CONTENTS

TABLES

FIGURES

TECHNICAL APPENDICES (VOLUME 3)

PLATES

Acronyms and Abbreviations

ACP	An Coimisiún Pleanála
AIL	Abnormal Indivisible Load
BESS	Battery Energy Storage System
BNG	Biodiversity Net Gain
CAP	Climate Action Plan
CDP	County Development Plan
CLO	Community Liaison Officer
CO_2	Carbon Dioxide
CRM	Collision Risk Model
CSO	Central Statistics Office
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
ESB	Electricity Supply Board
EU	European Union
GHG	Greenhouse Gas
GIS	Geographic Information Systems
GP	Golden Plover
GCR	Grid Connection Route
GTUoS	Generator Transmission Use of System
GW	Gigawatt
LVIA	Landscape and Visual Impact Assessment
MCC	Mayo County Council
MEC	Maximum Export Capacity
MNOU	Minimum Number of Units
MWh	Megawatt hour
MW	Megawatt
NBAP	National Biodiversity Action Plan
NGO	Non-Governmental Organisation
NHAs	Natural Heritage Areas
NIS	Natura Impact Statement
NPF	National Planning Framework
NPWS	National Parks and Wildlife Service
NWRA	Northern and Western Regional Assembly
PV	Photovoltaic
RED III	Renewable Energy Directive (EU Directive 2023/2413)
RSES	Regional Spatial and Economic Strategy

SACs	Special Areas of Conservation
SEA	Strategic Environmental Assessment
SEAI	Sustainable Energy Authority of Ireland
SID	Strategic Infrastructure Development
SLR	SLR Consulting
SNSP	System Non-Synchronous Penetration
SPAs	Special Protection Areas
TDR	Turbine Delivery Route
TII	Transport Infrastructure Ireland
TuOS	Transmission Use of System
VP	Viewpoint
WEDG / WEDGs	Wind Energy Development Guidelines

3.0 SITE SELECTION AND ALTERNATIVES, EIA SCOPING, CONSULTATION AND KEY ISSUES

INTRODUCTION

Background

3.1 The following chapter sets out the need for the Proposed Project with respect to national and regional policy as well as national renewable energy and climate change targets. This chapter also presents the Environmental Impact Assessment (EIA) scoping and consultation work completed during the preparation of the EIAR.

3.2 Careful consideration of reasonable alternative options throughout the design process provides one of the most effective means of reducing the environmental effects of a project. Following the establishment of the need for the Proposed Project, the chapter details the reasonable alternatives studied by the Applicant. The main alternatives considered during the evolution of the design are set out in this chapter, along with an indication of the main reasons for selecting the final layout of the Proposed Project.

Statement of Authority

3.3 This chapter of the EIAR was completed by SLR Consulting. The competent practitioners responsible for the preparation of this chapter comprise:

- Paula McCarthy, BSc, MSc, RTPI is an Associate Planning & Development Surveyor with SLR with over 18 years' professional experience in relation to preparing and submitting planning applications and Environmental Impact Assessment Reports for a broad range of development proposals throughout Ireland.
- Gareth Hughes, MSc, BSc, IEMA is a Principal Consultant EIA and has over 18 years' experience who specialises in managing multi-disciplinary Environmental Impact Assessment (EIA) projects. He has coordinated numerous EIAs from screening stage, through scoping, to the production of EIARs.
- Aislinn O'Brien, MCD, MSc, MIPI, MRTPI reviewed the chapter. Aislinn is a chartered town planner with over 18 years' professional planning experience. During this time Aislinn has project managed and coordinated numerous planning applications and EIARs.

3.4 Further information in relation to SLR Consulting can be found at www.slrconsulting.com.

Need for the Development

3.5 As outlined in the Planning Statement accompanying the planning application, the need for the Proposed Project is closely aligned with National energy and climate policy which in turn is derived from the overarching European Policy which aims to unify the European Union in energy and climate goals.

3.6 The Proposed Project will provide "*energy from a renewable non-fossil source, namely wind energy*", and thus comes within the definition of a RED III development.

3.7 The National Planning Framework outlines that the Government has established ambitious goals to reach 9 GW of onshore wind, 5 GW of offshore wind, and 8 GW of solar energy by 2030. To date, Ireland has reached over 5 GW of installed capacity through onshore wind development. The Proposed Project would provide a wind farm of 13 turbines capable of generating a total of between 74.1 MW and 91 MW output by means of renewable technology, therefore contributing to the national policy objectives.

3.8 The Irish Government, through the Climate & Low Carbon Development (Amendment) Act 2021, commits to achieving 'net-zero' emissions by 2050. The latest Climate Action Plan published on 15 April 2025 (CAP 25) has set a target of 80% renewable electricity for the country by 2030.

3.9 CAP 25 commits to 24 GW of new renewable capacity by 2030, an increase from 22 GW in the previous iteration of the Plan (CAP 24). Within CAP 25, the 2030 target for onshore wind is 9 GW.

3.10 CAP 25 reiterates the European Green Deal commitment to delivering net-zero Greenhouse Gas (GHG) emissions at EU level by 2050; with Ireland committed to achieving a 51% reduction in emissions from 2021 to 2030, and the need for action to reduce emissions to be significantly accelerated in the period to 2030.[1]

3.11 During its operation, it is estimated for assessment purposes that the Proposed Project will generate between 74.1 MW and 91 MW output of electricity, enough to supply between 54,020 to 66,430 Irish households with renewable electricity per year, based on the average Irish household using 4.2 MWh of electricity. The Proposed Project has the potential to displace between 1,785,538 and 2,206,043 tonnes of CO_2 over the operational lifetime (35 years). Thus, this energy will be used to offset the same amount of energy that would otherwise be generated from energy sources with higher GHG emissions. The Proposed Project supports the delivery of targets within CAP 25 and the unprecedented need for effective onshore wind projects with associated infrastructure.

3.12 The Government's Wind Energy Development Guidelines for Planning Authorities 2006 (WEDG, 2006) establishes a land-use planning framework whereby planning authorities can proactively support the development of wind energy projects at appropriate locations. The Northern and Western Regional Assembly (NWRA) Spatial and Economic Strategy 2020-2032 recognises the need for decarbonising the energy sector and supports an increase in facilitating wind energy projects on a larger scale in appropriate sites within the region. It recognises the role of wind energy infrastructure in improving our climate resilience and cites the reliance of wind energy production through events such as Storm Ophelia during which access to alternative energy sources was challenged. It recognises the requirement for this type of development to be located in rural areas. The design of the Proposed Project also has regard to the draft 2019 Wind Energy Development Guidelines, but it should be noted that these have not yet been adopted.

3.13 In accordance with these land-use policies, the Mayo County Development Plan (CDP) 2022-2028 recognises the importance of onshore wind energy as a renewable energy source and is supportive of wind energy development at suitable locations and in accordance with specified development management criteria within their administrative areas. The CDP sets a minimum, target of 600 MW of wind energy capacity to be facilitated within the county over the plan period.

[1] Climate_Action_Plan_2025_updated_cover.pdf

Requirements of the EIA Directive

3.14 The requirement in relation to alternatives in the EIA process is set out in Directive 2011/92/EU, amended by Directive 2014/52/EU "the EIA Directive", in Article 5 (1)(d), which states that an EIAR should include:

> *"A description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment.'*

3.15 Article 5(1)(f) of the EIA Directive requires that the EIAR contains:

> *'any additional information specified in Annex IV relevant to the specific characteristics of a particular project or type of project and to the environmental features likely to be affected."*

3.16 Annex IV of the EIA Directive states that the information provided in an EIAR should include a:

> *"Description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects."*

3.17 This EIA process has been undertaken with respect to the Proposed Project taking into account the many factors that drive proposals for such development, such as national need, availability of land, geographical issues and availability of infrastructure. Once the wind farm location has been identified, the location of ancillary infrastructure can be considered in the context of a number of factors such as environmental constraints, land access and terrain before the design is finalised.

3.18 Implementation of the EIA process, complete with continuous input from a range of technical environmental experts as well as prescribed bodies and the local community has influenced the consideration of alternatives for the Proposed Project.

3.19 The alternatives considered have been described in line with the Environmental Protection Agency (EPA) Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (May, 2022). The Guidelines state that:

> *"The objective is for the developer to present a representative range of the practicable alternatives considered. The alternatives should be described with 'an indication of the main reasons for selecting the chosen option'. It is generally sufficient to provide a broad description of each main alternative and the key issues associated with each, showing how environmental considerations were taken into account in deciding on the selected option. A detailed assessment (or 'mini-EIA') of each alternative is not required."*

3.20 Furthermore, the Guidelines note the following regarding high level plans and strategies that may influence or pre-determine decisions in the development process:

> *"Higher level alternatives may already have been addressed during the strategic environmental assessment of relevant strategies or plans. Assessment at that tier is likely to have taken account of environmental considerations associated, for example, with the cumulative impact of an area zoned for industry on a sensitive landscape. Note also that plan level/higher-level assessments may have set out project-level*

objectives or other mitigation that the project and its EIAR should be cognisant of. Thus, these prior assessments of strategic alternatives may be taken into account and referred to in the EIAR."

3.21 It is important to note that there are non-environmental factors which may have equal or overriding importance to the developer of a project, such as engineering feasibility or land ownership and access. These other factors are also set out in this chapter where they were appropriate to the ultimate selection of the Main Wind Farm Development Site.

Alternatives Considered

3.22 Given the legislation and guidance background set out above, the reasonable alternatives considered in undertaking this EIAR were as follows:

- 'Do Nothing' alternative (Future Baseline);
- Alternative locations;
- Alternative technologies;
- Alternative design and layouts; and
- Alternative cable routes & turbine delivery.

3.23 Each of these alternatives were considered relevant to the Proposed Project and its specific characteristics and are discussed in further detail below. This includes an assessment and comparison of likely significant environmental effects, and indicates the main reasons for choosing the Main Wind Farm Development Site and the final layout of the Proposed Project.

'Do Nothing' Alternative

3.24 In the 'Do Nothing' / Future Baseline alternative, the status quo in terms of the local environment would continue, a mixture of bog, farmland and scattered dwellings.

3.25 The Main Wind Farm Development Site would not fulfil its potential to contribute to renewable energy production which has been clearly stated as a need at national level in the Climate Action Plan 2025. According to EirGrid Group's All-island Generation Capacity Statement 2021 – 2030 (EirGrid, 2021)[2], the growth in energy demand for the next ten years on the island of Ireland will be between 18% and 43%. In the 'Do Nothing' scenario, importation of fossil fuels to maintain growing energy supply will likely continue to be required and Ireland's energy security will remain vulnerable. A 'Do Nothing' scenario would contribute to strain on existing energy production and may impact on economic and employment growth if energy demand cannot be met. The delay in closing the Tarbert and Moneypoint power plants means that nationally there is a continued reliance on imported fossil-fuels with unpredictable pricing, a vulnerable supply chain and higher carbon emissions.

3.26 Given the importance of onshore wind energy as a contributor to the renewable energy targets, the 'Do Nothing' alternative was not considered a viable option.

[2] https://cms.eirgrid.ie/sites/default/files/publications/208281-All-Island-Generation-Capacity-Statement-LR13A.pdf (accessed 24/03/2026

3.27 It was further considered that there is significant potential for wind energy within County Mayo to deliver further wind energy generation capacity. At present, Mayo County Council is a leader in the development of renewable energy. The county generates 358 MW (Q2 2025), which is approximately 6% of Ireland's overall wind energy production and 296,173 tonnes of carbon emissions saved[3]. The additional capacity of the Proposed Project would further benefit Mayo in reaching its energy targets.

3.28 The 'Do Nothing' option would result in a failure to capitalise upon and exploit the significant renewable wind energy resource available within County Mayo, resulting in a lost opportunity to meet ambitious national, regional and local targets to produce renewable electricity.

Alternative Locations

3.29 Strategic site selection, which avoids areas of environmental sensitivity is the principal mitigation option for onshore wind energy projects. At the outset of developing a wind energy project an assessment of alternative locations can avoid sensitive locations in favour of locations which have fewer constraints.

3.30 A rigorous strategic national site selection process was undertaken to identify the optimum site to accommodate the Proposed Project. The Applicant is highly experienced and employs a detailed screening process for site selection.

3.31 The process of site screening and project selection is undertaken in-house by the Applicant's team of developers. The development team is made up of planners, engineers, project managers and environmental scientists ensuring that a holistic approach is undertaken during the screening and project selection process. The Applicant recognises the complexities associated with the development of renewable energy sites and has developed a large database of information that allows the company to identify and screen potential sites.

3.32 The Applicant uses Geographical Information Spatial software (GIS), using a number of criteria and stages to assess the potential for wind energy development across the entire country of Ireland. This exercise utilises a large number of spatial datasets such as ordnance survey land data, house location data, transport, forestry data, existing wind energy and grid infrastructure data and environmental data such as ecological designations. This initial stage in the selection process discounted lands that were not available for development due to technical and/or environmental constraints.

3.33 The site selection process also took account of relevant International, National, Regional and local policies, as well as the principal environmental, planning and technical criteria that determine the feasibility and suitability of the existing environment to absorb wind farm developments.

3.34 A screening process was conducted across the country in 2018, which identified a number of suitable sites, which were then taken forward for assessment. As these sites have all been brought forward to planning (or are in that process), and are subject to EIA, a description of the reasonable alternatives studied which are relevant to each project and its specific characteristics, together with an indication of the main reasons for selecting the chosen option with regards to their environmental impacts, are provided in the EIAR accompanying the applications for same.

[3] Wind Energy Ireland (Wind Energy By County)

3.35 Sites that emerged from the 2018 site selection process, outlined above, for which planning applications have been submitted are as follows:

- Fahybeg, County Clare.
- Shancloon, County Galway.
- Ballincor, County Offaly.

3.36 Sites that emerged from the 2018 site selection process, outlined above, for which are projects in their own right which will be subject to EIA are as follows:

- Clooncunny, County Sligo.

3.37 As such, a description of the reasonable alternatives studied which are relevant to each project and its specific characteristics, together with an indication of the main reasons for selecting the chosen option with regards to their environmental impacts, will be provided in the EIAR accompanying the application for same.

This site was ultimately selected for wind energy development on the basis of the following considerations:

- Identification of environmental designations on a National Scale.
- Proximity to built wind farms.
- Reasonable access to the national electricity grid
- Transmission Uses of System Charges.
- Population Density and distance to Residential Receptors.
- Available Wind Resource.
- Relevant International, National and Regional Policies.

Environmental Designations

3.38 An assessment of environmental designations (Special Areas of Conservation (SACs), Special Protection Areas (SPAs), National Heritage Areas existing and proposed (NHAs)) identified the western and eastern seaboards of the Country as having dense levels of European and National environmental designations. **Figure 3-1** shows the environmentally designated sites surrounding the Main Wind Farm Development Site within a 20 km radius. Most of the Main Wind Farm Development Site itself is not designated for environmental conservation, although a small part of the north-western corner is designated as Annex 1 habitat. The only works associated with this part of the Main Wind Farm Development Site relate to peat enhancement, so the Main Wind Farm Development Site is therefore considered a suitable location for a wind farm.

Proximity to Built Wind Farms

3.39 According to the latest statistics from Wind Energy Ireland, there are over 300 operational wind farms across Ireland. Sustainable Energy Authority of Ireland (SEAI) provides an online interactive map[4] which indicates a number of connected and up and coming / contracted projects.

[4] Wind Atlas [Accessed August 2025].

3.40 **Figure 3-2** shows the currently connected/ contracted wind farms within a 20 km radius of the Main Wind Farm Development Site. The nearest project is the Bunnahowen Wind Farm, which is a small capacity development (2.55 Maximum Export Capacity (MEC)) located approximately 4.2 km north of the Main Wind Farm Development Site. Bellacorick Wind Farm, developed by Bord na Móna is an 21-turbine development located on the edge of the 20 km radius, to the east. Sheskin Wind Farm (Phases 1 and 2) is located approximately 18.5 km to the east. Finally, Oweninny Wind Farm (Phases 1 and 2), operated by ESB and Bord na Móna, has a capacity of 370 MW, is located on the edge of the 20 km radius, also to the east. It is not considered therefore that there would be unacceptable cumulative effects from surrounding built wind farms.

Reasonable Access to the National Electricity Grid

3.41 Electrical grid access has become a critical issue for site selection.

3.42 As of August 2025, Ireland's electrical grid is undergoing significant transformation to meet rising demand and sustainability targets. The country recorded a new peak electricity demand of 6,024 MW on 8 January 2025, marking the first time demand exceeded 6,000 MW.[5] Electricity demand is projected to grow by 45% by 2034, driven by the expansion of data centres, electrification of heating and transport, and broader economic growth.[6]

3.43 The current fuel mix is dominated by renewables, which account for approximately 59.3% of electricity generation, followed by gas at 35.9%, with coal now fully phased out.[7] To ensure grid stability, dispatchable generation includes flexible gas-fired plants and temporary emergency generation units, with approximately 450 MW of additional capacity secured for winters 2023/2024 to 2025/2026.[8] The Celtic Interconnector, a 700 MW link between Ireland and France, is under construction and expected to be operational by 2027–2028, enhancing grid resilience and enabling electricity exchange with continental Europe.[9]

3.44 EirGrid's Operational Policy Roadmap 2025–2035 outlines strategies to accommodate higher levels of renewable integration, including raising the System Non-Synchronous Penetration (SNSP) limit and reducing the Minimum Number of Units (MNOU) requirement.[10] Real-time grid performance and fuel mix data are available via EirGrid's Smart Grid Dashboard, supporting transparency and operational planning.[11]

3.45 Ongoing and planned investment in Ireland's electricity grid will facilitate increased renewable energy integration, particularly in the west where there is significant wind resource availability that coincides with existing grid constraints. This is reflected in EirGrid's investment programme and Government backed funding, including multi-billion euro commitments to grid infrastructure over the coming decade, which will deliver upgrades in

[5] EirGrid. (2025). All-Island Resource Adequacy Assessment. https://www.eirgrid.ie/news/new-eirgrid-analysis-examines-balance-between-electricity-demand-and-supply-ireland-over-10

[6] EirGrid. (2025). All-Island Resource Adequacy Assessment. https://www.eirgrid.ie/news/new-eirgrid-analysis-examines-balance-between-electricity-demand-and-supply-ireland-over-10

[7] EirGrid. (2025). Real Time System Information. https://www.eirgrid.ie/grid/real-time-system-information

[8] Department of Climate, Energy and the Environment. (2025). Government Measures for Electricity Supply. https://www.gov.ie/en/department-of-climate-energy-and-the-environment/press-releases/government-announces-package-of-measures-to-secure-electricity-supplies-into-the-future-and-to-help-mitigate-rising-household-electricity-bills/

[9] EirGrid. (2025). Celtic Interconnector Project. https://www.eirgrid.ie/celticinterconnector

[10] EirGrid. (2025). Operational Policy Roadmap 2025–2035. https://cms.eirgrid.ie/operational-policy-roadmap-2025-2035

[11] EirGrid. (2025). Real Time System Information. https://www.eirgrid.ie/grid/real-time-system-information

constrained regions such as the west and north-west.[12] These works are being progressed alongside renewable energy development and demonstrate that grid capacity is being actively expanded at a national level to support projects such as the Proposed Project.

3.46 Initial analysis and site surveys undertaken as part of a feasibility study undertaken by TLI has shown that there is a feasible underground Grid Connection Route (GCR) available to the Bellacorick substation. This substation has the required 110 kV substation rating to accommodate a connection from the Proposed Project, which is key from both a technical and financial perspective to take the Proposed Project forward. The GCR will be the subject of a separate planning application but has been assessed in this EIAR.

3.47 The applicant requested a customer clinic with Eirgrid for the Proposed Project, which was held on the 26th March 2025. Details associated with the Proposed Project, including the estimated MEC, feasibility study for the GCR and a future connection to the national grid at Bellacorick 110 kV substation were discussed.

Transmission Uses of System Charges

3.48 Transmission Use of System (TuOS) charges are applied to electricity generators and suppliers to reflect the transmission cost of connecting at different locations and to recover the total allowed revenues of the onshore and offshore transmission owners and their levels within an area are an important factor in determining the suitability of it for locating infrastructure.

3.49 Changes to generation dispatch patterns and the geographical location of generation can have an impact on all-island transmission network power flows, which can impact on TuOS charges. The **EirGrid All-Island Ten-Year Transmission Forecast Statement 2024**[13] outlines the expected evolution of Ireland's transmission system over the next decade, driven by rising electricity demand and the integration of renewable energy. Demand is projected to grow significantly due to electrification of transport and heating, as well as the expansion of data centres and industrial activity. The report highlights key transmission corridors where power flows are expected to increase, identifying areas of congestion and the need for network reinforcements. It includes fault level analyses and detailed network models to support system planning and operational reliability. Opportunities for new generation and demand connections are identified, alongside constraints that may impact future development. The forecast supports strategic investment and policy alignment with Ireland's 2030 climate and energy targets.

3.50 As can be seen in **Figure 3-3**, the Main Wind Farm Development Site Location is situated in an area with a GTUoS tariff value in the €7,000-8,000 bracket (€7,205 specifically). This value represents the lowest tariff value found in the coastal region along the west of the country, particularly when compared to other coastal areas such as those in the North West (€7,337) and the South West (€8,156 and €8,109). At the time of the site selection for the Proposed Project, potentially viable sites areas were selected in areas of highest infrastructure capacity, along with favourable GTUOS tariffs, including County Mayo.

[12] Network Delivery Portfolio (NDP) | Grid Information | EirGrid

[13] EirGrid (2024) cms.eirgrid.ie/sites/default/files/publications/All-Island-Ten-Year-Transmission-Forecast-Statement-2024.pdf

Population Density

3.51 An analysis of 2022 Census data provides information on population density by county as set out in **Table 3-1**. Population is denser within the urban centres of Dublin and Cork, spreading through their wider catchment area.

3.52 The western counties show a lower population density, being removed from urban centres. County Mayo has one of the lowest population densities (24.5 persons per square kilometre) with the highest being Dublin (1,573 persons per square kilometre), as can be seen below in **Table 3-1**. This reflects the rural location of Mayo which provides locations such as the Main Wind Farm Development Site where the potential for adverse effects on residential receptors from onshore wind energy developments is likely to be lower than in areas of higher population density.

Table 3-1 CSO 2022 Population Density by County

Census Year	County	Population by Area	County by Size km^2	Population Density
2022	Co. Carlow	61,931	897	69.04
2022	Co. Cavan	81,201	1,932	42.03
2022	Co. Clare	127,419	3,450	36.93
2022	Co. Cork	581,231	7,500	77.50
2022	**Co. Donegal**	**166,321**	**4,860**	**34.22**
2022	Co. Dublin	1,450,701	922	1573.43
2022	**Co. Galway**	**276,451**	**6,151**	**44.94**
2022	Co. Kerry	155,258	4,807	32.30
2022	Co. Kildare	246,977	1,695	145.71
2022	Co. Kilkenny	103,685	2,073	50.02
2022	Co. Laois	91,657	1,720	53.29
2022	**Co. Leitrim**	**35,087**	**1,589**	**22.08**
2022	Co. Limerick	205,444	2,756	74.54
2022	Co. Longford	46,634	1,091	42.74
2022	Co. Louth	139,100	826	168.40
2022	**Co. Mayo**	**137,231**	**5,588**	**24.56**
2022	Co. Meath	220,296	2,342	94.06
2022	Co. Monaghan	64,832	1,295	50.06
2022	Co. Offaly	82,668	2,001	41.31
2022	Co. Roscommon	69,995	2,548	27.47
2022	**Co. Sligo**	**69,819**	**1,837**	**38.01**
2022	Co. Tipperary	167,661	4,305	38.95
2022	Co. Waterford	127,085	1,857	68.44
2022	Co. Westmeath	95,840	1,840	52.09

Census Year	County	Population by Area	County by Size km^2	Population Density
2022	Co. Wexford	163,527	2,367	69.09
2022	Co. Wicklow	155,485	2,027	76.71
2022	Ireland	5,123,536	70,273	72.91

Available Wind Resource

3.53 Sustained wind speeds are required in order for a wind development to make a substantial and viable contribution to renewable energy targets. An examination of the Wind Atlas[14] over the study area indicates that wind speeds average between 8.8 m/s and 9.2 m/s at 100 m (as shown on **Figure 3-4**). Wind speeds were a consideration in the final site selection of the Main Wind Farm Development Site. Wind speeds at the Main Wind Farm Development Site were measured using a Light Detection and Ranging (LiDAR) remote sensing measurement system to provide more accurate data. This two-year monitoring campaign from October 2022 to November 2024 confirmed average wind speeds of 9.1 m/s, which demonstrated that the Main Wind Farm Development Site is a suitable location in terms of wind resource.

Relevant Policies

3.54 The site selection process is informed by European, National, Regional and Local planning policies and legislation. The European, National and Regional Policies highlight the need for renewable energy development in order for Ireland to meet its climate and energy goals. Local Planning Policy informed the micro-siting of the Proposed Project in conjunction with the site selection screening, as outlined in this section.

European Legislation

3.55 Comprehensive assessment of policy is set out within the relevant chapters to which they relate in this EIAR, as well as within the Planning Statement accompanying the planning application.

3.56 Relevant policy has also informed the selection of reasonable alternatives studies by the developer. At a European level this includes the Renewable Energy Directive (EU Directive 2023/2413) (RED III) which introduces measures to speed up renewable infrastructure permitting procedures to help meet national climate and energy goals.

National Level

3.57 At the time of siting of the Proposed Project, the national level, climate and energy policy to achieve these goals were identified in Project Ireland 2040, the National Planning Framework (NPF) which was originally published in 2018, and states that:

> "*Ireland's national energy policy is focused on three pillars: (1) sustainability, (2) security of supply and (3) competitiveness. The Government recognise that Ireland must reduce greenhouse gas emissions from the energy sector by at least 80% by*

[14] Wind Energy Resources In Ireland | SEAI GIS Maps | SEAI [Accessed October 2024]

2050, compared to 1990 levels, while at the same time ensuring security of supply of competitive energy sources to our citizens and businesses." [15]

3.58 In relation to siting of wind farm developments, the NPF states: "*Increases in population, economic growth, higher levels of food demand, transitioning to a more sustainable energy market and conservation goals will ultimately result in increased competition for suitable land to facilitate these accumulating pressures. Some parts of Ireland are more suitable than others for facilitating particular national sectoral aims by reason of physical factors, environmental sensitivities, land capacity and existing settlement patterns*."

3.59 In addition to the NPF, the Climate Action Plan is the foremost national climate change document and provides the targets for development of renewable energy. There have been a number or iterations of this Plan since the site selection process began in 2018, with the first iteration published in 2019. Each iteration has been consistent in the need to implement carbon budgets and sectoral emissions ceilings, with the ultimate target of reaching net zero by 2050.

3.60 At the time of writing this Chapter, Climate Action Plan 2025 is in place, among the key targets in this document are:

- 80% renewable electricity share by 2030.
- 9 GW of Onshore Wind by 2030.
- 8 GW of Solar by 2030.
- 5 GW of Offshore Wind by 2030
- 2 GW of non-grid renewable energy generation.
- 20-30% Demand Side Flexibility by 2030, up from 15-20% in 2025.

Regional Level

3.61 During the site selection and design of the Proposed Project, the Regional Spatial and Economic Strategy (RSES) for the Western Region[16], the foremost regional planning document within the Republic of Ireland was referred to. Page 166 of the RSES notes that:

'Policy RPO 4.16: The NWRA shall co-ordinate the identification of potential renewable energy sites of scale in collaboration with Local Authorities and other stakeholders within 3 years of the adoption of the RSES. The identification of such sites (which may extend to include energy storage solutions) will be based on numerous site selection criteria including environmental matters, and potential grid connections.'

Local Level

3.62 In assessing alternative locations, reference was made to the policies and objectives of the Mayo County Development Plan 2014-2020, including the Strategic Environmental Assessment (SEA) prepared for each plan in accordance with Directive 2001/42/EC and the Mayo Renewable Energy Strategy (2011-2020). These documents informed the

[15] Project-Ireland-2040-NPF.pdf

[16] REGIONAL SPATIAL AND ECONOMIC STRATEGY 2020-2032 [Accessed 03 December 2025].

locations within the County considered acceptable for wind energy development and outlined the development management standards required to be followed, which informed the micro-siting for the Proposed Project.

3.63 Section 5.4.1 of the Mayo County Development Plan 2014-2020 stated that:

"Renewable energy developments will be considered in accordance with the objectives and development management standards set out in the Renewable Energy Strategy for Co. Mayo 2011-2020 and shall only be permitted where they will not have an adverse impact on adjoining properties and the environment, in particular on:

- *Biodiversity,*
- *Flora and Fauna*
- *Population and Human Health*
- *Water Quality*
- *Soil*
- *Air and Climatic Factors*
- *Material Assets*
- *Cultural Heritage*
- *Landscape."*

3.64 Objective REO3 of the Mayo County Development Plan 2014-2020 stated that:

"It is an objective of the Council that proposals for wind farms shall demonstrate consistency with the Landscape Appraisal of County Mayo with reference to the four Principal Policy Areas shown on Map 3A Landscape Protection Policy Areas and the Landscape Sensitivity Matrix (Figure 3), and the Wind Energy – Guidelines for Planning Authorities (2006)".

3.65 The Mayo Renewable Energy Strategy 2011-2020, provided a Renewable Energy Strategy for the County with a strategic aim:

"*To transition to a low carbon and climate resilient county, with an emphasis on reduction in energy demand and greenhouse gas emissions, through a combination of effective mitigation and adaptation responses to climate change; in addition to maximising the opportunities to become a national leader in renewable energy generation, whilst increasing the resilience of our Natural and Cultural Capital to climate change by planning and implementing appropriate adaptation measures*."

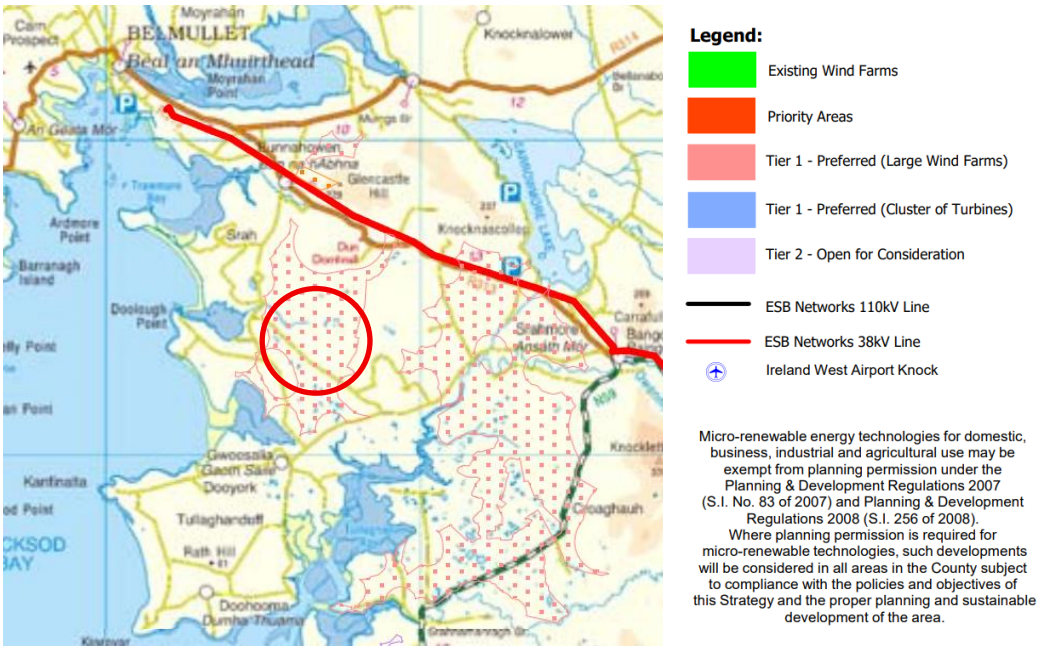
3.66 The strategy identified specific areas across Mayo for onshore wind energy development, categorised into four tiers:

- Priority Areas (existing wind farms with planning permission).
- Tier 1 – Preferred (Large Wind Farms).
- Tier 1 – Preferred (Cluster of Turbines).
- Tier 2 – Open for Consideration.

3.67 **Plate 3-1,** an extract from Map 1 Wind Energy from the Renewable Energy Strategy for County Mayo 2011-2022, confirms that the Main Wind Farm Development Site is in the Tier

1 area. It is noted that this strategy is currently under review through the Draft Mayo Renewable Energy Strategy, which will provide updated guidance for the renewable energy development in the county. Please refer to the Planning Statement which accompanies this Planning Application for more information on the updated draft RES 2022-2028.

Plate 3-1 Extract from Map 1 - Wind Energy from the Renewable Energy Strategy for Co. Mayo 2011-2022



Alternative Technologies

3.68 There are a number of renewable energy technologies available for use in Ireland, most notably bio energy, wind, solar PV, hydrogen, offshore wind, tidal and wave energies. However, in comparison with onshore wind energy generation, the majority of these technologies (with the exception of Solar PV) are in their infancy in terms of commercial application and are not considered to be viable for the Main Wind Farm Development Site or for the Applicant.

Bioenergy

3.69 Bioenergy presents an alternative to wind in assisting Ireland to meet its renewable energy targets. Bioenergy refers to the production of renewable energy from a variety of materials of biodegradable nature and is generally considered under the headings: solid biomass, biogas and biofuels. However, the technical and economic challenges for the production of biofuel are high.

3.70 Biomass is not always a reliable energy source due to its dependence on the availability of raw materials, such as crops or wood, and there can be lifecycle implications in terms of the energy required through the whole cycle. When these resources are scarce, it can be difficult to sustainably generate energy from biomass. Biomass from waste (forests, farms and everyday organic waste can provide us with biomass fuel) is considered more advantageous in terms of carbon emissions savings, although again a steady stream of supply can be difficult to source. Biomass energy production can also be inefficient and

converting it into a useful form of energy often involves burning, which generates emissions. Biomass energy production can also take up a lot of land, especially if crops are being grown specifically for the production of energy, which can lead to deforestation and other environmental impacts. Additionally, biomass energy production is often more expensive than other renewable energy sources, such as wind and solar power. For these reasons, biomass was not a viable alternative technology for the Main Wind Development Site.

Solar Energy

3.71 The Main Wind Farm Development Site is located in a coastal location which is generally flat with some gently undulating terrain. There is substantial commercial forestry and agricultural presence in the area. The production of solar energy would require greater land take and areas of forestry to be felled, and therefore greater environmental impacts than the siting of a wind farm on the same site.

3.72 Solar energy requires a southerly aspect for optimum viability as well as significant direct land-take and substantial changes to existing bog practices. Given the terrain of the Main Wind Farm Development Site in tandem with the existing land uses of the area, and the alignment of the site is in a north to south direction, it was considered that the Main Wind Farm Development Site would be a less suitable use of the land for solar PV production than for a wind energy development.

Hydrogen

3.73 Hydrogen energy is an emerging technology in the move to net zero. It is currently, however, a less viable alternative given the high costs, safety considerations large quantities of water required and lack of adequate storage infrastructure. While hydrogen can be facilitated in tandem with a wind or solar development, it requires other important considerations for viability, including safety and infrastructure, such as pipelines to transport the hydrogen to where it is needed or local storage, such as tanks and underground storage facilities, for safely storing the hydrogen until it is needed.

Wind Farm Co-located with Battery Energy Storage System (BESS)

3.74 Wind energy is recognised in Government policy as a proven and cost-effective renewable energy generation technology in the context of Ireland's abundant wind resource.

3.75 The optimum ground conditions for producing onshore wind energy include: sufficient wind speeds of at least 8 m/s; good accessibility for construction and maintenance; a favourable local terrain, such as a high ridge or hilltop. Nearly all of these conditions can be met across the Main Wind Farm Development Site. Though it is recognised that wind speeds are higher in elevated terrain, in general, wind energy production at lower altitudes in Ireland is very effective due to the large available wind resource and mature cost-effective technologies.

3.76 Wind energy projects do not require a large direct land take and can co-exist with agricultural activities, with only minor disturbance during the construction phase.

3.77 Of the options available for the Main Wind Farm Development Site, it is considered that wind energy has the most potential to provide efficient renewable electricity with less impact on existing land uses. According to the SEAI, wind energy is currently the largest contributing resource of renewable energy in Ireland. It is both Ireland's largest and cheapest renewable electricity resource. In 2025, for example, 33% of Ireland's electricity

came from wind energy[17] and while solar continues to increase, on a sunny day in early May 2023, 10% of the country's energy was produced by solar power[18], while in less sunny periods, for example in October 2025, only 1.6% of electricity came from solar[19] . Combining BESS with wind energy generation enhances the efficiency and reliability of renewable energy production. The combination of both the BESS and the energy being generated from wind offers greater efficiency, as BESS can provide support to grid stability and can store excess energy to reduce system curtailment and release it into the grid when there is a demand for it, maximising the output of the Proposed Project.

Alternative Design and Layouts

3.78 Following the identification of the Main Wind Farm Development Site as the preferred location, an iterative process was undertaken to determine the precise siting, design and layout of the proposed turbines and associated infrastructure. Several alternative layouts were evaluated following the principle of the mitigation hierarchy, whereby the first and most preferred step is to avoid impacts by changing the design and location of infrastructure so that sensitive areas or species are not affected.

3.79 The aim was to adopt the combination of design and layout options that presented the best balance between the avoidance of likely significant environmental effects and the achievement of the objectives of the Proposed Project. The process involved an ongoing dialogue between technical designers and competent environmental experts throughout the design process, with the designers adjusting the design in response to continued environmental evaluation. Feedback from the scoping process, including public and stakeholder consultation, discussed later in this chapter, also informed this process.

3.80 The assessment of alternative designs and layout focused on achieving the best balance with regard to a wide range of environmental factors. This continuous assessment was intrinsic to the selection of the final design and layout of the Proposed Development.

3.81 The alternative layouts considered were highly dependent on the specific turbine technology to be installed, with larger turbines requiring increased inter-turbine spacing to minimise wake effects and to maintain correct operational performance. A series of wind modelling analyses, using specialist software, examined a range of turbine layouts and turbine designs to establish turbine technology, including hub, rotor and overall height parameters. While larger turbines can be perceived to be more intrusive, the design favours the selection of fewer, larger turbines. This fewer, larger turbine strategy is an accepted design method as it reduces the overall number of turbines required, thereby mitigating visual clutter and reducing the magnitude of visual impact across the landscape when compared to more numerous smaller turbines, which would be required to achieve the same energy production. The Proposed Project layout was designed to minimise potential environmental impacts and to maximise the energy generation potential from wind onsite. The design was carried out in accordance with industry guidelines and best practice, namely the Department

[17] https://windenergyireland.com/blog/irish-wind-farms-provided-a-third-of-our-power-in-2025?utm_source=chatgpt.com [Accessed 24 April 2026]

[18] https://www.seai.ie/news-and-media/seai-wind-and-solar-farms/ [Accessed 27 January 2024]

[19] https://www.eirgrid.ie/news/over-40-electricity-came-renewables-october?utm_source=chatgpt.com [Accessed 24 April 2026]

of Environment, Heritage and Local Government (DoEHLG) Wind Energy Development Guidelines (2006), Irish Wind Energy Association Best Practice Guidelines (2012) and Draft Wind Energy Development Guidelines (2019). The layout and design were developed through an iterative process which took account of such criteria as:

- Setback from public roads.
- Setback to existing/permitted residential dwellings.
- Set back from village and town centres, designated sites.
- Most suitable access to turbine locations and national grid.
- Landscape and visual sensitivity.
- Inter-visibility/visual clutter.
- Avoidance of telecommunications links present in the general area.
- Set back from other constraints such power lines.
- Suitable wind speeds.
- Ecology and ornithology constraints.
- Soils and geology (including peat).
- Hydrology constraints (including a buffer around watercourses).
- Cultural heritage constraints.

3.82 The overall design of the Proposed Project has gone through five main design iterations. The initial designs were based on maximising the potential wind take for the overall study area and comprised an early stage 14 turbine layout. This design included the development of the lands to the west of the study area. After an internal consultation and consideration of wind resource data, this design was then revised to remove the turbine from this area, resulting in an initial 13 turbine layout which was developed taking account of initial desk-observed constraints (Layout 1). The design evolution can be seen in further detail in **Figure 3-5**.

3.83 Further design changes were then made during the following stages of the EIA process.

3.84 Landscape and visual considerations were integrated at an early stage of the project through the use of wireframe photomontages, which were generated from key visual receptors located within the central study area, typically less than 5 km from the proposed turbine array. These initial visual assessments revealed a slight sense of overbearing at some of the nearest residential receptors, with turbine placements falling within the draft 2019 Wind Energy Development Guidelines (WEDGs) visual amenity offset threshold—specifically, 720 m from the nearest turbine. In response, the turbines were repositioned further into the Main Wind Farm Development Site, aligning them within the boundary of the existing conifer forest that characterises much of the area.

3.85 The final 13 turbine design reflects a balance between optimising energy yield and addressing landscape, visual, and environmental constraints, including peat depth variability across the Main Wind Farm Development Site, which was informed by a detailed peat survey programme (see **Technical Appendix 6-3** for further details).

3.86 Two options for the GCR were considered, with a shorter more direct option with fewer watercourse crossings chosen (see **Figure 2-5** for the final GCR chosen). See section on cable route selection below for further information. Similarly, the feasibility of various Turbine Delivery Route (TDR) options was assessed to identify the most appropriate and least constrained route for the transport of the turbine components. The selection of the TDR is detailed further in the following section on alternative routes and in **Technical Appendix 14-1**.

3.87 The key design iterations are presented on **Figure 3-5** and detailed in **Table 3-2**.

Table 3-2 Design Iterations

Layout	Date	No. of Turbines	Description	Environmental Effects
Layout 1 (January 2023)	January 2023	13-14	• Tip heights up to 180m • This turbine layout took into account initial desk-observed constraints including residential properties, watercourses, slope, forested areas and areas of peat. It was also informed by bird survey work which commenced on site in 2021.	The environmental effects of this iteration include impacts on sensitive habitats and proximity to receptors.
Layout 2 (July 2023)	July 2023	13	• Layout 2 moved turbine T1 to the east between T2 and T3 to avoid an area of sensitive habitat. T4 was moved to the east to reduce proximity to the disused industrial unit. Turbine T8 was moved to the south-west to reduce proximity to the new location of T4. The locations of T9 and T12 were also adjusted in response to this move to ensure optimal distances between turbines and avoid wake overlap. • Turbines were re-numbered to ensure a logical order as shown on **Figure 3-5.**	The environmental effects of this iteration include impacts on sensitive habitats. More detailed design was undertaken to take account of and avoid these habitats.
Layout 3 Scoping (April 2024)	April 2024 (Scoping Report)	13	• Supporting infrastructure (turbine crane pads, access tracks, and a combined substation and BESS compound), was added to the design to produce a layout to include in the Scoping Report. The substation and BESS was located to minimise Landscape and Visual effects, along with reducing noise.	Infrastructure was relocated to take account of Landscape and visual constraints.
Layout 4 Design Chill (February 2025)	February 2025	13	• Two temporary construction compounds and a permanent met mast were added to the layout. • The Substation and BESS compounds were separated and increased in size to accommodate the equipment required. • Further assessment work (detailed peat depth survey and a ground investigation survey) was undertaken and the layout of supporting infrastructure was optimised to:	Infrastructure was moved to minimise the volumes of deep peat required to be extracted.

Layout	Date	No. of Turbines	Description	Environmental Effects
			○ Minimise lengths of access track where possible. ○ Minimise the amount of peat required to be extracted. ○ Optimise the layout in relation to cut and fill to reduce the amount of material required to be excavated and imported to the Main Wind Farm Development Site.	
Layout 5 Final Layout – shown on Figure 2-3	December 2025	13	• Substation and BESS compounds were combined into one compound, resized slightly and rotated to better reflect operational requirements. • Temporary Construction Compound 02 was moved to the east to better reflect operational requirements.	N/A

Alternative Cable Routes & Turbine Delivery

3.88 Following the overarching site selection process, the most appropriate cable route option was explored for the Main Wind Farm Development Site. The acceptable proximity of the proposed wind turbines to a suitable potential substation connection point for onward connection to the national grid was a key driver in the strategic site selection process, meaning that once decided, the cable route and turbine delivery could be refined based on local site requirements and constraints. Factors considered included length of the cable route, environmental and heritage constraints, population centres and suitability of terrain.

3.89 Underground electrical cables will transmit the electricity generated by each proposed wind turbine to the proposed onsite substation via underground 33 kV collector cables and then onwards to the 110 kV national grid connection point at Bellacorick 110 kV Substation.

3.90 While it is considered that overhead cables are easier to repair and access and are less expensive, underground cable connections will have no visual impact and will be located within the public roadway, therefore reducing potential impacts on underground archaeology, drainage, habitat loss and surface water.

3.91 The initial selection for cable routes followed consideration of criteria as follows:

- Proximity of a potential location for a suitable off-site substation to connect to the national grid connection point.
- Cable routes were shortened and optimised where possible to minimise impacts.
- Minimisation of watercourse crossing points.
- Avoidance of environmental and heritage features.
- Minimisation of traffic and transportation obstruction.

3.92 A network of access tracks that provide access from the public road network to each proposed turbine for construction, operational maintenance and decommissioning purposes has also been selected based on similar criteria. A network of internal connections between

the proposed turbines has been identified to reduce the need for use of the local public roads for development traffic. This selection was based on the availability of existing track and suitable ground conditions, local road infrastructure and other considerations.

3.93 A preferred GCR has been based on the analysis conducted as part of a Preliminary Route Development study. There are two viable options with one preferred option for the GCR from the Main Wind Farm Development Site to Bellacorick 110 kV Substation, subject to agreement on the use of national roads for underground electrical cables with TII, and if sufficient cable ratings can be met for all circuits along the route.

3.94 Both routes followed the local and regional roads to a point where they overlap on the national N59 road at Bangor towards the proposed connection point at the existing Bellacorick 110 kV Substation. The alternative route option (32.3 km in length) exits the western side of the Main Wind Farm Development Site before running north west and then turning south-west towards the 110 kV substation, whereas the preferred route is more direct exiting from the eastern side of the Main Wind Farm Development Site and running east towards the 110 kV substation (25.5 km in length). The preferred route option has been chosen primarily because it is considerably shorter (~7 km), utilises a large section of busy regional road, would not impact national monument zones of notification and will require fewer watercourse crossings than the alternative route.

3.95 For the TDR, two potential options were considered within an overall route from Killybegs Port through to Bangor Erris. From Bangor Erris, two route options were studied south to the site access point. Option 1 involved turning onto the L5254 and a section of the L1206, which required the construction of a new, short offline track to safely transition the AIL onto the unclassified road leading to the site entrance. Option 2 utilised the L1206 before turning right onto the L1205 and onto a proposed site access track. A circular route continuing to the west was also considered. Option 1 was ultimately chosen as the final TDR as it presented fewer overall constraints for Abnormal Indivisible Load movements. Specifically, the swept path assessment showed that the existing roads for Option 2 would require more disruptive mitigation works. Option 1 was therefore selected as the most practical option.

3.96 Detailed swept path drawings for pinch points were undertaken with mitigation works including the extents of over-run and oversail areas being examined with these being detailed in **Technical Appendix 14-1**. The final TDR chosen with three offsite over-run areas is shown in **Figures 2-4a-d**.

3.97 Following consideration of the alternatives it is considered that the layout chosen for the Main Wind Farm Development Site provides an optimal balance between the need to maximise renewable energy production while minimising environmental impacts.

Scoping Consultation

3.98 This section describes the consultation process and EIA scoping that was undertaken to identify key effects from the Proposed Project to be included in the EIAR. The consultation process carried out for the Proposed Project was lengthy, detailed, and thorough. Several points and submissions were made by prescribed bodies and other third parties as part of the consultation process which have informed the design of the Proposed Project and the approach to this EIAR.

3.99 This section describes the consultation and scoping process undertaken by the Applicant during the pre-submission stage and does not refer to the statutory consultation process that will be carried out by An Coimisiún Pleanála once the application is lodged.

3.100 This consultation process has been guided by the principles set out in the 'Code of Practice for Wind Energy Development in Ireland – Guidelines for Community Engagement' published in 2016 by the Department of Communications, Climate Action, and the Environment. This states that:

> *'This Code of Good Practice is intended to ensure that wind energy development in Ireland is undertaken in observance with the best industry practices, and with the full engagement of communities around the country'.*

3.101 The Applicant complied with the provisions of this Code of Practice throughout the pre-planning process and followed good practice in engaging with communities as set out in this Guidance. Further detail on the approach to Community Engagement is set out in the Project Brochure (**Technical Appendix 3-1**) and First Residents Letter (**Technical Appendix 3-2).**

Scoping Consultees

3.102 The purpose of the EIA scoping process is to identify the key points and issues which are likely to be important during the environmental impact assessment of a project and to eliminate those that are not. The scoping process identifies sources or causes of potential environmental effects, the pathways by which the effects can happen, and the sensitive receptors which are likely to be affected. It defines the appropriate level of detail for the information to be provided in the EIA Report (EIAR) so as to enable the competent authority to reach a reasoned conclusion on the significant effects on the environment of the Proposed Project, taking into account current knowledge and methods of assessment.

3.103 A consultation process was carried out with respect to this EIAR in order to inform the scope of the assessment of likely significant environmental effects. A scoping request letter and preliminary scoping report, included in **Technical Appendix 3-3**, providing a description of the Proposed Project at that time, preliminary table of contents of the EIAR and an outline of the methodology for assessment, was distributed to consultees in April 2024.

3.104 A total of 69 statutory and non-statutory bodies, including those who are likely to have an input into the final planning application have been consulted. The recipients included Local Authorities, Government Departments, non-governmental organisations (NGOs), interested parties and key stakeholders. Consultees were invited to contribute to the Scope of the EIAR by suggesting baseline data, survey methodologies and potentially significant effects that should be considered as part of the impact assessment process and as part of preparing the EIAR.

3.105 **Table 3-3** details the list of consultees who were issued a copy of the scoping documents.

Table 3-3 List of Consultees

Type of Stakeholder	Body Department
Mayo County Council	Planning Department

Type of Stakeholder	Body Department
	Roads Department
	Environment Department
	Heritage Officer
Government Departments	Department of Agriculture, Food, and the Marine
	Department of Defence
	Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs – Development Applications Unit (Nature Conservation)
	Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs – Development Applications Unit (National Monuments Service)
	Department of Housing, Planning, Community and Local Government
	Department of Environment, Climate and Communications
	Department of Transport, Tourism and Sport
Prescribed Bodies, NGOs, and Stakeholders	An Chomhairle Ealaíon (Arts Council)
	An Taisce
	Bat Conservation Ireland
	Birdwatch Ireland
	Commission for Energy Regulation
	Echo IT Limited
	EPA
	ESB
	Fáilte Ireland
	Gas Networks Ireland
	Geological Survey of Ireland
	Health Service Executive
	Iarnród Éireann
	Inland Fisheries Ireland
	Irish Farmers Association
	Irish Parachute Club
	Irish Peatland Conservation Council
	Irish Raptor Group
	Irish Red Grouse Association
	Irish Sports Council
	Irish Wildlife Trust

Type of Stakeholder	Body Department
	Irish Water
	Magnet Networks
	National Monuments Service, DHLGH
	National Parks, and Wildlife Service - Development Applications Unit
	Northern and Western Regional Assembly
	Office of Public Works
	Sport Ireland Outdoors
	Sustainable Energy Authority of Ireland
	Teagasc
	TETRA Ireland Ltd.
	The Heritage Council
	Transport Infrastructure Ireland
	Údarás na Gaeltachta
	Waterways Ireland
Telecommunication / Aviation	Arra Communications
	Broadcasting Authority of Ireland
	BT Communications Ireland Ltd
	Commission for Communications Regulation
	Digiweb Dublin Offices and Data Centre
	Dublin Airport Authority
	Eir
	Irish Aviation Authority
	Irish Broadband/Imagine
	Premier Broadband
	Ripplecom
	RTE / 2RN
	Telecommunications Section, An Garda Siochána
	Three
	TowerCom Ltd.
	TV3
	Viatel

Type of Stakeholder	Body Department
	Vodafone
	Wireless Connect Ltd.

EIA Scoping Conclusion

3.106 Consultation was carried out with several stakeholders, including Mayo County Council, An Coimisiún Pleanála, Government departments, Non-Governmental Organisations, telecommunications providers, aviation organisations, local councillors, community groups and local residents. Their comments and feedback were addressed by subsequent project design iterations and subsequently into the EIAR (meeting minutes provided as **Technical Appendices 3-4, 3-5 and 3-6**).

3.107 Pre-planning consultation meetings were held with Mayo County Council and An Coimisiún Pleanála and the National Parks and Wildlife Service (NPWS) to determine the key points and potential impacts of the Proposed Project and to inform the assessment methodology in this EIAR.

3.108 Of the 69 statutory and non-statutory bodies which were consulted, responses were received from 39 bodies.

3.109 Of the bodies which provided a response, 16 of these have either provided statements that it is not within their remit to comment, no concerns, no capacity to make comment (bat conservation Ireland), or are not active in the area (in terms of broadband providers).

3.110 Eight bodies provided a response with standard conditions/guidance documents, and four bodies referred to other departments for comment. These are listed in **Technical Appendix 3-8**.

3.111 The following 11 bodies have raised concerns in relation to the Proposed Project as shown in **Table 3-4**.

Table 3-4 Statutory and Non-statutory Bodies Concerns

Consultee	Concern	How Addressed
Department of Transport, Tourism and Sport	It should be noted that the Department considers the construction involved in providing this development and especially, the connection cables to the national grid, may have effects on both the environment and the Regional and Local Road network.	Addressed in **Chapter 14** of this EIAR.
Development Applications Unit, NPWS	Merlin recorded on site. Guidance documents provided.	Addressed in **Chapter 5** of this EIAR.
Geological Survey of Ireland	Provide information in relation to stability of the surrounding landscapes and groundwater.	Stability is addressed in **Chapter 6** of this EIAR, see landslide dataset therein. Potential impacts on groundwater are assessed in **Chapter 7** of this EIAR.

Consultee	Concern	How Addressed
Irish Peatland Conservation Council	While IPCC understand the need to shift to renewable energy, installing wind farm infrastructure on the cutaways, cutovers and blanket bog habitats does not maximise the benefit that peatlands can bestow upon us. It has been highlighted by the European Commission that for every €1 spent on nature restoration, €4-38 is returned in other areas of our lives. The hydrology of an industrial wind farm site has to be continually managed, the fragmentation from the road ways and cabling further disrupts the peat mass and the question as to whether the large wader birds which are under threat of extinction such as the Curlew, will return, has not been answered.	Addressed in **Chapter 5** of this EIAR.
Minister for Rural and Community Development	Felling Licence required and examination if that in itself requires EIA.	Addressed in **Chapter 13** of this EIAR.
Office of Public Works	This office has records of flooding or past flood events adjacent to the study area. It is recommended to carry out a review of historical flood risk using floodinfo.ie using link provided https://www.floodinfo.ie/map/floodmaps/. This office would recommend that no flooding should occur during or after construction of the proposed project.	Addressed in **Chapter 7** of this EIAR.
Roads Department - Mayo County Council	Mayo County Council raised concerns in relation to the proposed grid connection as they seek to protect the structural integrity and strategic nature of these routes. MCC requested that the Applicant identify and assess alternative routes for the grid connection serving the Proposed Development proposal and that these alternatives are included in this scoping report.	Measures to protect structural integrity of roads are provided in more detail in **Chapter 14** of this EIAR. Two options for the GCR were considered with a shorter more direct option with fewer watercourse crossings chosen. See Section 3.86 onwards for further information.
Planning Department – Mayo County Council	State that inconsistency of project description in section 3.2 needs to be resolved. Provide information on other developments refused nearby. Raised concerns in relation to Landscape impact. Provide information on scope and receptors for LVIA in context of Wild Atlantic Way and Wild Nephin National Park located c.3 km east of the proposed site location. Note presence of Dark Skies Park and recommend a night-time visual analysis be carried out.	Updated project description information is provided in **Chapter 2** of this EIAR, which also provides a summary list of potential cumulative projects based on a search of planning records. The design of the Proposed Project has been amended to take account of the identified Landscape constraints. The potential for likely significant effects including aviation

Consultee	Concern	How Addressed
	Stated that Renewable Energy Strategy for Mayo 2011-2022 will be reviewed	lighting has been addressed in **Chapters 4** and **10** of this EIAR.
TETRA Ireland Ltd.	They have equipment at E075875 / N319896. A 500m exclusion zone surrounding the site of their equipment is requested.	Addressed in **Chapter 13** of this EIAR.
TowerCom Ltd.	TowerCom Ltd has a site that appears to be located about 500m from the southern boundary with permission to develop it but have not done so yet. Requested contact.	Addressed in **Chapter 13** of this EIAR. TowerCom have been contacted and have confirmed that as the Main Wind Farm Development Site is located more than 500 m from the location provided for the Tetra facility above they do not have any concerns.
Transport Infrastructure Ireland TII	Routing along the N59, national road, represents implications for TII and road authorities. TII recommends a full assessment of all route alternatives for grid connection, including alternatives to public road. Assess potential impacts on the national road network including junctions with national roads and haul route. Assess visual impact from existing national roads. Have regard to any EIAR/EIS and all conditions and/or modifications imposed by An Coimisiún Pleanála regarding road schemes in the area, including cumulative impacts. Clearly identify haul routes proposed and fully assess the network to be traversed, including abnormal weight and length loads and temporary works. Other grid connection proposals routing to the Bellacorick Substation, a co-ordinated approach to grid connection routing in this area is needed.	A full assessment is undertaken in **Chapter 14** of this EIAR and feedback will be addressed as the project progresses.

Consultation with Key Stakeholders

Pre-application Consultation with Mayo County Council

3.112 An initial pre-application consultation meeting was held online with the Applicant and Mayo County Council (MCC) on 13 December 2023. The Applicant provided a preliminary introduction to the emerging proposals at this meeting and the MCC representatives provided general feedback in relation to the Renewable Energy Strategy for County Mayo and stated that it was due to be updated.

3.113 A second meeting was held on 16 January 2025 in which the results of the baseline environmental surveys and layout design work undertaken were presented.

3.114 Key points raised at this meeting held on the 16 January 2025 included:

- The Applicant identified that the Landscape and Visual Impact Assessment (LVIA) is a key item, and it will work with Macroworks to ensure any issues are addressed.
- The Applicant queried if MCC had any issue regarding roads.
- MCC outlined Mayo's Road Department Representatives could not attend.
- MCC outlined all points stand from response to the scoping report.
- The team will endeavour to address all issues raised as part of the application.

3.115 Minutes from this meeting on 16 January 2025 are provided in **Technical Appendix 3-4.**

Pre-application Consultation Meeting with An Coimisiún Pleanála

3.116 An initial consultation meeting was carried out between the Applicant and An Coimisiún Pleanála on 25 January 2024, during which the initial design parameters of the Proposed Project were set out. The consultation feedback obtained in relation to this was incorporated into the design of the preferred option. In this meeting several items were raised concerning the Proposed Project. Discussion with the Commission consisted of:

- the need for clarity on whether the battery storage should be included in the application;
- details on the grid connection and substation should be provided as part of the application;
- the wind energy strategy that has been incorporated into the Mayo County Development Plan 2022 was discussed with the following issues being raised:
    - It was confirmed that an LVIA will be carried out;
- surface water impacts were discussed and it was highlighted that the Main Wind Farm Development Site is located in a Flood Zone C (low risk of flooding);
- it was queried whether bird and bat surveys be carried out:
    - It was stated that recreational amenities in or around the site for members of the community should be considered;
    - It was recommend that the assessment examined similar European Sites with relevant qualifying interests to inform the NIS; and
- it was recommended that major accidents were included as part of the EIAR:
    - The preliminary view was stated that the design flexibility request must be made while the pre-application consultation under section 37B is still live.

3.117 Finally, the Commission indicated that in their preliminary opinion the Proposed Project is likely to fall within the scope of Strategic Infrastructure Development.

Second Pre-application Consultation Meeting with An Coimisiún Pleanála

3.118 A second pre-application consultation meeting with An Coimisiún Pleanála was held on 9 April 2025 (ABP-318372-23).

3.119 During this meeting the Commission's representatives raised the following points:

Gaeltacht Considerations

- Applications within a Gaeltacht area have specific requirements. The Applicant has submitted sections of the planning application in Gaeilge where required (NTS, NIS, Public Notices).
- Applicant advised to contact the Commission's administrative services for clarity. The Applicant has confirmed with ACP that the above sections of the planning application should be provided in Gaeilge.

Battery Energy Storage System (BESS)

- Capacity intended to match wind farm output, but not yet finalised.
- The Commission confirmed BESS can be included under Section 37E application. The planning application includes the BESS.

Site Characteristics

- Elevated ground to the east; geotechnical team believes no rock removal is needed.

Planning Context

- The Applicant noted that the Main Wind Farm Development Site is within Tier 1 area for wind energy (Mayo County Development Plan 2022–2028).

Visual Impact

- It was confirmed that Viewpoint 7 has been added to the LVIA following MCC concerns. **Chapter 10** includes this additional VP.
- It was confirmed that the proposed maximum turbine tip height is 180 m.

Tourism Impact

- EIAR should clearly assess potential effects on tourism, especially regarding Wild Atlantic Way. **Chapters 4** and **10** assess these receptors.

Biodiversity & Ecology

- Use best practice guidance and collect sufficient data, especially near Natura 2000 sites. The assessment **in Chapter 5** of this EIAR takes account of best practice guidance and several seasons of biodiversity surveys that are considered sufficient to undertake a robust assessment.
- Reference National Biodiversity Action Plan. **Chapter 5** of this EIAR takes account of Ireland's 4th National Biodiversity Action Plan (NBAP) 2023–2030.
- NPWS concerns were acknowledged. The Applicant confirmed an experienced ornithology/ecology team has been engaged to undertake the assessment.

- Surveys should include nocturnal, migratory, and local bird species. These species have been assessed in **Chapter 5** of this EIAR.
- Assess hydrology, coastal slippage, and water quality impacts. Hydrology, and water quality impacts are assessed **Chapter 7** of this EIAR. The Proposed Project is located sufficient distance from the coast such that coastal slippage is unlikely to be an issue.
- Map habitat loss and enhancement areas clearly. These areas are fully assessed in **Chapter 5** of this EIAR**.**

Cultural Heritage

- No issues raised by National Monuments Service during scoping.

Grid Connection

- Must be appropriately considered in EIAR and NIS. The GCR will be the subject of a separate planning application but has been assessed in this EIAR.

3.120 Meeting Minutes from the meetings on 25 January 2024 and 9th April 2025 are provided in **Technical Appendix 3-5.**

Design Flexibility Meeting with An Coimisiún Pleanála

3.121 A design flexibility meeting was held with An Coimisiún Pleanála on 9 April 2025 in which the unconfirmed details of the Proposed Project in relation to the three potential candidate turbines was provided. The items below were discussed.

Turbine Design Flexibility:

- The Applicant presented four turbine options with varying dimensions (tip height, hub height, rotor diameter).
- The Commission indicated flexibility in these dimensions at this stage, but final dimensions must be detailed in the planning application.

Assessment Requirements:

- Each turbine type must be individually assessed in the planning documentation.
- The Environmental Impact Assessment Report (EIAR) must evaluate all proposed turbine types, not just a range. How the design parameters have been assessed for each topic in shown in **Table 1-2** in **Chapter 1** of this EIAR with more detail provided within the individual topic chapters.

Environmental Impact Assessment (EIA):

- Some EIAR chapters may not need to be specific to each turbine type, but justification must be provided.

Planning Application Considerations:

- The Applicant may limit the number of turbine types in the final application to reduce assessment complexity.
- A condition will be included in any planning permission requiring turbine dimensions/type to be agreed with the competent authority before development begins.

Process Guidance:

3.122 The Commission's Inspector will prepare a draft opinion for the Commission's consideration, and the process was outlined to the Applicant. In addition, further detailed mitigation measures were identified for all environmental topic areas, which are described within the respective EIAR technical chapters.

Pre-application Consultation Meetings with NPWS

3.123 A pre-application consultation meeting was held online with the Applicant and NPWS in March 2024 with a second meeting held in March 2025. The first meeting provided an overview of the application and initial design, with the second meeting providing more detail in relation to the surveys undertaken, development of the design etc. During the second meeting, NPWS's representatives raised the following points:

- Main issue for wind farms in region is collision risk with SPA bird species and assessment which is often done incorrectly in EIAs. **Chapter 5** of this EIAR uses the standard, random (i.e. non-directional) Band Collision Risk Model (CRM) (Band et al., 2024) to estimate collision risk which is the industry standard.
- Robust NPWS guidance is lacking and needs to be developed using NatureScot guidance as a model. NatureScot guidance is taken account of where appropriate within **Chapter 5** of this EIAR.
- Cumulative effects on Golden Plover (GP) will be a key issue. The effects on Golden Plover of other wind farms which are assessed for the cumulative assessment have been fully taken account of in **Chapter 5** of this EIAR.
- Highlighted very small breeding GP population, vulnerable to cumulative impacts and stated that cumulative assessment should not reiterate conclusions of other assessments but focus on mortality effects. CRM has been undertaken for golden plover amongst other bird species and are reported in **Chapter 5** of this EIAR.
- Highlighted the need for assessment to define relevant geographical areas beyond county level with reasonable estimates of bird populations, using NPWS / birdwatch data if relevant. Bird atlases (e.g. shown on BirdWatch Ireland) were used to define biogeographically meaningful areas and thus, regional populations which in acceptable approach, as defined in NatureScot guidance. Further information is provided in in **Chapter 5** of this EIAR.
- Stated that offshore bird species and developments should be considered in cumulative assessment. These are considered where appropriate in the cumulative assessment reported in **Chapter 5** of this EIAR.

- Welcomed the Applicant's Biodiversity Net Gain (BNG) proposals and flagged up difficulty of getting rid of lodgepole pine on another site.

3.124 Meeting Minutes from the meeting with NPWS in March 2025 are provided in **Technical Appendix 3-6.**

SID Pre-Application Closure and List of Prescribed bodies

3.125 The SID pre-application consultation was closed on 11 December 2025.

3.126 A list of prescribed bodies was provided by An Coimisiún Pleanála. The prescribed bodies which have been provided are as follows:

- Department of Housing, Local Government and Heritage.
- Department of Climate, Energy and the Environment.
- Department of Enterprise, Tourism and Employment.
- Department for Rural and Community Development and the Gaeltacht.
- Department of Agriculture, Food & Marine.
- Department of Transport.
- Údarás na Gaeltachta.
- Mayo County Council.
- Sligo County Council.
- Donegal County Council.
- The Northern and Western Regional Assembly.
- Transport Infrastructure Ireland.
- National Transport Authority.
- An Chomhairle Ealaíon (Arts Council).
- The Heritage Council.
- Fáilte Ireland.
- An Taisce.
- Uisce Éireann.
- Inland Fisheries Ireland.
- Irish Aviation Authority.
- Córas Iompair Éireann (CIE).
- Iarnród Éireann.
- Environmental Protection Agency (EPA).
- Health Service Executive.
- Health and Safety Authority.
- The Commission for Regulation of Utilities.
- Office of Public Works.

- ESB.
- EirGrid.

3.127 As part of the scoping process, all prescribed bodies listed above were contacted and provided copies of the scoping documents and kept abreast of any further changes. Scoping responses, where received, are summarised in **Table 3-4** above.

3.128 The prescribed bodies provided by An Coimisiún Pleanála were contacted with copies of the Planning Application and EIAR provided to them in the requested format.

Community Consultation

3.129 Extensive community consultation has been undertaken since 26 June 2023 and a Community Liaison Officer (CLO) was appointed when the Proposed Project was initially envisaged. Kieran O'Byrne is the Applicant's Stakeholder Engagement / Communications Manager.

3.130 A dedicated phone line (087 151 9219) and email address (muingmore@rwe.com) were set up prior to commencing the first consultation and have remained in place since then, to enable anyone with queries to get in touch with the RWE Project Team or indeed to ask questions or voice concerns via phone or email at any time over the entire consultation period.

Project Website

3.131 A dedicated Project website (www.muingmoreresid.ie) was set up and went live in January 2023 which presented updates on the Proposed Project, updated FAQs and useful documents. As the project developed and questions and concerns were asked and raised by local residents as part of the stakeholder engagement process, these were answered on the website and further relevant information was also published on the site.

First Residents Letter and Project Brochure

3.132 An information brochure (Muingmore Proposed Wind Farm) was developed in English and Irish for the project. This brochure was delivered along with a cover letter to all residents within a 2.5 km radius (225 homes) of the Main Wind Farm Development Site on 26 June 2023 by All Homes delivery company (see **Technical Appendix 3-1**).

3.133 The cover letter from the CLO introduced the project and the Stakeholder Engagement / Communications Manager as the point of contact. The Stakeholder Engagement / Communication Manager's picture and contact details were on the letter (mobile phone number and email address). The contact number for the Kilkenny office and postal address was also provided (see **Technical Appendix 3-2**).

Door to Door Community Engagement

3.134 Following the first resident letter and brochure delivery, the Stakeholder Engagement / Communications Manager and other members of the project team went door-to-door and met with 67 householders of the 225 households visited, i.e., 30% of all households within a 2.5 km radius were met within the first week of consultation.

3.135 After the first letter drop and during the following two months (July and August 2023), a number of emails were received from groups and individuals (two groups and seven individuals) and each one was followed up either face to face at pre-arranged meetings or by email.

Second Residents Letter and Door to Door Engagement

3.136 In October 2025, a second residents' letter was provided to each of the 225 homes during further door to door engagements, where the CLO and the Project Manager called to each home. The second letter outlined that the project team had been working on the EIAR and that they had two pre application consultation meetings with An Coimisiún Pleanála in relation to determining if the project was a Strategic Infrastructure Development (SID).

3.137 The second letter also included OS map and aerial imagery of the proposed locations of the turbines (see **Technical Appendix 3-7**).

3.138 The RWE team met with 83 householders over three days at this stage (37% of all households within 2.5km radius).

Third Residents Letter and Door to Door Engagement

3.139 A third letter drop via door-to-door engagement was undertaken by the RWE team on Thursday 22 January 2026, during which residents were informed of a proposed Drop in Clinic on Wednesday 28 January 2026. The letter invited any interested parties to contact the Stakeholder Engagement / Communications Manager by phone, text, email or post to suggest a time that they might be available. It advised that the Clinic would be run “by appointment” to try and stagger the numbers of people that might attend. However, it was stated that drop in visits would also be facilitated.

3.140 The letter further stated that the RWE team were happy to discuss the project on either a one-to-one basis or in small groups. The letter also said that in the event that residents were not able to attend that they could contact the CLO to arrange a separate meeting as per their requirements. Availability to meet was also offered for the evening before and the morning after the Clinic (see **Technical Appendix 3-7**).

Stakeholder Drop-In Clinic

3.141 The RWE team held a Drop-in Clinic in the Broadhaven Hotel, Belmullet on Wednesday 28 January 2026 from 8am until 8pm. On the day of the Clinic, 21 people attended, including 3 passersby, including Councillor Gerry Coyle and Councillor Sean Carey. A request was also received from Deputy Keira Keogh TD for a video (Microsoft Teams) call that day which was facilitated that afternoon.

3.142 At the Clinic, the following printed material were on display for viewing by members of the public and to facilitate questions and responses:

- Overall Project Layout.
- Turbine Delivery Route.
- Grid Connection Route.
- Photo Montages.

3.143 The RWE team received further requests for information at the clinic, with more requests received the following week / weeks by phone and email.

Elected Members Engagement

3.144 Throughout the consultation process, all local and relevant national representatives were emailed copies of all documentation associated with the proposed Muingmore Wind Farm, in advance of delivering to local residents.

Engagement Timeline

- **June 2023**: Initial brochure and letter drop; door-to-door visits (67 households met).
- **July - August 2023**: Email responses and meetings with individuals and groups.
- **October 2025**: Second letter drop with SID update (83 households met).
- **November 2025 - January 2026:** Email responses to individuals.
- **January 2026:** Third letter drop and stakeholder drop-in clinic.

Project Consultation Feedback

3.145 As the stakeholder interaction progressed during both consultations, it became clear that there were three main questions that most people discussed with the Applicant's team. These were related to shadow flicker, noise and visual impact.

3.146 The Applicant's team also received feedback on the doorsteps about how people would like to be communicated with vis a vis face to face meetings, group meetings etc. The Applicant's team discussed the various options with the majority of stakeholders in favour of being able to meet on a one-to-one basis / door to door, or in small groups. Some felt intimidated by large groups and felt that their questions and concerns would not be heard in larger groups. The Applicant's team mentioned a 'drop-in clinic' at a local facility which some residents felt might be appropriate.

3.147 Details of all Community Consultation activities are provided in the Community Consultation Report in **Technical Appendix 3-7**.

Summary of Key Issues

Key Issues Raised during Community Consultation

3.148 Observations and issues that arose during the scoping and consultation process have informed the design, assessment and mitigation measures proposed as part of this Proposed Project. Of significance here is the repositioning of turbines and associated infrastructure during the design evolution.

3.149 The scoping process proved beneficial to the identification of potential issues in relation to the Proposed Project. Responses from the consultees identified a range of observations which have been taken into consideration in the preparation of the respective chapters of this EIAR. Issues raised during the consultation process are as follows:

- Potential shadow flicker, setback distances and, proximity to houses and noise.

- Landscape and visual impacts; and
- Noise impact.

3.150 See **Table 3-2** for more detail on how these issues were taken into account in the design iterations.

Feedback on Design

3.151 The preliminary design was reviewed to reflect consultation responses from consultation bodies and those commonly received from the local public. Feedback gathered during this consultation process in relation to the design of the proposal was relayed to the design team who worked to take on board the local community's views and concerns. A design review process was undertaken in which this feedback, along with technical appraisals, were considered, and this fed into Design Chill (April 2024) and Design Freeze workshops (December 2025).The process gave the design team the opportunity to make amendments to the design layout and the project being considered, based on the local feedback received.

Conclusion

3.152 This chapter has provided a description of the reasonable alternatives that have been considered in the evolution of the design of the Proposed Project.

3.153 From the outset the Applicant has sought to select a location for the Proposed Project which does not have inherent environmental sensitivities.

3.154 Once the preferred location was identified, the design process was influenced by an iterative EIA process and through seeking the views of the local community. Feedback received resulted in a series of alternative designs and layouts, which were continually evaluated and amended to avoid or reduce any likely significant environmental effects, as far as possible.

3.155 The iterative EIA process has resulted in the proposals that are finally assessed in this EIAR. It is the final option that was selected through the EIA process that represents the most environmentally acceptable option whilst meeting the recognised need for the Proposed Project.

3.156 The Main Wind Farm Development Site was assessed as the most suitable location for a number of reasons including high wind speeds, low population density, access to the national electricity grid, along with favourable policies.

References

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https://www.seai.ie/news-and-media/seai-wind-and-solar-farms/

Figures

Technical Appendices

Technical Appendix 3-1: Proposed Muingmore Wind Farm Project Brochure

Technical Appendix 3-2: First Residents Letter

Technical Appendix 3-3: Scoping Report

Technical Appendix 3-4: Meeting Minutes with Mayo Co. Co. on 16th January 2025

Technical Appendix 3-5: Meeting Records with An Coimisiún Pleanála on 25th January 2025 and 9th April 2025 (ABP-318372-23) and ABP-321948-25 on 9th April 2025

Technical Appendix 3-6: Minutes of Meeting with NPWS

Technical Appendix 3-7: Community Consultation Report

Technical Appendix 3-8: Log of Non Substantive Statutory and Non-statutory Scoping Responses

(Refer to EIAR Volume 3 for Appendices)

450000 460000 470000 480000 490000 500000

840000 830000 820000 810000

N

Erris Head SAC
Eagle Island pNHA
Erris Head pNHA
Illanmaster SPA
Termoncarragh Lake and Annagh Machair SPA
Broadhaven Bay SAC
Glenamoy Bog Complex pNHA
Benaderre Cliffs pNH
Inishglora and Inishkeeragh SPA
Mullet Peninsula SPA
Glenamoy Bog Complex SAC
Inishglora & Inishkeeragh pNHA
Carrowmore Lake SPA
Bellacorick Iron Flush SAC
Pollatomish Bog NHA
Broadhaven Bay pNHA
Slieve Fyagh Bog pNHA
Glenturk More Bog NHA
Fyagh Bog SAC
Tristia Bog NHA
Ederglen Bog NHA
OVER-RUN AREA 1
Carrowmore Lake Complex pNHA
Knockmoyle/Sheskin Ramsar
West Connacht Coast SAC
Mullet/Blacksod Bay Complex pNHA
Bellacorick Complex
Inishkea Islands pNHA
Inishkea Islands SPA
Bellacorick Iron Flush pNHA
Blacksod Bay/Broad Haven SPA
Carrowmore Lake Complex SAC
Inishkea Islands SAC
OVER-RUN AREA 3
Lough Dahybaun SAC
Duvillaun Islands SPA
Mullet/Blacksod Bay Complex SAC
Tullaghan Bay and Bog NHA
Bellacorick Bog Complex pNHA
Owenduff catchment Ramsar
Owenboy Ramsar
Duvillaun Islands pNHA
OVER-RUN AREA 2
Duvillaun Islands SAC
Owenduff/Nephin Complex pNHA
Blacksod Bay and Broadhaven Ramsar
Doogort Machair/Lough Doo SAC
Owenduff/Nephin Complex SAC
Corraun Point Machair/Dooreel Creek pNHA
Croaghaun/Slievemore SAC
Doogort Machair/Lough Doo pNHA
Altaconey Bog pNHA
Owenduff/Nephin Complex SPA
Doogort Machair SPA
Croaghaun/Slievemore pNHA
Doogort East Bog NHA
Bellacragher Saltmarsh pNHA
Keel Machair/Menaun Cliffs pNHA
Inishgalloon pNHA
Achill Head SAC
Lough Gall Bog SAC
Bellacragher Saltmarsh SAC
Lough Gall Bog pNHA

0 5 10
Kilometres

LEGEND

- Proposed Development Site Boundary
- Study Area (Main Wind Farm Development Site Boundary 20 km Buffer)
- Over-run Area Location
- Ramsar Wetland and Site Location
- Special Area of Conservation (SAC)
- Special Protection Area (SPA)
- Natural Heritage Area (NHA)
- Proposed Natural Heritage Area (pNHA)

Galway

RWE

SLR

MUINGMORE WIND FARM

SITE SELECTION AND ALTERNATIVES, SCOPING AND KEY ISSUES

ENVIRONMENTAL DESIGNATIONS

FIGURE 3-1

Scale 1:180,000 @ A3

Date APRIL 2026

402.064443.00001.0071.0 Env Des

450000
465000
480000
495000
840000
825000
810000

N

Broadhaven Bay
Béal an Mhuirthead
Loch na Ceathrún Móire
Blacksod Bay - Cuan an Fhóid Duibh
Achill Island - Acaill
Keel Beach
Wild Nephin National Park

Bunnahowen Wind Farm (Temp)
OVER-RUN AREA 1
OVER-RUN AREA 3
OVER-RUN AREA 2
Sheskin Wind Farm Phase 2
Sheskin Wind Farm Phase 1
Sheskin South Wind Farm
Oweninny Power (1)
Bellacorrick Wind Farm

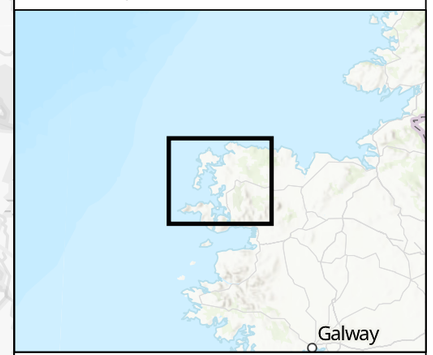
N59

0 5 10
Kilometres

LEGEND

- Proposed Development Site Boundary
- Main Wind Farm Development Site Boundary 20 km Buffer
- Over-run Area Location
- Sustainable Energy Authority of Ireland (SEAI) Connected or Contracted Wind Farm

Note
Connected or Contracted Wind Farm Locations have been clipped to the Proposed Development Site Boundary 20 km Buffer



RWE

SLR

MUINGMORE WIND FARM

SITE SELECTION AND ALTERNATIVES, SCOPING AND KEY ISSUES

SEAI CONNECTED AND CONTRACTED WIND FARMS IN IRELAND

FIGURE 3-2

Scale 1:180,000 @ A3

Date APRIL 2026

402.064443.00001.0140.1 SEAI Connected

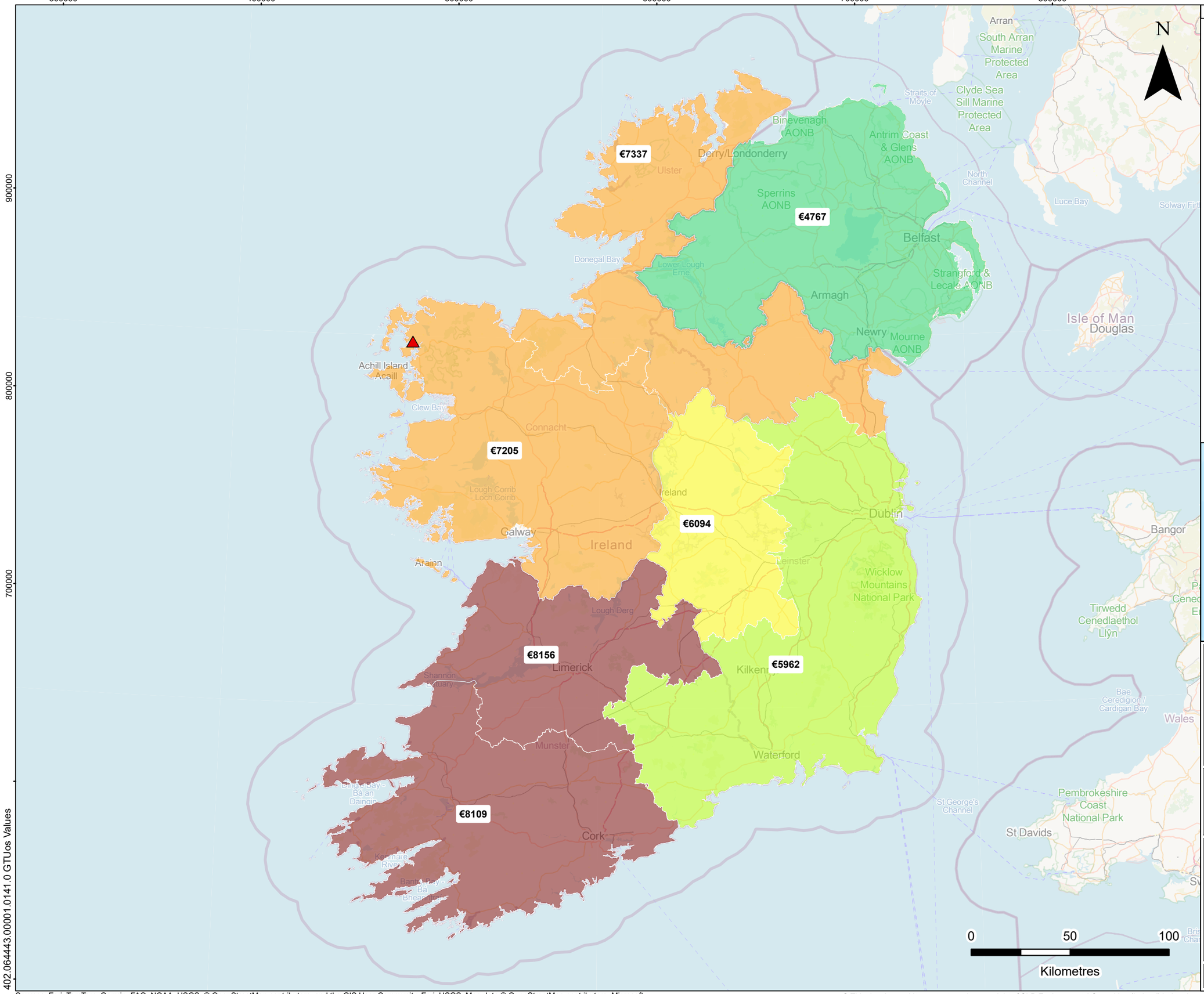
300000 400000 500000 600000 700000 800000

900000

800000

700000

402.064443.00001.0141.0 GTUos Values



LEGEND

Proposed Development Site Location

Regional Average Generator Use of System Charges (GTUoS) Tariff (€)

- < 5000
- 5000 - 6000
- 6000 - 7000
- 7000 - 8000
- > 8000

RWE

SLR

MUINGMORE WIND FARM

SITE SELECTION AND ALTERNATIVES, SCOPING AND KEY ISSUES

ALL ISLAND 2021 REGIONAL AVERAGE GTUOS VALUES

FIGURE 3-3

Scale	Date
1:1,800,000@ A3	APRIL 2026

440000 450000 460000 470000 480000 490000 500000

840000 830000 820000 810000

402.064443.00001.0072.1 Wind Speed

N

Broadhaven Bay

Béal an Mhuirthead

Loch na Ceathrún Móire

Blacksod Bay - Cuan an Fhóid Duibh

Achill Island - Acaill

Keel Beach

Wild Nephin National Park

N59

L120

OVER-RUN AREA 1

OVER-RUN AREA 3

OVER-RUN AREA 2

0 5 10

Kilometres

LEGEND

Proposed Development Site Boundary

Study Area (Main Wind Farm Development Site Boundary 20 km Buffer)

Over-run Area Location

Wind Speed at 100 m (SEAI)

Low : 6 m/s

High : 17 m/s

Galway

RWE

SLR

MUINGMORE WIND FARM

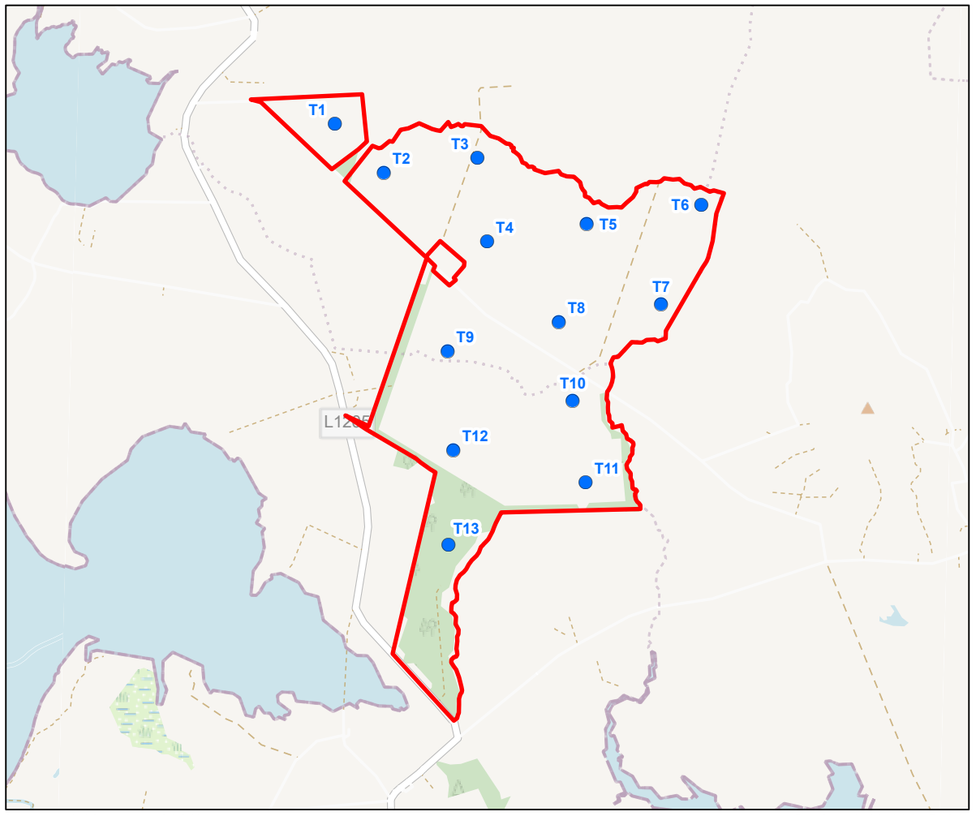
SITE SELECTION AND ALTERNATIVES, SCOPING AND KEY ISSUES

WIND SPEEDS WITHIN STUDY AREA

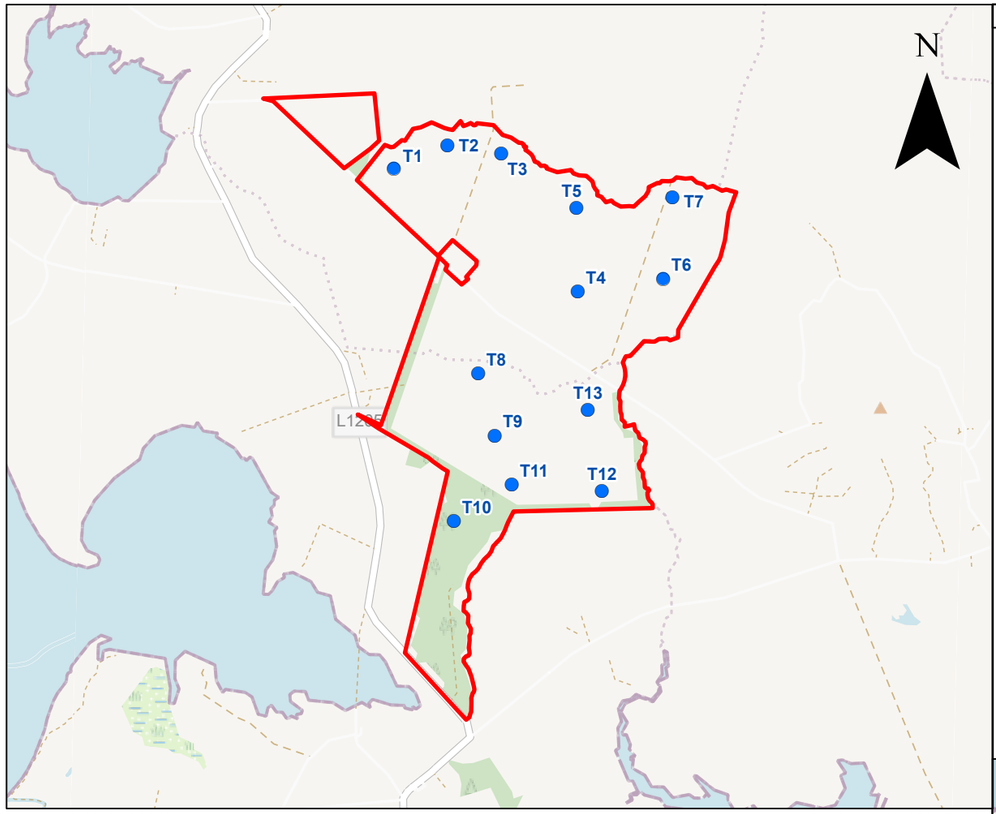
FIGURE 3-4

Scale 1:200,000 @ A3

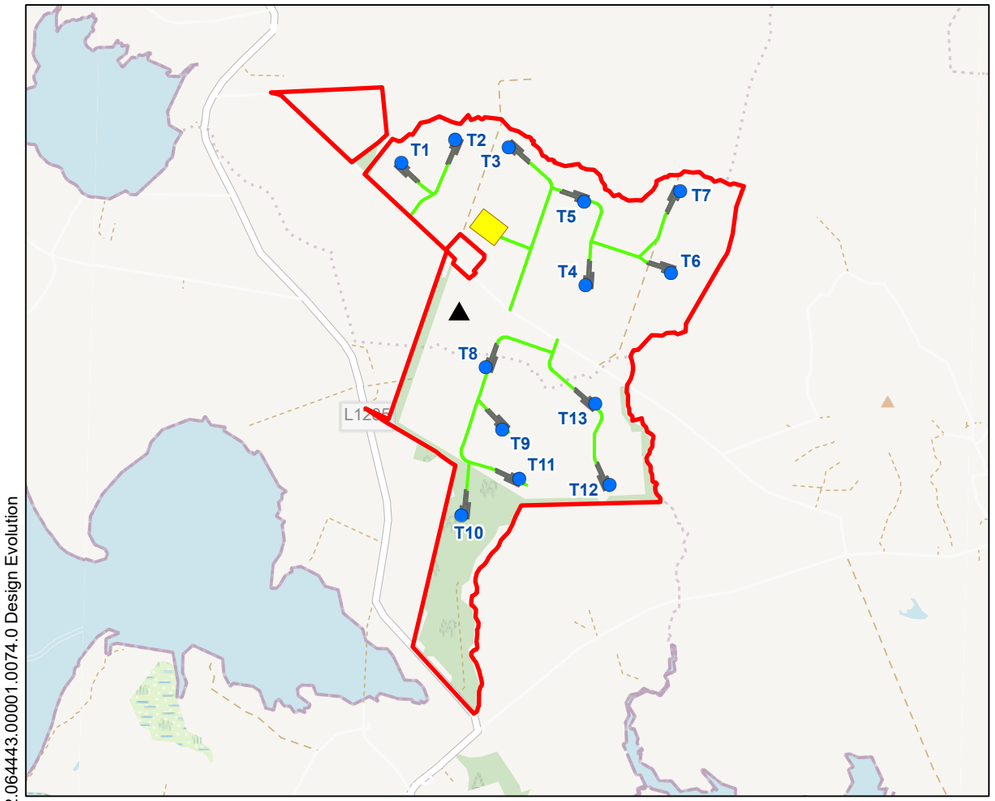
Date APRIL 2026



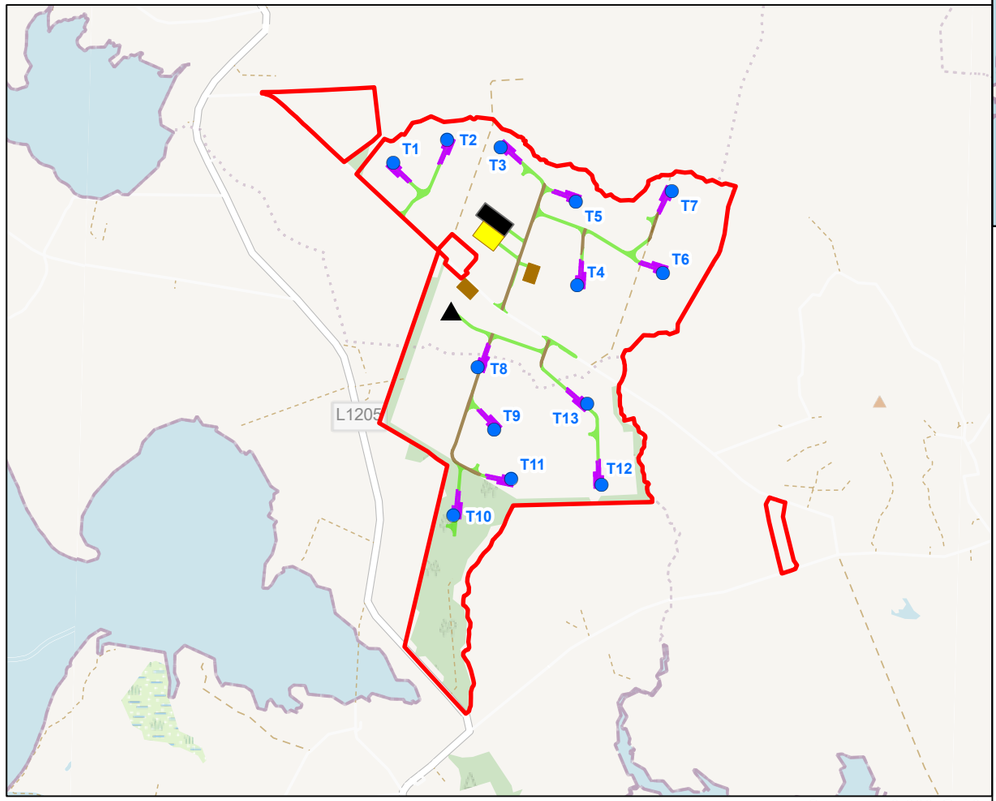
Layout 1 (January 2023) Scale - 1:40,000 @ A3



Layout 2 (July 2023) Scale - 1:40,000 @ A3



Layout 3 Scoping (April 2024) Scale - 1:40,000 @ A3



Layout 4 Design Chill (February 2025) Scale - 1:40,000 @ A3

LEGEND

- Proposed Development Site Boundary
- Proposed Turbine Location
- Proposed Met Mast Location
- Proposed New Access Track
- Proposed Upgraded Access Track
- Proposed Crane Pad
- Proposed Substation
- Battery Energy Storage System (BESS) Compound
- Proposed Temporary Construction Compound

RWE

SLR

MUINGMORE WIND FARM

SITE SELECTION AND ALTERNATIVES, SCOPING AND KEY ISSUES

DESIGN EVOLUTION

FIGURE 3-5

Date APRIL 2026

402.064443.00001.0074.0 Design Evolution