lacken demesne – at the south-eastern boundary wall corner). A number of watercourses originating within or adjacent to the proposed development area ultimately contribute to the hydrological functioning of downstream environments associated with the Lacken Saltmarsh and Kilcummin Head SAC and the Killala Bay/Moy Estuary SPA.

The relationship between source, pathway and receptor is a fundamental component of environmental assessment and is particularly important where Natura 2000 sites are concerned. In this instance, the proposed development is situated within the upper reaches of a catchment that ultimately influences designated habitats and species of European conservation importance downstream. The construction phase will require extensive excavation works, turbine foundation installation, access road construction, drainage infrastructure, significant cable trenching and associated engineering operations over a substantial area.

While mitigation measures are proposed within the application documentation, it must be recognised that mitigation measures, regardless of how comprehensive or well written they may appear on paper, can never provide an absolute guarantee that adverse impacts will not occur. This is particularly relevant where highly sensitive Natura 2000 sites occur in close proximity to one another, receive waters originating from the proposed development catchment and support qualifying interests that are known to be vulnerable to changes in water quality, sediment loading, hydrology and disturbance.

Large-scale earthworks inherently increase the risk of sediment mobilisation, erosion, accidental contaminant release and alteration of local drainage patterns. Even where best practice construction methodologies are adopted, unforeseen events such as extreme rainfall, drainage failures, equipment malfunction, human error or cumulative pressures from multiple construction activities can result in environmental impacts that are difficult to predict and, in some instances, impossible to fully reverse.

The elevated topography of the site further increases the significance of this issue. Steep gradients, combined with direct hydrological connectivity, create efficient pathways through which suspended solids, hydrocarbons, concrete residues or other contaminants may be transported downstream if control measures fail or are overwhelmed. Such pathways increase the potential for adverse effects on downstream habitats associated with the Lackan Saltmarsh and Kilcummin Head SAC and the Killala Bay/Moy Estuary SPA.

Of particular concern is the fact that these designated sites support sensitive aquatic-dependent estuarine, coastal, saltmarsh and avian habitats which are dependent upon the maintenance of favourable ecological conditions as well as hydrological conditions. Many of the qualifying interests associated with these Natura 2000 sites (Salicornia and other annuals colonising mud and sand [1310], Atlantic salt meadows (Glauco-Puccinellietalia maritima) [1330], Mediterranean salt meadows (Juncetalia maritimi) [1410], Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] and Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] exhibit a low tolerance to changes in water quality, chemistry, sediment deposition and hydrological

regime. Consequently, even temporary or localised impacts arising during construction may have implications beyond the immediate footprint of the development.

Tourism, Recreation and Environmental Capital

The environmental assets of North Mayo are increasingly functioning as economic assets. The growth of tourism within the region is directly linked to the quality of the landscape, archaeological resources and outdoor recreation opportunities. Downpatrick Head, the Céide Fields and the planning approved Céide Coast Walk project collectively represent a significant tourism resource with the potential to deliver sustainable economic benefits for local communities over the long term.

These assets derive their value from the quality and authenticity of the surrounding landscape. Consequently, landscape change should be considered not only as a visual issue but also as an economic issue. **The cumulative industrialisation of highly sensitive landscapes has the potential to undermine the very attributes that support tourism and recreation-based development.**

Environmental Planning Considerations

Good planning requires the balancing of competing interests such as renewable energy and nature, heritage conservation. However, so too is the protection of archaeological heritage, landscape character, biodiversity, Natura 2000 sites, tourism resources and community wellbeing.

In my opinion, this proposal presents a clear example of a development that risks creating significant conflict between these objectives.

The receiving environment possesses an unusually high concentration of environmental, archaeological and tourism sensitivities.

Alternative locations may be capable of accommodating such development with fewer environmental constraints.

Conclusions

Having reviewed the available information and considered both the local and wider environmental context, I remain significantly unconvinced that the proposed development represents an appropriate form of development within this location.

My concerns relate principally to:

- The wider archaeological setting of the Céide Fields and Rathlacken Court Tomb
- Landscape character and cumulative visual impacts
- Hydrological connectivity and downstream environmental receptors
- Potential implications for Natura 2000 sites
- Tourism and recreation resources along with the interests of the local community
- Long-term environmental sustainability within North Mayo

For the reasons outlined above, I submit that the opinion that the proposed development should not be permitted at this location.

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