OBSERVATION / SUBMISSION

AN COIMISIÚN PLEANÁLA

Case Reference: PAX16.324387

MUINGMORE WIND FARM

County Mayo
Applicant: RWE Renewables Ireland Limited
13 wind turbines, 110 kV substation, BESS and associated infrastructure

Observer	John Callaghan MIEI AMEI
Position	Supports renewable-energy development in North Mayo, subject to strategic spatial optimisation and full environmental assessment
Comparative scenario	Indicative wider North Mayo / Glencastle wind-energy study scenario of up to approximately 100 MW
Status	Early-stage strategic and comparative scenario; not a rival planning application or asserted entitlement to landscape capacity

8 August 2026

1. Purpose and Central Proposition

This observation supports substantial renewable-energy development in North Mayo. It asks the Commission to assess Muingmore within the wider spatial, landscape, environmental, electricity-system and regional-development context. Where residual landscape and grid capacity are limited, those scarce resources should be allocated so as to maximise useful renewable-energy output and enduring public benefit.

The relevant strategic metric is not installed MW alone. It includes net annual renewable MWh, capacity factor and equivalent full-load hours, network capacity consumed, expected constraint and curtailment, the quantity and duration of useful local supply, and the environmental, social, economic and decarbonisation benefits produced.

2. Standing and Disclosure

I am John Callaghan MIEI AMEI, a Member of Engineers Ireland and an Associate Member of the Energy Institute, with experience in civil and structural engineering, infrastructure, renewable energy, energy systems, planning and environmental assessment. I previously engaged with strategic-infrastructure consenting as an appellant in Callaghan v An Bord Pleanála [2017] IESC 60.

For transparency, through Harmyl Holdings Limited I am examining wind, solar PV, BESS and private-wire/direct-supply opportunities, including wind-energy potential in the wider Glencastle-Bangor-Bellanaboy area. These interests are disclosed so that the commercial and development context of this observation is clear. The principles advanced are intended to apply equally to Muingmore, Harmyl and other renewable developments.

3. Indicative Circa 100 MW Comparative Scenario

The Harmyl assessment includes an indicative wider North Mayo / Glencastle wind-energy study scenario of up to approximately 100 MW. It is an early-stage strategic and comparative scenario. No development consent is sought for it through this observation, landowner consents sufficient for a planning application have not yet been secured, and no entitlement to landscape capacity is asserted.

Its present relevance is comparative: it demonstrates that materially different spatial and energy-system configurations of the wider North Mayo renewable resource can be examined before scarce landscape and network capacity is committed. Candidate locations are being considered by reference to residential amenity, renewable-energy output, landscape and visual impact, geotechnical, ecological and hydrological constraints, grid/private-wire opportunities, storage and productive electricity demand.

4. Landscape Capacity and Reasonable Alternatives

If Mayo's residual landscape capacity for utility-scale wind is materially limited, it is a scarce strategic environmental and economic resource. The Commission should identify the relevant receiving landscape unit or units, the extent of existing and committed development, and the evidential basis for any finding as to residual capacity.

Reasonable alternatives should remain genuinely open. The circa 100 MW comparative scenario need not be treated as a rival application; the issue is whether materially different spatial configurations within the wider high-yield North Mayo resource could meet the renewable-energy objective with a different balance of landscape, environmental, grid and regional-development effects.

5. Useful Energy and Local Productive Use

Strategic value should be assessed by useful renewable energy delivered, not nameplate MW alone. The assessment should address net annual MWh, net capacity factor, equivalent full-load hours, wake and electrical losses, availability, constraint and curtailment. Representative annual or 8,760-hour modelling would allow the Commission to understand the actual energy-system value of the project and alternatives.

Where otherwise comparable configurations impose broadly similar environmental and landscape costs, a configuration capable of supporting productive economic activity within Mayo may produce additional public benefit through industrial decarbonisation, investment, employment, commercial rates, supply chains and energy-cost competitiveness.

The Observer does not propose an artificial restriction on electricity export. The issue is whether high-availability local productive consumption should receive additional strategic weight where landscape and network capacity are scarce.

By way of illustration, 25% of a 100 MW nameplate capacity is 25 MW. The material issue, however, is not an arbitrary percentage but the MW of productive demand that could be served and the number of annual hours for which that supply could be sustained, as demonstrated by an appropriate production-duration analysis.

6. Grid Connection, BESS and EIA Completeness

The Commission should establish the proposed Maximum Export Capacity, the rating and architecture of the 110 kV connection, residual capacity at the relevant Bellacorick network node, required reinforcement, realistic full-energisation date and expected constraint or curtailment. It should also clarify the BESS power rating, storage capacity, duration and operating strategy.

The regional opportunity cost of the connection is material. The Commission should consider whether connection assets could be shared or designed to facilitate future wind, solar PV or BESS development and whether local productive offtake could reduce export loading, constraint, curtailment or reinforcement requirements.

The reasonably foreseeable grid connection required to make Muingmore operational should be identified and environmentally assessed to the extent required at this stage, including cumulative effects. O'Grianna v An Bord Pleanála [2014] IEHC 632 remains relevant to the treatment of a wind farm and its grid connection, subject to the facts and scope of the present EIAR.

Where underground connection is proposed or anticipated, the Commission should be satisfied that the choice has been reasonably assessed against technically feasible overhead alternatives having regard to capital and whole-life cost, losses, construction and maintenance effects, fault repair, landscape, amenity and environmental consequences.

7. Essential Issues for Determination

1. Identify the relevant receiving landscape unit or units and provide a reasoned assessment of total, utilised and residual capacity for large-scale wind development.

2. Assess reasonable alternative spatial configurations within the wider high-yield North Mayo resource, including the indicative circa 100 MW Glencastle scenario, without treating that scenario as a consent-ready rival application.

3. Assess Muingmore by net annual useful energy, net capacity factor and equivalent full-load hours after losses, constraint and curtailment, rather than installed MW alone.

4. Clarify the grid connection architecture, MEC, required reinforcement, realistic energisation date, residual capacity at Bellacorick, BESS configuration and the comparative merits of underground and technically feasible overhead connection options.

5. Determine whether the reasonably foreseeable grid connection and its cumulative environmental effects have been adequately identified and assessed in the EIAR/NIS.

6. Consider whether private-wire or other local productive offtake could provide a useful block of power for a substantial number of annual hours, increase regional economic and decarbonisation benefit, and reduce avoidable transmission loading, constraint, curtailment or reinforcement.

7. Give clear reasons explaining why the configuration ultimately preferred represents the greatest sustainable public value from the finite landscape and network capacity that can be accommodated.

8. Further Submission

The Observer respectfully requests an opportunity, insofar as the applicable procedure permits, to address material new information submitted during determination concerning the grid connection, MEC, underground/overhead options, BESS, curtailment, offtake arrangements or a sufficiently developed reasonable alternative.

9. Conclusion

North Mayo's wind resource is a strategic national asset, but landscape, environmental and network capacity are finite. The appropriate planning response is strategic allocation. Landscape change is a real environmental cost; the social and economic value obtained in return is also material.

The Commission is therefore requested to identify residual landscape capacity, assess reasonable alternatives, evaluate annual useful renewable energy and grid consequences, consider high-availability productive local demand, and explain the environmental, social and economic balance ultimately struck. The indicative circa 100 MW Harmyl/Glencastle scenario is advanced only to demonstrate that materially different configurations remain capable of examination before scarce capacity is committed.

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