

2.

BACKGROUND AND POLICY

This section of the EIAR sets out the relevant Energy and Climate Change related policies and targets, the strategic, regional, and local planning context for the Proposed Development, scoping and consultation, and the cumulative impact assessment process.

2.1 Introduction

This section of the EIAR presents the policies and targets which have been put in place both nationally and internationally in relation to renewable energy and climate change. The details below set out the need for the Proposed Development to aid Ireland in meeting its national targets and European commitments in relation to climate change and decarbonisation.

The Proposed Development comprises the provision of a wind farm of 22 no. wind turbines, which is capable of generating approximately 158.4 MW of renewable energy and provide it for use onto the national grid. The need to decarbonise the economy and reduce emissions has always been imperative, however in recent years the urgency involved has become clearer to all stakeholders. The Climate Action Plan (CAP) published by the Government in 2023 sets out the detail for taking action to achieve a 51% reduction in overall greenhouse gas emissions by 2030, and to reach net-zero emissions by no later than 2050. The 2023 Plan builds on the measures and technologies set out in the 2021 Climate Action Plan to deliver greater ambition. The greater ambition requires a greater range of measures under the 2021 Plan, reflected in two categories of 'core measures' and 'further measures'. 'Core measures', set out to meet the 2030 targets, cover the fundamentals of decarbonisation and include the development of a renewable energy electricity supply. These 'core measures' are not, by themselves, sufficient to deliver the ambitions set out in the CAP and so a series of 'further measures' will also be necessary which are more technically challenging or not yet available in Ireland at the scale required, e.g. Biogas/biomethane, green hydrogen, carbon capture and storage. While deploying all the core measures would reduce emissions by 10-11 MtCO2eq. by 2030, undertaking further measures could close the gap. All sectors will have to further their efforts from those outlined in the CAP if the core and further measures are to be achieved.

The primary driver behind the Proposed Development is the need to provide additional renewable energy to offset the use of fossil fuels within the electricity generating sector. Increasing electricity generation from wind power represents the most economical renewable option to reduce emissions within the power generation sector and is the most mature technology available to achieve national targets that have been established for decarbonisation.

This review of relevant policy contained in this Section of the EIAR concludes that the proposed Glenora Wind Farm is consistent with the overarching planning framework with regard to facilitating the move away from dependency on fossil fuels and the promotion of proper planning and sustainable development.

2.2 **Climate Change Policy and Targets**

International and national policy consistently identifies the need to reduce greenhouse gas (GHG) emissions and stresses the importance of reducing global warming. The context of international policy has altered over the last 30-years from being of a warning nature to the current, almost universally accepted belief, that there is a climate change emergency occurring both within Ireland and at a broader global scale. The Intergovernmental Panel on Climate Change (IPCC)'s Sixth Assessment Report¹ published in 2021 provides a stark assessment of global climate change and presents evidence that climate changes will increase in all regions of the globe over the coming decades and that much of the damage

¹ Climate Change 2021 'The Physical Science Basis' (Intergovernmental Panel on Climate Change, August 2021)



caused by climate change up to this point is now likely irreversible, such as the rise in sea levels over the 21^{st} century. The Climate Status Report for Ireland 2020^2 similarly reflects on clear and distinct impacts arising from climate change effects within an Irish context:

- > An increase in the number of warm spell days over the last 60 years with very little change in cold spell duration;
- Annual precipitation was 6% higher in the period 1989–2018, compared with the 30-year period 1961–1990, and the decade 2006–2015 has been the wettest on record;
- Satellite observations indicate that the sea level around Ireland has risen by approximately 2–3mm per year since the early 1990s; and
- > In 2018, carbon dioxide emissions were almost 18% higher than in 1990, primarily due to increased fossil fuel combustion in transport and energy industries

The IPCC's Sixth Assessment Report does not, however, conclude that a climate catastrophe is inevitable, but rather, there remains a 'narrow path' to determine the future course of climate, mainly by cutting emissions down to net zero. The Proposed Development will contribute to the decarbonisation of the energy sector and reduce harmful emissions. In this regard, it is in compliance with national and international climate change policy and targets.

2.2.1.1 International Policy

United Nations Framework Convention on Climate Change

In 1992, Ireland joined an international treaty, the United Nations Framework Convention on Climate Change (UNFCCC), as a framework for international efforts to combat the challenge posed by climate change. The UNFCCC seeks to limit average global temperature increases and the resulting climate change. In addition, the UNFCCC seeks to cope with impacts that are already inevitable. It recognises that the climate system is a shared resource whose stability can be affected by industrial and other emissions of carbon dioxide and other greenhouse gases. The framework set no binding limits on greenhouse gas emissions for individual countries and contains no enforcement mechanisms. Instead, the framework outlines how specific international treaties (called "protocols" or "Agreements") may be negotiated to set binding limits on greenhouse gases.

Kyoto Protocol

The Kyoto Protocol operationalises the UNFCCC by committing industrialised countries and economies in transition to limit and reduce GHG emissions in accordance with agreed individual targets. Ireland is a Party to the Kyoto Protocol, which came into effect in 2005, and as a result of which, emission reduction targets agreed by developed countries are now binding.

In Doha, Qatar, on 8th December 2012, the *"Doha Amendment to the Kyoto Protocol"* was adopted. The amendment includes:

- New commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from 1st January 2013 to 31st December 2020;
- A revised list of greenhouse gases (GHG) to be reported on by Parties in the second commitment period; and
- > Amendments to several articles of the Kyoto Protocol which specifically referenced issues pertaining to the first commitment period and which needed to be updated for the second commitment period.

² Climate Status Report for Ireland 2020 (Environmental Protection Agency, Marine Institute, Met Éireann, August 2021)



Under the protocol, countries must meet their targets primarily through national measures, although market-based mechanisms (such as international emissions trading) can also be utilised.

COP21 Paris Agreement

COP21 was the 21st session of the Conference of the Parties (COP) to the UNFCCC. Every year since 1995 (excluding 2020 due to COVID-19), the COP has gathered the 196 Parties (195 countries and the European Union) that have ratified the Convention in a different country, to evaluate its implementation and negotiate new commitments. COP21 was organised by the United Nations and held, in Paris, from 30th November to 12th December 2015. COP21 closed with the adoption of the first international climate agreement (concluded by 195 countries and applicable to all). The 12-page text, made up of a preamble and 29 articles, provides for a limitation of the global average temperature rise to well below 2°C above pre-industrial levels and **to limit the increase to 1.5°C**. It is flexible and takes into account the needs and capacities of each country. The IPCC's 6th Assessment Report (2021) further collaborates this need to limit any increase in global average temperature to 1.5°C, stating that (<u>underlined for emphasis</u>),

"<u>Humanity has emitted 2,560 billion equivalent tons of CO₂ since 1750, and we only have a</u> budget of 500 more if we want to limit warming to 1.5°C.

By following a trajectory of very low GHG emissions (SSP1-1.9), the threshold of 1.5° C will be reached in the short term, between 2021 and 2040, before being very slightly exceeded (1.6° C anticipated over the period 2041-2060) then respected in the long term (1.4° C anticipated over the period 2081-2100).

Everything is not lost, but we must pursue the Paris Agreement's most ambitious goal of limiting warming to 1.5°C."

An article published by the IPCC on the 6th October 2018 titled '*Global Warming of 1.5*°C, notes the impacts of global warming of 1.5° C above pre-industrial levels and related global greenhouse gas emission pathways; in the context of mitigation pathways, strengthening of the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. This special report is part of an invitation contained in the Decision of the 21^{st} Conference of Parties of the United Nations Framework Convention on Climate Change to adopt the Paris Agreement, and provides an update on the impact of climate change if emissions are not reduced.

COP25 Madrid

COP25, the 25th session of the COP, was held between the 2nd and 13th of December 2019 in Madrid. The conference was characterised by repeated warnings from civil society (NGOs and corporates) on emerging evidence and scientific consensus on climate change risk. Specifically, it was noted that there are only c. '10 years left' before the opportunity of limiting global warming to 1.5° C is no long feasible. As such, the only remaining approach to limiting raising global temperatures is a '7.6% reduction of global GHG emissions every year between 2020 and 2030, and to reach net zero emissions by 2050'. However, consensus was not achieved between States on finalising the operating rules of the Paris Agreement and to ensure that it became operational by 2020. Three issues which emerged between States from the COP25 are summarised below:

- > There was no uniform consensus between States to raise countries' climate ambitions, e.g. to make increased commitments in light of growing climate change data. Some States were opposed to imposing any obligation on countries to submit enhanced pledges next year, arguing it should be each country's own decision. All states were required to submit a review of their commitments for COP 26 in 2020. At the current level of climate targets, within a decade, the objective of the Paris Agreement will no longer be achievable;
- > There was no agreement on finalising Article 6, the foundations for international cooperation to combat climate change. The aim was to establish the rules for new international mechanisms for financing and transferring GHG emission reductions; and



> There was no agreement on financing (Green Climate Fund); specifically, relating to both loss and damage caused by climate change.

Despite the lack of consensus on the above challenges, the COP25 did achieve more limited success with regard to the introduction of the "*San Jose Principles for High Ambition and Integrity of International Carbon Markets*", which sets out the framework on which a robust carbon market should be built. These principles include, but are not limited to:

- > Ensures environmental integrity and enables the highest possible mitigation ambition;
- > Delivers an overall mitigation in global emissions, moving beyond zero-sum offsetting approaches to help accelerate the reduction of global greenhouse gas emissions;
- > Prohibits the use of pre-2020 units, Kyoto units and allowances, and any underlying reductions toward Paris Agreement and other international goals; and
- > Ensures that double counting is avoided and that all use of markets toward international climate goals is subject to corresponding adjustments.

These principles were supported by 23 EU, including Ireland, and Latin American countries, 5 no. pacific islands and 2 no. countries in the Caribbean.

COP26 Glasgow

COP26 took place in Glasgow, Scotland between the 31st October and 12th November 2021. The summit was centred around the fact that "*climate change is the greatest risk facing us all.*" The UK, as hosts for the summit, developed a ten-point plan to deliver a green industrial revolution, seeking to lead the world in tackling and adapting to climate change.

The key items COP26 sought to achieve are:

- > Secure global net zero by mid-century and keep 1.5 degrees within reach
- > Adapt to protect communities and natural habitats
- > Mobilise finance
- > Work together to deliver on the said goals and rise to the challenges of climate crisis

All world leaders at the summit confirmed the need to urgently address the gaps in ambition and work together to achieve climate action.

The summit highlighted that the Paris Agreement is working, with leaders outlining national targets and efforts to further reduce emissions. There was a clear commitment to working together to achieve climate aims, with significant announcements including:

- * "Over 40 leaders joined the Breakthrough Agenda, a 10-year plan to work together to create green jobs and growth globally, making clean technologies and solutions the most affordable, accessible and attractive option before 2030 beginning with power, road transport, steel, hydrogen and agriculture.
- > Over 120 countries covering more than 90% of the world's forests endorsed the Glasgow Leaders' Declaration on Forests & Land Use committing to work collectively to halt and reverse forest loss and land degradation by 2030, backed by the biggest ever commitment of public funds for forest conservation and a global roadmap to make 75% of forest commodity supply chains sustainable.
- > A Just Energy Transition Partnership was announced to support South Africa's decarbonisation efforts; a powerful example of collaboration between an emerging economy and international partners.
- The launch of the Global Methane Pledge saw over 100 countries committing collectively to reduce global methane emissions by 30% by 2030."



European Green Deal – European Climate Law (2021)

The European Green Deal, initially introduced by the European Commission in December 2019, sets out the 'blueprint' for a transformational change of the 27-country bloc from a high- to a low-carbon economy, without reducing prosperity and while improving people's quality of life, through cleaner air and water, better health and a thriving natural world. The Green Deal is intended to work through a framework of regulation and legislation setting clear overarching targets, e.g. **a bloc-wide goal of net zero carbon emissions by 2050 and a 55% cut in emissions by 2030 (compared with 1990 levels).** This is a substantial increase compared to the existing target, upwards from the previous target of at least 40% (2030 Climate & Energy Framework), and furthermore, these targets demonstrate the ambition necessary to keep the global temperature increase to well below 2°C and pursue efforts to keep it to 1.5°C as per the Paris Agreement. With regard to the energy sector, the Green Deal focuses on 3 no. key principles for the clean energy transition, which will help reduce greenhouse gas emissions and enhance the quality of life for citizens:

- > Ensuring a secure and affordable EU energy supply;
- > Developing a fully integrated, interconnected and digitalised EU energy market; and
- > Prioritising energy efficiency, improving the energy performance of our buildings and developing a power sector based largely on renewable sources (e.g. the subject development)

The European Climate Law³ writes into law the objectives set out above in the European Green Deal for Europe's economy and society to become climate-neutral by 2050. Climate neutrality by 2050 means achieving net zero greenhouse gas emissions for EU countries as a whole, mainly by cutting emissions, investing in green technologies and protecting the natural environment. The Climate Law includes:

- > A legal objective for the Union to reach climate neutrality by 2050;
- > An ambitious 2030 climate target of at least 55% reduction of net emissions of greenhouse gases as compared to 1990, with clarity on the contribution of emission reductions and removals;
- A process for setting a 2040 climate target, taking into account an indicative greenhouse gas budget for 2030-2050 to be published by the Commission;
- > A commitment to negative emissions after 2050;
- > The establishment of European Scientific Advisory Board on Climate Change, that will provide independent scientific advice;
- > Stronger provisions on adaptation to climate change; and
- > Strong coherence across Union policies with the climate neutrality objective

The law aims to ensure that all EU policies contribute to this goal and that all sectors of the economy and society play their part. All 27 no. EU Member States have committed to turning the EU into the first climate neutral continent by 2050. One third of the 1.8 trillion-euro investments from the NextGenerationEU Recovery Plan, and the EU's seven-year budget, will finance the European Green Deal. On 14th July 2021, the European Commission adopted a set of proposals⁴ to make the EU's climate, energy, transport and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels. Achieving these emission reductions in the next decade which is crucial to Europe becoming the world's first climate-neutral continent by 2050 would clearly be assisted by the Proposed Development.

2.2.1.2 **Project Compliance with International Policy**

From review of the relevant policy documents available, it is considered that the proposed development of 22 No. turbines will aid in reducing reliance on fossil fuels for electricity generation. This will aid with

³ European Climate Law was published in the Official Journal on 9 July 2021 and came into force on 29 July 2021.

⁴ 'Fit for 55': delivering the EU's 2030 Climate Target on the way to climate neutrality (July 2021)



achieving the United Nations Framework Convention on Climate Change goals of limiting global temperatures as a result of climate change and the goals of the Kyoto protocol and the several Conference of Parties agreements as outlined above. By making a just transition to more renewable forms of electricity generation, the level of carbon emissions will drop as our reliance on non-renewable forms of energy lessen.

The proposed renewable energy development is also considered to be in line with the European Green Deal which also aims to reduce carbon emissions and achieve net zero carbon emissions by 2050. These goals will not be met if projects, such as the one proposed are not implemented. The construction of this development would also aid in ensuring energy security within the EU which is a target of the European Green Deal. As wind is an indigenous and abundant resource, countries can tap into their own wind potential, reducing the vulnerability to price fluctuations and geopolitical risks associated with fossil fuel imports.

2.2.1.3 National Policy

Programme for Government (2020)

The Programme for Government 2020 (June 2020) places specific emphasis on climate change, stating that the next ten years are a critical period in addressing the climate crisis, and therefore, a deliberate and swift approach to reducing more than half of Ireland's carbon emissions over the course of the decade (2020-2030) must be implemented. The programme states that the government are committed to reducing greenhouse gas emissions by an average 7% per annum over the next decade in a push to achieve a net zero emissions by the year 2050.

With regard to energy generation, the Programme notes that the government is committed to the rapid decarbonisation of the energy sector. The Programme states the government's ongoing support and commitment to take "*the necessary action to deliver at least 70% renewable electricity by 2030.*" While it is noted this has been updated by the 2021 Climate Action Plan, the Programme for Government sets out a range of measures to achieve this target which remain relevant, including:

- > Finalise and publish the Wind Energy Guidelines
- > Continue EirGrid's programme 'Delivering a Secure, Sustainable Electricity System'
- > Strengthen the policy framework to incentivise electricity storage and interconnection
- > Produce a whole-of-government plan setting out how we will deliver at least 70% renewable electricity by 2030

The Climate Action and Low Carbon Development (Amendment) Act (2021)

The Climate Action and Low Carbon Development (Amendment) Act 2021, which was signed into law on the 23rd July 2021, legally binds Ireland to achieve net-Zero emissions no later than 2050, and to a **51% reduction in emissions by the end of this decade**. The Act provides the framework for Ireland to meet its international and EU climate commitments and to become a leader in addressing climate change. As indicated by the premise of the legislation, the reduction of emissions is a key proponent of the Climate Action and Low Carbon Development (Amendment) Act 2021 and incorporates the following key provisions:

- Embeds the process of setting binding and ambitious emissions-reductions targets in law;
 Provides for a national climate objective, which commits to pursue and achieve no later
- Provides for a national climate objective, which commits to pursue and achieve no later than 2050, the transition to a climate resilient, biodiversity-rich, environmentally sustainable and climate-neutral economy;



- > Provides that the first two five-year carbon budgets proposed by the Climate Change Advisory Council should equate to a total reduction of 51% over the period to 2030, relative to a baseline of 2018;
- > The role of the Climate Change Advisory Council has been strengthened;
- > The government must adopt carbon budgets that are consistent with the Paris agreement and other international obligations;
- > Actions for each sector will be detailed in the Climate Action Plan which must be updated annually; and
- > Local Authorities must prepare individual Climate Action Plans which will include both mitigation and adaptation measures and will be updated every five years.

The project represents a significant opportunity to be a nationally important wind energy generator, contributing to the 51% reduction in emissions being sought, which is as outlined above a legally binding requirement. The Proposed Development is therefore considered compliant with the relevant policies and objectives set out at both the European (e.g. European Green Deal) and National tiers of governance in this regard.

Carbon Budgets

The first national carbon budget programme proposed by the Climate Change Advisory Council, approved by Government and adopted by both Houses of the Oireachtas in April 2022 comprises three successive 5-year carbon budgets⁵. The total emissions allowed under each budget are shown in Table 2-1 below.

	2021 – 2025 Carbon Budget 1	2026 – 2030 Carbon Budget 2	2031 – 2035 Provisional Carbon Budget 3
	All Gases		
Carbon Budget			
(Mt CO ₂ eq)	295	200	151
Annual Average Percentage Change in Emissions	-4.8%	-8.3%	-3.5%

Table 2-1. Proposed Carbon Budgets of the Climate Change Advisory Council

The figures are consistent with emissions in 2018 of 68.3 Mt CO₂eq reducing to 33.5 Mt CO₂eq in 2030, thus allowing compliance with the 51% emissions reduction target by 2030.

Report of the Joint Committee on Climate Action - Climate Change: A Cross-Party Consensus for Action (2019)

In March 2019, the Joint Committee on Climate Action Change released a report detailing a cross party consensus for action. The report in its introduction states that *"Irelands performance in meeting international obligations has to date been poor"* (refer to *'Emissions Projections for Ireland'* below). The Report highlights on-going concern regarding emission projections and growing evidence that Ireland is off track in meeting its 2030 targets under the relevant the EU Directives.

The report states that the transformation of Ireland's energy system will be required for the country to meet its future 2030 and 2050 GHG emission targets; specifically, in order to reach net zero emissions by

⁵ Climate Change Advisory Council Carbon Budget Technical Report (October 2021) <u>https://www.gov.ie/en/publication/9af1b-</u> carbon-budgets/



2050, Ireland will be required to fully decarbonise electricity generation. Therefore, there is a clear incentive for developing, and safeguarding, Ireland's capacity in renewable energies and renewable electricity. Since this report was published, the Climate Action and Low Carbon Development (Amendment) Act 2021 has been enacted and there have been recent progress / future scenario assessments (e.g. EirGrid's 'All Island Generation Capacity Statement 2021 – 2030' (September 2021)).

Given the clear concern that the county's future emissions targets may be missed, it is crucial that projects such as the Proposed Development which can contribute in a meaningful manner towards climate change targets and which can be provided without significant adverse environmental effects arising are brought forward and supported with favourable consideration through the planning system and constructed.

Climate Action Plan 2023

The Climate Action Plan 2023 ('the CAP') launched in December 2022, sets out a roadmap to delivery on Ireland's climate ambition. It aligns with the legally binding economy-wide carbon budgets and sectoral ceilings that were agreed by Government in July 2022 following the Climate Action and Low Carbon Development (Amendment) Act 2021. The Act commits Ireland to a legally binding target of net-zero greenhouse gas emissions no later than 2050, and a reduction of 51% by 2030.

At the time of publication (December 2022), the key sources of Ireland's greenhouse gas (GHG) emissions include agriculture (33.3%), Transport (15.7%) and Energy (14.4%). Current and future actions require "*the full implementation* of measures from Climate Action Plans 2023, and further future Climate Action Plans." (emphasis added)

CAP23 sets out indicative ranges of emissions reductions for each sector of the economy. Large-scale deployment of renewables - including onshore wind - is considered 'critical' to help decarbonise the power sector. In relation to achieving the sectoral emissions ceiling for the electricity sector the CAP states:

"The proposed pathway includes a massive and rapid build-out of renewable generation capacity (wind and solar power generation technologies) and will also rely on the continued build-out and strengthening of grid infrastructure, the deployment of zero-emissions gas and improved electricity demand management. The decarbonisation of the electricity sector will be an immense challenge as we face a growing demand for electricity and a need to ensure security of supply, while providing support for the decarbonisation of other sectors through the electrification of transport and heat."

In relation to the generation of electricity, the CAP emphasis the continued role of onshore wind in addressing the decarbonisation of the electricity sector. Under the CAP onshore wind targets of 6GW by 2025 and 9GW by 2030 is set out. An increase in the deployment of renewable energy generation, transformational policies, measures and actions are all called for in the CAP. Achieving further emissions reductions between now and 2030 requires a "*major step up*" across three key measures as follows:

- > Accelerate and increase the deployment of renewable energy to replace fossil fuels;
- > Deliver a flexible system to support renewables and demand;
- Manage electricity demand.

The CAP acknowledges that "Ireland accommodates one of the highest global percentages of variable renewable generation on the grid. However, to maximise the output of renewables, the electricity system must increase its flexibility further."

> Having regard to the targets and measures set out above, it is clear that there is strong policy support for the provision of additional renewable energy generators, such as that proposed.



Ireland's Greenhouse Gas Emissions Projections (2021 – 2040), June 2022

In June 2022, the EPA published an update on *Ireland's Greenhouse Gas Emission Projections 2021-2040* using the latest Inventory data for 2020. The report provides an assessment of Ireland's progress towards achieving its emission reduction targets for 2021 and 2030 as set out under the EU Effort Sharing Decision (ESD) and Effort Sharing Regulation (ESR). Under the Additional Measures scenario, renewable energy is projected to increase up to 78% of electricity generated by 2030 with emissions from the Energy Industry decreasing by 10% per annum from 2021-30. Increased coal use from 2021 and growing energy demand, including from data centres, threaten to negatively impact achievement of National targets, particularly for the first carbon budget period. The key findings set out within the report concerning Ireland's progress towards these targets, which are summarised below:

2030 Targets: Ireland's 2030 target under the EU ESR on greenhouse gas reduction is a 30% reduction of emissions compared to 2005 levels by 2030. EPA Projections show that *existing measures* will achieve a reduction of 5% on 2005 levels by 2030, significantly short of the target. However, if measures with the higher ambition (*with Additional Measures*) scenario are implemented, the reduction target can be achieved.

The Report assesses the future emission projections under two scenarios: 'With Existing Measures' and 'With Additional Measures'. The 'With Existing Measures' scenario assumes that no additional policies and measures, beyond those already in place by the end of 2019 are implemented. The 'With Additional Measures' scenario assumes implementation of the 'With Existing Measures' scenario in addition to further implementation of Government renewable and energy efficiency policies and measures, as set out in the CAP. Greenhouse gas emissions projections show total emissions decreasing from 2020 levels by 10.5% by 2030 under the With Existing Measures scenario and by 28% under the With Additional Measures scenario.

The energy sector contributed 14.9% of Ireland's total emissions in 2020 and is projected to decrease to 10.3% in 2030 (in the With Existing Measures scenario). The key trends underpinning the future progress of the sector under both scenarios are described below (<u>underlined for emphasis</u>):

- With existing measures
 - Emissions from the energy industries sector are projected to <u>decrease by 37.8%</u> from to 8.7 to 5.4 Mt CO2 eq over the period 2020 to 2030
 - In terms of the renewable energy generated, this scenario projects Ireland reaching approximately 70% of electricity consumption from renewable energy by 2030. Renewable electricity generation capacity is dominated by wind energy.
- > With Additional Measures
 - Emissions from the energy industries sector are projected to decrease by 48.9% from 8.7 to 4.5 Mt CO2 eq over the period 2020 to 2030
 - Assumed that by 2030 renewable energy generation increases to approximately 80% of electricity consumption. This is mainly a result of further expansion in wind energy (comprising 5.0 GW offshore).

In the context of Ireland, and the possible outcomes under the above scenarios, the EPA emphasises the need for 'urgent implementation' of all plans, policies and new measures as a response to reducing carbon emissions:

"These latest Projections highlight the pace and scale of action needed to reduce greenhouse emissions in time to contribute to arresting global temperature rise. Implementation has consistently lagged behind planning. The message form the IPCC is that no further delays are possible to avoid the worst climate outcomes.



Urgent implementation of all climate plans and policies, plus further new measures are needed for Ireland to meet the 51% emissions reduction target and put Ireland on track for climate neutrality by 2050."

While it is clear that progress is on-going, it is also apparent that there are still significant challenges which will need to be overcome if Ireland is to achieve its 2030 emission targets of 51% reduction. With *Additional Measures*, if they are fully implemented, compliance can be achieved with the EU Effort Sharing Regulation target. As decarbonising electricity generation will have a significant positive contribution in achieving Ireland's emissions it is clear that additional renewable energy production such as that of the Proposed Development must be encouraged and supported if carbon saving targets are to be met.

2.3 **Renewable Energy Policy and Targets**

Renewable energy development is recognised as a vital component of Ireland's strategy to tackle the challenges of combating climate change and ensuring a secure supply of energy. Ireland's import dependency was 66% in 2019, down from an average of 89% between 2001 and 2015, arising from the beginning of production of gas from the Corrib field and increasing use of indigenous renewable energy. Notwithstanding this improvement, the numbers have been rising again since, and Ireland remains one of the most import fuel dependent countries in the EU; In 2020 import dependency was 72%. SEAI's 'Energy in Ireland 2021 Report' (December 2020) further expands on the above, nothing that 'Total indigenous energy production in Ireland reached the highest level ever in 2018 of 5,044 ktoe, but declined to 3,541 ktoe in 2020 due to declining natural gas and peat production.' The most significant changes noted in the report in terms of fuels included:

- Natural gas consumption in industry decreased by 1.8% in 2020 and accounted for 43% of industry's final energy demand.
- Electricity consumption in industry decreased by 6.5% and accounted for 26% of final energy consumption in industry.
- > Oil use fell by 4.0% and accounted for 16.5% of industry's energy use.
- Renewable energy use in industry fell by 1.4%, in 2020 and accounted for 8.6% of industry's energy use.
- Coal use fell by 3.9% and accounted for 3.5% of the energy share of industry.

Ireland had two mandatory targets for renewable to bet met by 2020, which were set out by the Renewable Energy Directive (RED). The SEAI comments the following in relation to these targets –

'The first relates to overall renewable energy share (RES), and is commonly referred to as the overall RES target. For Ireland, the overall RES target was for at least 16% of gross final energy consumption (GFC)24 to come from renewable sources in 2020. The actual overall renewable energy share in 2020 was 13.5%, meaning that Ireland did not meet this target. The shortfall to target was equivalent to 3.3 TWh of renewable energy.

The second mandatory target set by the RED relates to the renewable energy used for transport. This is commonly referred to as the RES-T target. The RES-T target was for at least 10% of energy consumed in road and rail transport to come from renewable sources25. The actual RES-T achieved in 2020 was 10.2%, meaning that Ireland did meet this target.'

The projected demand for electricity is clear and to meet that demand viable projects such as the proposed renewable energy development can directly contribute to Ireland's energy and climate targets.



2.3.1.1 **EU Policy**

The 2030 Climate and Energy Framework (adopted by EU leaders in October 2014) represents the current governance system underpinning EU renewable energy policy. The framework defines EU wide renewable energy targets, which builds on the 2020 climate and energy package:

- > A binding commitment at EU level of at least 40% domestic Green House Gas reduction by 2030 compared to 1990;
- > An EU wide, binding target of at least 27% renewable energy by 2030; and
- > An indicative EU level target of at least 27% energy efficiency by 2030.

The European Commission published its proposal for an Effort Sharing Regulation on the allocation of national targets for greenhouse gas emissions for the period 2021-2030 in May 2018. The Effort Sharing legislation forms part of a set of policies and measures on climate change and energy that will help move Europe towards a low-carbon economy and increase its energy security. Under the current Regulation, the national targets will collectively deliver a reduction of around 10% in total EU emissions from the sectors covered by 2020 and of 30% by 2030, compared with 2005 levels.

The proposal implements EU commitments under the Paris Agreement on climate change (COP21), discussed above in Section 2.1.1, and marks an important milestone in the allocation to Member States of a package of climate targets formally adopted as part of the 2030 Climate and Energy Framework.

The revised Renewable Energy Directive (EU) 2018/2001 came into force in December 2018. It establishes a binding EU target of at least 32% for 2030 with a review for increasing this figure in 2023. The revised Directive sets a 2030 target of 32.5% energy from renewable sources with a potential upward revision in 2023.

The European Green Deal was launched in December 2019 and proposes to increase the binding target of renewable sources in the EU's energy mix from 32% to **40% by 2030** via amendments to the Renewable Energy Directive (Renewable Energy Directive) as per the 'Fit for 55' package (July 2021)⁶. This supports Member States in making the most of their cost-effective renewable energy potential across sectors through a combination of sectoral targets and measures. It aims at making the energy system cleaner and more efficient by fostering renewables-based electrification and, in sectors such as industry and transport where this is more difficult, it will promote the uptake of renewable fuels. 8

REPowerEU

The European Commission has proposed an outline of a plan to make Europe independent from Russian fossil fuels, starting with gas, due to the high and volatile energy prices, and security of supply concerns following Russia's unprecedented military attack on Ukraine. Currently, the EU imports 90% of its gas consumption, with Russia providing around 45% of those inputs. Russia also accounts for around 25% of oil and 45% of coal imports. Phasing out dependence on fossil fuels can be done well before 2030, increasing the resilience of the EU-wide energy system based on two pillars:

1. Diversifying gas supplies, via higher Liquefied Natural Gas (LNG) and pipeline imports of biomethane and renewable hydrogen production and imports from non-Russian suppliers

2. Reducing faster the use of fossil fuels by boosting energy efficiency, increasing renewables and addressing infrastructure bottlenecks.

With full implementation of the measures in REPowerEU plan, at least 155 bcm of fossil gas use could be removed, which is equivalent to the volume imported from Russia in 2021. Nearly two thirds of that reduction can be achieved within a year. A part of this plan includes *'Speeding up renewables permitting'*

⁶ https://www.consilium.europa.eu/en/policies/eu-plan-for-a-green-transition/



to minimise the time for roll-out of renewable projects and grid infrastructure improvements'. This will make the sector more efficient and reach the set goals faster. As such, it is submitted that the Proposed Development is strongly supported by EU energy policy.

Energy Roadmap 2050

The Energy Roadmap 2050 was published by the European Commission in 2011 and analyses the transition of the contemporary energy system in ways that would be compatible with the greenhouse gas reductions targets as set out in the Renewable Energy Directive (Directive 2009/28/EC) while also increasing competitiveness and security of supply. To achieve these targets and objectives, the Roadmap states that significant investments will need to be made in new low-carbon technologies and renewable energy, e.g. wind energy infrastructure, energy efficiency and grid infrastructure. Five main routes are identified to achieving a more sustainable, competitive and secure energy system in 2050:

- > High Energy Efficiency;
- > Diversified Supply Technologies;
- > High Renewable Energy Sources;
- > Nuclear energy; and
- > Carbon capture and storage.

The analysis found that decarbonising the energy system is technically and economically feasible. The Roadmap notes that all scenarios show the biggest share of energy supply technologies in 2050 comes from renewables. In this regard, it should be noted that the Climate Change Advisory Council states within their 2020 Annual Review (September 2020) that, "while the share of renewable electricity generation, particularly wind, is increasing [in Ireland], the [overall] pace of decarbonisation of the [electricity generation] sector needs to accelerate", as it is not compatible with a low-carbon transition to 2050. As such, a major prerequisite for a more sustainable and secure energy system is a higher share of renewable energy up to and beyond 2030 to 2050. Each of the scenarios assumes in the analysis that increasing the share of renewable energy and using energy more efficiently are crucial, irrespective of the particular energy mix chosen.

Progress on Targets

The SEAI *Energy in Ireland 2022* was published in December 2022 and set outs the most recent updates to Ireland's progress towards its binding European and National renewable energy targets. Based on confirmed 2020 data, the report found that Ireland failed to meet the EU overall renewable energy supply target of 16% for 2020. Although Ireland committed to reducing its CO2 emissions by 4.8% per annum from 2021- 2025 under the first carbon budget, energy related emissions were instead up by 5.4% in 2021.

The SEAI report illustrates (Figure 6) the summary of sectoral ceilings within the first two carbon budgets, over the periods 2021-2025 and 2026-2030 – copied below in Figure 2-1.





Figure 2-1. Carbon Budgets and Sectoral Ceilings for 2015-2025 and 2026-2030 (SEAI Energy in Ireland 2022)

A guideline trajectory the electricity sector's emission ceiling in both carbon budgets is shown above in Figure 2-1. The data shows that "electricity emissions were 'on trajectory' in 2021 (10.3 MtCO2), despite the greater dependence on coal- and oil-fired electricity generation. However, our provisional estimate for electricity emissions in 2022 (10.8 MtCO2) is higher than the guideline trajectory (9.0 MtCO2e). This is due to an increase in electricity demand for 2022, not all of which could be supplied through renewable electricity, and the significant pace of annual reductions (-12.6% down on each previous year) needed to satisfy electricity's sectoral emission ceiling."

The report confirms that wind accounted for 84% of renewable electricity generated in 2021 having 4339MW of installed wind capacity in 2021. Up to September 2022, the report confirmed 78MW of added wind capacity.

Security of supply is a focus in the report, noting "*Ireland's import dependency [of energy] has been increasing steadily, as the output from the Corrib gas field reduces faster than we are adding new renewable sources.*" In 2021 Ireland's import dependency for energy was 80%; ranked eighth highest of the 27 Member States in terms of import dependency in 2020, the last year in which full data was available.

In order to reduce Irelands emissions there is a need to increase the renewable share of electricity, heat and transport. Up until 2020, renewable energy targets and results were set and calculated under the rules and methodologies of the first EU Renewable Energy Directive (REDI) however, from 2021 onwards, renewable results must be calculated under the REDII methodology. This updated Directive contains stricter requirements on the countability of biomass, biogas, and biofuels, as they relate to our renewable energy share (RES) results. The second EU Renewable Energy Directive (REDII) continues to promote the growth of renewable energy and set renewable energy share (RES) targets out to 2030. The changes in criteria and caps under REDII change how the RES results in 2021 are calculated compared to 2020, even where there is little to no change in the underlying renewable energy:



	2020	RES 2020 Note	2021*	Note	New 2030 Target
Overall RES	13.6%	Ireland failed to meet its target of 16%	12.5%	Drop is almost entirely due to the shift in the REDII methodology	34.1%
RES-T (Transport energy from renewable energy sources)	10.2%	Ireland achieved its target of 10%	4.3%	Drop is almost entirely due to the shift in REDII methodology.	14%
RES-E (Electricity from renewable energy sources)	39.1%	Ireland failed to meet its target of 40%	36.4%	RES-E fell by 2.6% to 36.4% with over half this drop due to the shift in the REDII methodology and exclusion of some biomass; the remaining drop was due to reduced renewable electricity generation due to less wind in 2021.	70%
RES-H (Heat from renewable energy sources)	6.3%	Ireland failed to meet its target of 12%	5.2%	This decrease in RES-H is mainly due to the shift in REDII methodology and the introduction of new sustainability and verification criteria for biomass fuels.	24%

Table 2-2. Ireland Progress on Renewables

*calculated under the new REDI methodology

REDII introduced a binding EU-wide target for overall RES of 32% in 2030 and requires Member States to set their national contributions to the EU-wide target. As per the National Energy and Climate Plan (NECP) 2021-2030, Ireland's overall RES target is 34.1% in 2030.

The second mandatory target set by the RED related to the renewable energy share in transport sector. This is commonly referred to as the RES-T target. The 2020 RES-T target was for at least 10% of energy consumed in road and rail transport to come from renewable sources. The actual RES-T achieved in 2020 was 10.2%, meaning that Ireland did meet this target. REDII sets a new RES-T target of 14% by 2030.

The RES-E target to 2030 of 70% ensures that "renewable electricity continues to form the backbone of our renewable energy use for the coming decade and beyond."

The Climate Advisory Council (CCAC) notes within their *2022 Annual Review* that urgent implementation of the measures identified in the ⁷CAP 2021 and identification of further new measures would be needed to reach national emission reduction targets in the electricity sector. The CACC stress the importance of reducing emissions in the electricity sector given the reliance of other sectors on the successful decarbonisation of the electricity sector.

EirGrid's recent analysis presented in *'All Island Generation Capacity Statement 2022 – 2031'* (October 2022) found that the existing generation capacity is poor. Some generation capacity, due to close in September 2023, have submitted notices that they will not be available throughout 2022 and 2023. This represents 590 MW (rated) that will be unavailable to the national grid. Furthermore, a sizable portion (364MW) of the forecasted new generation has failed to materialise, with developers terminating their

⁷ CAP23 was not yet published when the CCAC 2022 Annual Review was published



capacity market contracts. These issues combined with existing social and economic growth driving electricity demand upwards means that the new generation capacity, especially renewable electricity, is urgently required. The scale of the capacity issue is clear, with significant capacity deficits forecasted across all scenarios for the remainder of the decade. In this context, the importance of wind energy becomes more apparent as it is estimated that 1 MW of wind capacity can provide enough electricity to supply approximately 650 homes⁸. Accordingly, the Proposed Development will serve to only contribute to meeting this increasing electricity demand.

With regard to the requirements needed to achieve the ambitious targets set in the Governments Climate Action Plan 2023, it is stated that:

"The electricity sector has a ceiling of 40 MtCO2eq. for the first budgeting period (2021-2025), equating to an average of 8 MtCO2eq. per annum. As emissions in 2021 were 9.98 MtCO2eq., electricity will need to achieve average annual emissions of circa 7.5 MtCO2eq. from 2022 to 2025.

At a time when the energy system is under severe pressure to ensure security of supply, amid projections of rapid electricity growth over the coming decade, the electricity sector has been set one of the smallest carbon budget allocations and the steepest decline (-75%) of all sectors. The scale of the challenge to meet the carbon budget programme is immense and requires policies to be moved from an 'end of decade' target trajectory to a 'remaining carbon budget' target."

In relation to the scale of the challenge, the CAP calls for "a major acceleration and increase in onshore wind turbines across the country." To accelerate renewable electricity generation a target of 9GW by 2030 of onshore wind is set, framed in the context of ensuring that renewable energy generation projects and associated infrastructure are considered to be "in the overriding public interest."

EirGrid have also released their Strategy 2020-2025: Transform the Power System for Future Generations which is driven by climate change and the need to transform the electricity sector. Currently, the electricity grid can operate with up to 65% of renewable power but by 2030 this must increase to 95%. SEAI's National Energy Projections to 2030 notes that wind energy deployment has "made the most significant contribution to RES-E to date. The historic build rate (2005-2010) was 180MW per year. Since 2010 the build rate has increased to an average of over 200MW per year. In 2017 the installed capacity increased by 335MW to just over 3.3GW total installed capacity." Furthermore, "Post 2020, as electricity demand continues to grow at an anticipated rate of 3% per annum, increasing levels of deployment will be needed just to maintain the share achieved in 2020."

Ireland faces significant challenges through efforts to meet its renewable energy targets, EU targets for renewable energy by 2030 and its commitment to transition to a low carbon economy by 2050. The proposed Glenora wind energy development will aid Ireland in addressing these challenges as well as addressing the country's over-dependence on imported fossil fuels. Through the production of renewable energy which will connect to the national grid the Proposed Development has the potential to be a major contributor to meeting the country's binding targets.

The additional wind energy output of approximately 158.4MW from the proposed Glenora Wind Farm will further assist Ireland's overall capability to meet its future targets. Ireland's 2030 target under the EU ESR on greenhouse gas reduction is a 30% reduction of emissions compared to 2005 levels by 2030. EPA Projections show that existing measures will achieve a reduction of 5% on 2005 levels by 2030, significantly short of the target. However, if measures with the higher ambition (with Additional Measures) scenario are implemented, the reduction target can be achieved.

⁸ https://www.iwea.com/about-wind/faqs



2.3.1.2 **Regulation (EU) 2022/2577**

The European Council adopted Regulation (EU) 2022/2577 on 22 December 2022 laying down a framework to accelerate the deployment of renewable energy (the Regulation). This has been in force since the 29th of December 2022 and is directly applicable for 18 months in each EU member state and can be extended. This Regulation establishes temporary rules of an emergency nature to accelerate the permit-granting process applicable to the production of energy from renewable energy sources, with a particular focus on specific renewable energy technologies or types of projects which are capable of achieving a short term acceleration of the pace of deployment of renewables in the Union.

"Renewable energy plants, including heat pumps or wind energy, are crucial to fight climate change and pollution, reduce energy prices, decrease the Union's dependence on fossil fuels and ensure the Union's security of supply".

Regulation (EU) 2022/2577 represents an unprecedented measure with significant potential to streamline the consenting process which is vital in this time of energy uncertainty. Therefore, it is clear that Regulation 2022/2577 represents a favouable position on the faster deployment of renewable energy projects.

2.3.1.3 **Project Compliance with EU Policy**

The proposed development is also considered to be fully in accordance with the above-mentioned EU Policy targets. The targets outlined in the 2030 Climate and Energy Framework are in line with the proposed wind farm development. An EU wide binding target of 27% renewable energy by 2030 and a target of at least 27% energy efficiency by 2030 are both targets that could be achieved by the implementation of the proposed development and similar projects. The target of increasing the binding target of the EU's energy mix from 32% to 40% by 2030 is also considered to be a target that would be achievable by the construction of schemes such as the one proposed. Similarly, in the Energy Roadmap 2050 which considers scenarios which will lead to achieving the EU's climate action and energy goals. The Roadmap notes that all scenarios show the biggest share of energy supply technologies in 2050 comes from renewables. Therefore, it is submitted that the proposed renewable energy development is in line with the EU Energy Roadmap.

The RePowerEU plan, aims at increasing the energy security within the EU and increasing the share of renewable energy onto the EU electricity grid. A part of this plan includes '*Speeding up renewables permitting to minimise the time for roll-out of renewable projects and grid infrastructure improvements*'. This will make the sector more efficient and reach the set goals faster. Therefore, it is considered that the Proposed Development is strongly supported by EU energy policy.

2.3.1.4 National Policy on Renewable Energy

Climate Action Plan 2023

The Climate Action Plan 2023 (CAP23) was published in December 2022 by the Department of the Environment, Climate and Communications. This outlines the actions required to 2035 and beyond to meet Ireland's commitment to becoming carbon neutral by 2050. CAP23 sets out a roadmap to deliver on Irelands climate ambition and is aligned to ensure that Ireland achieves its legally binding target (the Climate Action and Low Carbon Development (Amendment) Act 2021) of net-zero greenhouse gas emissions no later than 2050. A target aims for a reduction in emissions of 51% over the period 2018 to 2030 and in doing so, prevent / mitigate the potentially devastating consequences of climate change on Ireland's environment, society, economic and natural resources.

The CAP23 states that to do so, Ireland must harness the untapped indigenous renewable resources, and has a target of achieving 80% of energy being produced from renewable sources by 2030 (unchanged from the previous Climate Action Plan, 2022) with a target of 9GW of that being produced by onshore



wind. Measures set out in CAP23 to achieve these targets include to 'accelerate and increase the deployment of renewable energy to replace fossil fuels' (Section 12.1.4 CAP23). It is clear from the message and ambition of CAP23 that the drive to deploy renewable energy projects such as the Proposed Development in Ireland are critical to achieving the aims and objectives of CAP23 including the 9GW of onshore wind energy by 2030 and carbon neutrality by 2050.

"Achieving these ambitions will require a coordinated effort across Ireland and every economic sector will be involved. It requires no less than a national transformation over the coming years in how we work, travel, heat out homes, source our energy and use our land".

"Decarbonisation of the electricity sector is, as noted in CAP23, key to the decarbonisation of other sectors who will depend on electrification including transport, heating and industry. The increase in portion of renewable electricity of 80% by 2023 will come in part from a targeted 9GW of onshore wind. The plan notes: "Achieving further emissions reductions between now and 2030 requires a major step up in how we accelerate and increase the deployment of renewable energy to replace fossil fuels, deliver a flexible system to support renewables, and manage electricity demand".

Chapter 12 sets out the state of play, targets and actions for the decarbonisation of the Electricity sector. Carbon emissions from electricity have fallen by 45% between 2005 and 2020, falling by 19% between 2005-2012 and by 33% between 2012 and 2020. This trend is largely due to the availability of renewable energy generated electricity (a sixfold increase between 2005 and 2020) and an associated reduction in the use of carbon heavy fuels such as peat and coal.

Due to the scale of the challenge, and the recognition of central role of the electricity sector in achieving sector wide targets, the electricity sector has been allocated the smallest carbon budget and will require the steepest carbon emissions decline of all sectors – namely a reduction in carbon emission by -75% relative to 2018 baseline. Carbon budgets 1 and 2 allow for 30.02 MtCO2eq from the electricity sector up to 2025 and 20 MtCO2eq. from 2026-2030. This means an average of 8 MtCO2eq. per annum. Emissions for the period 2021 were 9.98 MtCO2eq., which is in exceedance of 8 MtCO2eq., which means that to keep on track, electricity will now have to achieve annual emissions of c. 7.5 MtCo2eq. from 2022 to 2025.

The measures set out for the electricity sector include *inter alia*:

- Reduce annual CO2eq. emissions from the sector to 3 MtCO2eq by 2031 (75% reduction compared to 2018);
- > Accelerate and increase the deployment of renewable energy to replace fossil fuels;
- > Accelerate the delivery of onshore wind, offshore wind and solar through a competitive framework to reach 80% of electricity demand from renewable energy by 2030;
- > Target 6GW of onshore wind and to 5 GW of solar by 2025;
- > Target 9 GW onshore wind, 8 GW Solar and at least 5 GW of offshore wind by 2030;
- > Align the relevant constituent elements of the planning and permitting system to support accelerated renewable energy development, supported by national policy and associated methodologies to inform regional and local planning policies, noting that Development Plans are obliged to set out objectives to facilitate energy infrastructure;
- > In line with the emerging EU frameworks, ensure that renewable energy generation projects, and associated infrastructure, will be considered to be in the overriding public interest.

White Paper on 'Ireland's Transition to a Low Carbon Energy Future' 2015 - 2030

On 12th May 2014, the Green Paper on Energy Policy in Ireland was launched which marked the start of a public consultation process on the future of Ireland's energy policy over the medium to long-term. The Department of Communications, Climate Action & Environment acknowledged that energy is an integral part of Ireland's economic and social landscape and that "*a secure, sustainable and competitive energy sector is central to Ireland's ability to attract and retain Foreign Direct Investment and sustain Irish*



enterprise. The three key pillars of energy policy are to focus on security, sustainability and competitiveness".

Following on from an extensive consultation process, a Government White Paper entitled '*Ireland's Transition to a Low Carbon Energy Future 2015-2030* was published in December 2015 by the (then) Department of Communications, Energy and Natural Resources ("DCENR"). This Paper provides a complete energy update and a framework to guide policy up to 2030. The Paper builds upon the White Paper published in 2007 and takes into account the changes that have taken place in the energy sector since 2007.

The policy framework was developed to guide policy and actions that the Irish Government intends to take in the energy sector up to 2030 and also reaching out to 2050 to ensure a low carbon future that maintains Ireland's competitiveness and ensures a supply of affordable energy. The Energy Vision 2050, as established in the White Paper, describes a '*radical transformation*' of Ireland's energy system which will result in GHG emissions from the energy sector reducing by between 80% and 95%, compared to 1990 levels. The paper advises that a range of policy measures will be employed to achieve this vision with emphasis on the generation of electricity from renewable sources, which there are plentiful indigenous supplies and increasing the use of electricity and bio energy to heat homes and fuel transport.

In this White Paper, the DCENR acknowledges that onshore wind is one of the cheapest forms of renewable energy in Ireland, stating that:

"Onshore wind continues to be the main contributor (18.2% of total generation and 81% of RES-E in 2014). It is a proven technology and Ireland's abundant wind resource means that a wind generator in Ireland generates more electricity than similar installations in other countries. This results in a lower cost of support."

As stated in CAP 2023, 'a major acceleration and increase in onshore wind turbines across the country, transformation of land use from other activities such as agriculture to solar PV, and a hitherto unseen level of electricity network upgrades and construction will be required, as a minimum' (Section 12.1.3) in order to meet the scale of the challenge of the decarbonisation of the electricity sector. The Proposed Development would contribute to the decarbonisation targets, providing a source of renewable energy to the national grid.

In summary, the actions set out in CAP23 are framed to achieve a 75% reduction in carbon emissions from the electricity sector relative to 2018 baseline by 2030. This reduction will be achieved through the execution of renewable energy projects, such as the one proposed which would see a potential installed capacity of 158.4MW, will offer significant benefits in terms of renewable energy production and reduction in greenhouse gas emissions by its net displacement of approximately 6,035,010 tonnes and 8,717,237 tonnes of Carbon Dioxide (CO2) per annum (Against EU FFC).

National Energy Security Framework

The National Energy Security Framework, published in April 2022, sets out the Government's response to Ireland's energy security needs in the context of the war in Ukraine. This Framework identifies a number of potential measures under the planning system that could better support the timely delivery of additional renewable energy sources and the required supporting infrastructure.

Of particular relevance to the subject application, the framework outlines proposals to speed up the country's shift to increased energy efficiency and indigenous renewable energy systems. The framework is divided into three key themes, with associated Government actions. Theme three relates to reducing dependency on imported fossil fuels which includes reducing demand for fossil fuels and replacing fossil



fuels with renewables. Relevant to the subject application and the development of wind renewable energy projects in general are the following responses:

Response 25: Align all elements of the planning system to fully support accelerated renewable energy development;

Response 26: Review grid connection arrangements for renewable electricity projects and the development of system services to accelerate the growth in renewable electricity;

Response 27: Accelerate investment in the electricity grid and the development of storage technologies.

The Proposed Development is aligned with the actions set out in the Energy Security Framework as it will contribute to an increase in indigenous renewable energy generation, reducing reliance on imported fossil fuels and increasing energy security for the State.

2.3.1.5 **Project Compliance with National Policy**

The proposed development of 22 No. wind turbines and associated infrastructure is also considered to be in line with National Policy objectives. The CAP23 as outlined herein was published to outline national actions required to meet EU climate targets. According to CAP23, Ireland aims to utilise its untapped native renewable resources and has set a goal of reaching 80% renewable energy production by 2030 and produce 9GW of wind by 2030. Measures are also outlined to accelerate the delivery of onshore wind. It is therefore considered that the proposed development of an additional 22 No. wind turbines with an approximate electricity generation capacity of 158.4MW would greatly aid Ireland in achieving its national targets and will also assist in reaching the renewable energy and carbon emission reduction targets at EU level.

The National Energy Security Framework identifies a number of measures to fast track Irelands transition to renewable energy projects. With regard to this, it is considered clear that the implementation of the proposed wind energy development would fully be in accordance with the framework by increasing the share of renewable energy onto the national grid and thereby accelerating Irelands transition to a low carbon energy future.

2.4 **Planning Policy Context**

2.4.1 **National Policy**

2.4.1.1 National Planning Framework: Project Ireland 2040

The National Planning Framework (NPF), published in February of 2018, forms the top tier of the national planning policy structure which establishes the policy context for the Regional Spatial and Economic Strategies (RSES) and local level development plans. In an effort to move away from developer led development to one informed by the needs and requirements of society up to 2040, a number of objectives and policies have been put in place in order for the country to grow and develop in a sustainable manner.

- > Developing a new region-focused strategy for managing growth;
- Linking this to a new 10-year investment plan, the Project Ireland 2040 National Development Plan 2018-2027;
- > Using state lands for certain strategic purposes;
- Supporting this with strengthened, more environmentally focused planning at local level; and



> Backing the framework up in law with an Independent Office of the Planning Regulator.

The NPF notes that the population of Ireland is projected to increase by approximately 1 million people by 2040 which will result in a population of roughly 5.7 million. This population growth will place further demand on both the built and natural environment. In order to strengthen and facilitate more environmentally focused planning at the local level, the NPF states that future planning and development will need to:

"Tackle Ireland's higher than average carbon-intensity per capita and enable a national transition to a competitive low carbon, climate resilient and environmentally sustainable economy by 2050, through harnessing our country's prodigious renewable energy potential."

A key focus throughout the NPF is the fostering of a transition toward a low carbon, climate-resilient society. In this regard, one of the stated key elements of the NPF is an Ireland which has a secure and sustainable renewable energy supply and facilitates the ability to diversify and adapt to new energy technologies. Key features identified in the NPF to facilitate the transition towards a low carbon energy future include:

- > A shift from predominantly fossil fuels to predominantly renewable energy sources.
- > Increasing efficiency and upgrades to appliances, buildings and systems.
- > Decisions around development and deployment of new technologies relating to areas such as wind, smart grids, electric vehicles, buildings, ocean energy and bio energy.
- Legal and regulatory frameworks to meet demands and challenges in transitioning to a low carbon society.

Relevant to the subject development, the National Strategic Outcome 8 (*Transition to Sustainable Energy*), notes that in creating Ireland's future energy landscape, new energy systems and transmission grids will be necessary to enable a more distributed energy generation which connects established and emerging energy sources, i.e. renewables, to major sources of demand. The successful transition to a low-carbon power system will depend on the pillars of 1) *Sustainability*, 2) *Security of supply* and 3) *Competitiveness.* A common theme underpinning these pillars is the need for a fit-for-purpose transmission and distribution energy network. Specifically, the NPF states that reinforcement of the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres, e.g. the functional purpose of the extant grid connection. Ireland's national energy policy under **Objective 55** aims to 'promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050'. The NPF aims to ensure that decisions that are made today meet our future needs in a sustainable manner.

"The manner in which we plan is important for the sustainability of our environment. Our planning system has influence across a wide range of sectors, both directly and indirectly and interacts with many common issues related to effective environmental management, including water services, landscape, flood risk planning, protection of designated sites and species, coastal and marine management, climate mitigation and adaptation, and land use change."

An overarching objective of the NPF is to foster a transition toward a low carbon, climate-resilient society, which reflects the policy ethos established at the European level of governance (e.g. climate change and renewable energy targets – Section 2.1). In this regard, one of the key themes of the NPF is the realisation of an Ireland which has a secure and sustainable renewable energy supply and the ability to diversify and adapt to new energy technologies. The NPF references the National Climate Policy Position (superseded by the then CAP 2019) which established the fundamental objective of achieving transition to a competitive, low carbon, climate-resilient and environmentally sustainable renewable energy supply for the country and acknowledges that *"rural areas have significantly contributed to the energy needs of the country and continue to do so"*. In this regard, the NPF states:



"In meeting the challenge of transitioning to a low carbon economy, the location of future national renewable energy generation will, for the most part, need to be accommodated on large tracts of land that are located in a rural setting, while also continuing to protect the integrity of the environment".

The NPF acknowledges that greenhouse gas emissions from the energy sector must be reduced by at least 80% by 2050 when compared to 1990 levels while ensuring a secure supply of energy exists. New energy systems and the maintenance / safeguarding of existing grid assets will be necessary for a more distributed, renewables focused energy system required to harness Ireland's considerable indigenous energy sources and *"connect the richest sources of that energy to the major sources of demand"*.

In regard to the above, it is clear that the provision of new renewable energy generation is in line with the aims and objectives of the NPF which seeks to transition to a low carbon economy.

2.4.1.2 **Project Compliance with the National Planning Framework**

With regard to the above, it is considered that the proposed wind energy development is in line with the National Planning Framework. This framework projects a population increase of 1 million people by 2040 and therefore recognises the strain and demand this will put on Irelands energy system. In order to ensure Ireland delivers on our renewable energy and carbon emission reduction targets, the NPF recognises the need for increased renewable energy onto the national grid.

This shift from fossil fuels is dependant upon schemes such as the one proposed to generate renewable energy. Given the projected population increase, it is considered that if the share of renewable energy onto the grid is not increased, Ireland will fail to reach the National and International targets on emission reductions. The addition of 22 wind turbines, with an estimated electricity generation capacity of 158.4MW, is believed to significantly contribute to Ireland's national targets and support the country in meeting its renewable energy and carbon emission reduction goals at the EU level.

2.4.1.3 **National Development Plan 2021 – 2030**

The National Development Plan 2021 – 2030 (NDP) was published on 4th October 2021 and sets out the major public investment projects identified by Government which are to play a significant role in addressing the opportunities and challenges faced by Ireland over the coming years such as Covid-19, Brexit, housing, health, population growth, and most relevant to the subject development, climate change. It is stated that the NDP 2021 – 2030 will be the *'largest and greenest ever delivered in Ireland'*, and in this regard, the NDP highlights that extensive consultation was undertaken to ensure that the plan adequately supports the implementation of climate action measures. Reflecting on the recent publication of the IPCC's 6th Assessment Report, the NDP notes that the Irish Government is fully committed to 'playing its part' to ensure that the worst climate change damage can be avoided, e.g. significant reductions in CO₂ and other greenhouse gas emissions as assisted by the achievement of both European and National renewable energy targets. Specifically, the NDP states that,

"The next 10 years are critical if we are to address the climate crisis and ensure a safe and bright future for the planet, and all of us on it.

The investment priorities included in this chapter [Ch. 13] must be delivered to meet the targets set out in the current and future Climate Action Plans, and to achieve our climate objectives. The investment priorities represent a decisive shift towards the achievement of a decarbonised society, demonstrating the Government's unequivocal commitment to securing a carbon neutral future."

Notwithstanding this, the NDP acknowledges that it is not its role to set out a specific blueprint for the achievement of Ireland's climate targets; but as noted above, facilitate capital investment allocations for the climate and environmental strategic priorities.



One of the key climate priorities outlined in the NDP pertains to establishing low-carbon and resilient electricity systems. More specifically, the plan sets forth a commitment to significantly increase the proportion of renewable electricity to as much as 80% by the year 2030. The NDP underscores this as an unparalleled dedication to the process of decarbonizing electricity provision. When compared to the existing CAP 2023 and its target of achieving an 80% renewable energy share by 2030, this commitment aligns harmoniously with the aspirations of the plan. Furthermore, it serves as a clear catalyst for promoting the implementation of novel renewable energy generators while also ensuring the protection and longevity of pre-existing assets, such as the development under consideration. It is noted that the reliability of electricity supplies will also be strengthened through investment in the electricity transmission and distribution grid. The focus of investment in regulated network infrastructure is to contribute to a long-term, sustainable and competitive energy future for Ireland. With regard to this, it is considered that the proposal of 22 No. turbines is in line with the national development plans goals of reaching our climate objectives.

2.4.2 **Regional Policy**

2.4.2.1 Northern and Western Regional Spatial and Economic Strategy

The Northern and Western Regional Assembly (NWRA) has a recognised leadership role in setting out regional policies and coordinating initiatives which support the delivery and implementation of the National Planning Framework (NPF). The primary vehicle for this is the preparation and implementation of the Regional Spatial and Economic Strategy (RSES).

The North and Western region is characterised by the RSES as having 'a unique natural endowment of ample carbon-neutral, energy supplies' such as wind. Specifically, the Western Region is stated as being 'particularly rich' in renewable energy resources dispersed across the region, particularly North Mayo. The RSES acknowledges that the region has a pivotal role in delivering a successful transition to Ireland's proposed low carbon economy with huge potential for growth in renewables. As such, there is 'still significant potential' for all new renewable energy outputs to the grid. In order to facilitate the growth of renewables within the region, the RSES notes that the NWRA aims to encourage stakeholders, i.e. industry, commercial etc., to be the first to facilitate new opportunities and concentrate on possibilities to further advance renewable energy generation and use.

These strategic aims are captured in Policy Objectives 4.16, 4.17 and 4.18:

- **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.
- **RPO 4.17**: To position the region to avail of the emerging global market in renewable energy by stimulating the development and deployment of the most advantageous renewable energy systems, including:
 - Stimulating the development and deployment of the most advantageous renewable energy systems;
 - Raising awareness and public understanding of renewable energy and encourage market opportunities for the renewable energy industry to promote the development and growth of renewable energy businesses; and
 - Encourage the development of the transmission and distribution grids to facilitate the development of renewable energy projects and the effective utilisation of the energy generated from renewable sources having regard to the future potential of the region over the lifetime of the Strategy and beyond.



RPO 4.18: Support the development of secure, reliable and safe supplies of renewable energy, to maximise their value, maintain the inward investment, support indigenous industry and create jobs

As indicated above, there is a clear precedent within the region to identify and capitalise on emerging opportunities associated with the transition to a decarbonised economy such as renewable energy generation. It should be noted, however, that the existing transmission network within the region is predominantly 110 kV with very little higher capacity 220 kV and 400 kV transmission infrastructure. As such, the RSES endorses the future development of the grid in order to safely facilitate more diverse power flows from surplus regional generation and also to facilitate future growth in electricity demand:

- **RPO 8.3**: The Assembly support the necessary integration of the transmission network requirements to allow linkages with renewable energy proposals at all levels to the electricity transmission grid in a sustainable and timely manner.
- **RPO 8.4**: That reinforcements and new electricity transmission infrastructure are put in place and their provision is supported, to ensure the energy needs of future population and economic expansion within designated growth areas and across the Region can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs. Ensure that development minimises impacts on designated areas.

The RSES is ultimately supportive of the future growth of renewable energy technology in the region and sets a clear precedent to identify and capitalise on those opportunities associated with the transition to renewable energy generation.

2.4.2.2 **Project Compliance with Regional Policy**

The RSES for the Northern and Western Region states that the region has a crucial role to play in Ireland transition to a low carbon future. It is considered that the provision on the proposed wind energy development would facilitate this just transition and is particularly in line with RPO 4.17 and 4.18 as outlined above. In the region, a noticeable trend has emerged to recognize and take advantage of emerging opportunities related to the shift towards a decarbonized economy, particularly in the realm of renewable energy generation and therefore the proposal is considered to be in line with Regional Policy.

2.4.3 **Local Policy**

2.4.3.1 Mayo County Development Plan 2022 - 2028

The Mayo County Development Plan 2022-2028 (the CDP) was formally adopted by Local Members at a special meeting on the 29th June 2022. The Plan came into effect on the 10th of August 2022. A Ministerial Draft Direction was issued to the Planning Authority, however, there are no relevant policies to the Proposed Development affected by the Direction. The CDP provides the framework within which the decision on the planning application is made.

The policies and objectives set out within the CDP have maintained strong linkages with the key aims and themes set out within the previous development plan. Climate change is again emphasised as one of the greatest global challenges with Mayo County Council acknowledging that continual action is needed for Mayo to become a low carbon and climate resilient county. The significance of climate change and the need for continued support / investment within renewable energy generation as part of the county's broader decarbonisation strategy is captured within the strategic of the CDP's Climate Action and Renewable Energy Chapter:

"The strategic aim of this chapter is 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".

Relevant to the Proposed Development the CDP maintains the current ethos that the provision of a safe, secure and reliable electricity supply is a critical component necessary to sustain economic growth in Co. Mayo and the broader region. In this regard, it is noted that Mayo County Council has been a leader in the development of renewable energy and will endeavour to play its part in promoting more sustainable renewable electricity generation. In the context of wind energy, the CDP states that the county has "enormous wind resource with the potential to underpin an entire new economy in the county" as evident by its current wind energy generation capacity of 266MW (Q1 2020), which is c. 6% of Ireland's overall wind energy production.

The development of renewable energy sources is central to the overall energy policy in Ireland. In setting out how the next iteration of the county development plan will contribute to realising overall national targets on renewable energy, the CDP indicates renewable energy target for the county over the next six years;

"In setting a realistic deliverable target for a county with a high wind potential like Mayo, a minimum target of 600MW over the plan period is considered achievable. The target would meet the energy demands of existing households in Mayo, as well as the proposed additional households for the county set out in the Core Strategy Table (Chapter 2). This renewable energy target for Mayo may need to be revised over the lifetime of the Plan to ensure alignment with the Northern and Western Regional Assembly's forthcoming Renewable Energy Strategy."

The CDP states that the county generates 266MW (Q1 2020) from 15 wind farms, which is approximately 6% of Ireland's overall wind energy production. It is important to highlight that the above minimum 100MW target is not exclusive to wind energy but all potential renewable energy streams such as solar, marine, geothermal and etc. The Council did not review Mayo County Council's Renewable Energy Strategy as part of the county development plan review process but it may be further revised during the plan in accordance with future legislative guidelines, e.g. the RSES and implementation of RPO 4.16 (Regional Renewable Energy Strategy).

Table 2-3 below sets out the relevant policies and objectives within the CDP which currently support the continued investment within renewable / wind energy generation in County Mayo.

Climate Action		Renewable Energy	
MCDP 2022-2028 Policies	Objectives	Policies	Objectives
CAP 1 - To support and enable the	CAO 1 - To support	REP 1 - To support	REO 1 - To co-
implementation and achievement of	and advance the	Ireland's renewable	operate with the
European and national objectives for	provision of	energy commitments	Northern and
climate adaptation and mitigation as	renewable energy	outlined in national policy	Western Regional
detailed in the following documents,	resources and	by	Assembly in
taking into account other provisions	programmes in line	facilitating the	identifying
of the Plan (including those relating	with the	development and	Strategic Energy
to land use planning, energy,	Government's	exploitation of a range of	Zones as areas
sustainable mobility, flood risk	National Renewable	renewable energy sources	suitable for larger,
management and drainage),	Energy Action Plan	at suitable locations within	energy generating
including the Climate Action Plan	(NREAP), the	the county, where such	projects,
(2019 and any subsequent versions).	Governments'	development does not	community and
	Energy White Paper	have a negative impact on	micro energy
	"Irelands Transition	the surrounding	production, whilst
	to a Low Carbon	environment (including	ensuring
	Energy Future"	water quality), landscape,	environmental
	(2015-2030) and any	biodiversity or local	constraints and a
	other relevant policy	amenities to ensure the	regional landscape

Table 2-3 Mayo County Development Plan 2022–2028 – Climate Action – Renewable Energy Policies / Objectives



Climate Action	Renewable Energy		
MCDP 2022-2028 Policies	Objectives	Policies	Objectives
	adopted during the lifetime of this plan.	long term sustainable growth of the county	strategy are considered.
CAP 4 - To support local, regional, national and international initiatives for climate adaptation and mitigation and to limit emissions of greenhouse gases through energy efficiency and the development of renewable energy sources, which make use of all natural resources, including publicly owned lands, in an environmentally acceptable manner		REP 3 - To actively encourage and support the sustainable development, renewal and maintenance of energy generation infrastructure in order to maintain a secure energy supply, while protecting the landscape, archaeological and built heritage and having regard to the provisions of the Habitats Directive.	REO 6 - To ensure all renewable energy proposal comply with the provisions of the Mayo County Council Renewable Energy Strategy 2011-2022 (or as updated).
CAP 6 - To support the transition to a competitive, low carbon, climate- resilient and environmentally sustainable economy by 2050, by way of reducing greenhouse gases, increasing renewable energy, and improving energy efficiency and supporting nature-based solutions to climate adaptation and mitigation that provides co-benefits		REP 6 - To work with relevant stakeholders and industry to establish Mayo as a centre of excellence for renewable energy research and development activities	REO 7 - To commence the review of the Mayo County Renewable Energy Strategy 2011-2022 within one year of adopting this plan and update as required in accordance with future legislative guidelines and consistency with the provisions of RPO 4.16 and RPO 5.2(b) of the RSES, 2020-2032.
CAP 9 - To support Ireland's renewable energy commitments outlined in national policy by facilitating the development and exploitation of all appropriate renewable energy sources at suitable locations within the county, where such development does not have a negative impact on the surrounding environment (including water quality), landscape, biodiversity or local amenities, so as to provide for further residential and enterprise development within the county		REP 7 - To promote the harnessing of wind energy to contribute toward decarbonising County Mayo, including new emerging by-product markets.	REO8-Tocommencethereview of the MayoCountyRenewable

MKC

The CDP states that upgrading of the transmission network will facilitate power flows from both renewable and conventional sources to maximise the use of existing power corridors. Forthcoming projects such as the North Connacht 110 kV upgrade may provide additional capacity for renewable energy from the North West to connect to the grid by reinforcing the electricity network, which will support Mayo County Council's aim to enhance the attractiveness of the county as a place to live, work and invest. Any forthcoming planning application will need to assess the potential grid connection option(s) available at



the time of lodgement in order to limit the risk of lacunae within the overall application. In this regard, the assessment of grid connection options as part of the planning application may be preferable to a single proposal.

The following draft policies and objectives are considered relevant to Proposed Development and national grid connections:

- **INP 21** To support the provision of high-quality, electricity infrastructure and development of an enhanced electricity supply, to serve the existing and future needs of the county and to facilitate new transmission infrastructure projects, including the delivery and integration of renewable energy proposals to the electricity transmission grid in a sustainable and timely manner, whilst seeking to minimise any adverse impacts on local communities and protect and maintain bio-diversity, wildlife habitats, scenic amenities, including protected views and nature conservation;
- **INO 38** To ensure the provision, where feasible, of electricity cables located underground;
- **INO 39** To seek the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity transmission grid, in a sustainable and timely manner.

As demonstrated above, the Proposed Development is broadly consistent with the overall International, National and Regional policy objectives to increase deployment of renewable energy resources in the context of climate change, climate mitigation, renewable energy targets and sustainability as referenced in earlier sections this report.

2.4.3.2 Mayo Renewable Energy Strategy 2011 - 2020

The Renewable Energy Strategy (RES) for County Mayo 2011-2020 (2011) sets out guidance designed to allow County Mayo to both contribute to meeting the national legally binding targets while also capitalising on those opportunities associated with the generation and harnessing of renewable energy in a sustainable manner. The RES was not revised as part of the DCDP, however, Objective REO 7 clearly indicates that the review of the RES will commence within one year of adaptation of the new CDP.

The RES's vision for Mayo's renewable development strategy is established on the principle that the provision of energy through renewables must take place in a sustainable manner in order to protect the County's natural amenity and local economies dependent on these assets, e.g. tourism, as reproduced below:

"The renewable energy development vision for County Mayo is to harness the energy and economic potential of County Mayo presented by renewable technologies in order to provide benefits for both local communities and the global environment. In doing so, the elements of the natural, cultural (architectural and archaeological) and landscape heritage that define Mayo for local people and visitors alike will be protected. It is recognised, however, that change is an integral part of cultural heritage and that in order for communities and businesses to thrive Mayo needs new developments. Renewable energy projects will, therefore, be developed in ways that protect the integrity of environmentally designated sites; maximise local and regional benefits; and minimise or avoid negative impacts on the environment and society."

Lands classified under the RES's tiered strategic wind energy strategy are considered 'the most appropriate for renewable energy developments'. The definitions of the on-shore wind energy classifications, as per the Mayo Renewable Energy Strategy 2011-2020 are outlined below –

- > **Priority Areas** are areas which have secured planning permission and where on shore wind farms can be developed immediately.
- **Tier 1 Preferred (Large Wind Farms)** are areas in which the potential for large wind farms is greatest.



- Tier 1 Preferred (Cluster of Turbines) are areas identified as being most suitable for smaller clusters of wind turbines (clusters of up to three to five turbines depending on site conditions and visual amenity).
- Tier 2 Open for Consideration identifies areas which may be considered for wind farms or small clusters of wind turbines but where the visual impact on sensitive or vulnerable landscapes, listed highly scenic routes, scenic routes, scenic viewing points and scenic routes will be the principal consideration. The Tier 2 classification will be reviewed by the Council following a determination by EirGrid of grid infrastructure for the County.

Notwithstanding, the RES states that the "Planning Authority will consider all proposed renewable energy developments submitted through the planning system and, irrespective of the wind energy classifications identified within the Strategy, each will be assessed on the principles of proper planning and sustainable development.⁹"

The RES also states that Applicants applying for planning permission for renewable energy developments are required to demonstrate that any proposed renewable energy developments comply with the requirements set out Section 6.5 of the WES along with requirements set out in the Mayo County Development Plan and any national guidelines in relation to the location of renewable energy developments. These mitigation requirements relate to *inter alia*, Biodiversity and Flora and Fauna; Population and Human Health; Soils and Geology; Water Protection; Noise; Climatic Factors; Flooding; Transport Infrastructure; Waste Management; Energy Infrastructure; Cultural Heritage; and Landscape. It is noted that an assessment of the Proposed Development against each of these factors is provided throughout the EIAR submitted with this application and which demonstrates that no significant impacts on the receiving environment are predicted.

Having regard to the above, the following section sets out a brief summary of how the Proposed Development complies with the mitigation requirements applicable to such a development, however further detailed analysis is provided in the relevant EIAR chapters:

- Wind farm developments will only be considered within 500m of sensitive receptors (e.g. residential properties) where the developer has received witnessed written consent from the owner/occupier of such properties consenting to the location of the development within 500m of their property (a significant minimum separation distance from any residential dwelling (occupied and derelict) of 1,179m, i.e. distance between nearest turbine (T04) to the nearest dwelling (H1) has been achieved with the project design. Refer to Section 5.1 of the EIAR for further details).
- Landslide susceptibility and slope stability risk assessments shall be carried out by a suitably qualified person(s) in conjunction with the Geological Society Ireland (The Geotechnical & Peat Stability Assessment Report, included as Appendix 8-1 of this EIAR concludes that the proposed Glenora Wind Farm site has an acceptable margin of safety in relation to peat instability and is considered to be at **low** risk of peat failure).
- > The developer will be required to ensure that the Proposed Development will not have a negative impact on freshwater pearl mussel and its habitat; fish spawning grounds; fish migration routes; access to fishing grounds; and water quality during installation, operation and maintenance of any renewable energy development (The proposed drainage measures and controls for the wind farm site, refer to (Section 9.3.13 of the EIAR), will ensure that the proposed Glenora Wind Farm development will not have a negative impact on water quality, aquatic habitats or species.).
- > Proposals for renewable energy development shall be required to demonstrate that connection to the national grid can be carried out in a sustainable manner; (the proposed

⁹ Renewable Energy Strategy for Co. Mayo 2011 – 2020, pg 52



grid connection will be subject to a separate planning application and has been assessed under the EIAR as not having any cumulative significant effects with the Proposed Development); and

Renewable energy developments shall be sited and designed to minimise the impact to visual amenity of the surrounding area; (The Landscape and Visual Impact Assessment concludes that the sensitivity of the residential visual amenity in the surrounding area of the subject development is reduced by the lack of settlements and limited numbers of dwellings in proximity of the site.

The Proposed Development project site is designated by the RES as a strategic wind energy region and predominantly comprises a mix of Tier 1 (Preferred – Larger Wind Farms) and Tier 2 designated lands through the central region of the site with unclassified lands contained to the northern and eastern boundary extents as shown on Figure 2-2. The planning application has demonstrated that the project site can adequately accommodate the Proposed Development without significant adverse impacts to environmental amenities and sensitivities, and therefore, is fully in accordance with National, Regional and Local planning policy. The Environmental Impact Assessment Report, Natura Impact Statement and all supporting assessments provide a robust body of evidence demonstrating that the receiving environment has the capacity to support/co-exist with the proposed wind farm without significant adverse effects. This documentation is intended to provide the consenting authority with sufficient comfort and robust appropriate conclusions to facilitate a positive decision.



Figure 2-2. Strategic Wind Energy Designations

Justification of the Site in the context of the Renewable Energy Strategy

A comprehensive justification for the proposed development and how it aligns with the aims and policies at all levels of governance is provided in a separate "Planning Report" document enclosed with this application.



2.4.4 Additional Policy Support

2.4.4.1 **DoEHLG Wind Energy Guidelines 2006**

In June 2006, the then Department of Environment, Heritage and Local Government (DoEHLG) published '*Wind Energy Development Guidelines for Planning Authorities*' (the Guidelines) under Section 28 of the Planning and Development Act, 2000. The aim of these guidelines was to assist the proper planning of wind power projects in appropriate locations around Ireland. The Guidelines highlight general considerations in the assessment of all planning applications for wind energy. They set out advice to planning authorities on planning for wind energy through the development plan process and in determining applications for planning permission. They contain guidelines to ensure consistency of approach throughout the country in the identification of suitable locations for wind energy development.

Each wind project has its own characteristics and defining features, and it is therefore impossible to write specifications for universal use. Guidelines should be applied practically and do not replace existing national energy, environmental and planning policy. While the 2006 Guidelines remain the relevant guidelines in place, at the time of lodgement, An Bord Pleanála are only required to have regard to the guidelines and can (and do) consider updated best practice standards/requirements/specifications in assessing impacts and the proper planning and sustainable development of the area.

2.4.4.2 **DoHPCLG Interim Guidelines for Planning Authorities on Statutory Plans, Renewable Energy and Climate Change 2017**

In July 2017, the (then) Department of Housing, Planning, Community and Local Government (DoHPCLG) published '*Interim Guidelines for Planning Authorities on Statutory Plans, Renewable Energy and Climate Change*' under Section 28 of the Planning and Development Act 2000. Planning authorities are obliged to have regard to guidelines issued pursuant to Section 28 in the performance of their functions under the Planning and Development Act 2000 (as amended).

The guidelines state that it is a specific planning policy requirement under Section 28(1C) of the Act, that in making a development plan with policies or objectives that relate to wind energy developments that a Planning Authority must:

- * "Ensure that overall national policy on renewable energy as contained in documents such as the Government's 'White Paper on Energy Policy - Ireland's Transition to a Low Carbon Future', as well as the 'National Renewable Energy Action Plan', the 'Strategy for Renewable Energy' and the 'National Mitigation Plan', is acknowledged and documented in the relevant development plan or local area plan;
- Indicate how the implementation of the relevant development plan or local area plan over its effective period will contribute to realising overall national targets on renewable energy and climate change mitigation, and in particular wind energy production and the potential wind energy resource (in megawatts); and
- Demonstrate detailed compliance with item number (2) above in any proposal by them to introduce or vary a mandatory setback distance or distances for wind turbines from specified land uses or classes of land use into their development plan or local area plan. Such a proposal shall be subject to environmental assessment requirements, for example under the SEA and Habitats Directives. It shall also be a material consideration in SEA, when taking into account likely significant effects on climatic factors, in addition to other factors such as landscape and air, if a mandatory setback or variation to a mandatory setback proposed by a planning authority in a development plan or local area plan would create a significant limitation or constraint on renewable energy projects, including wind turbines, within the administrative area of the plan."



2.4.4.3 Department Circular PL5/2017

On the 3rd of August 2017, the (then) Department of Housing, Planning and Local Government issued Circular PL5/2017 to provide an update on the review of the wind energy and renewable policies in development plans, and the advice contained within a previous Departmental Circular PL20-13. Circular PL20-13 advised that local authorities should defer amending their existing Development Plan policies in relation to wind energy and renewable energy generally as part of either the normal cyclical six-yearly review or plan variation processes and should instead operate their existing development plan policies and objectives until the completion of a focused review of the Wind Energy Development Guidelines 2006. The new circular (PL05/2017) reconfirms that this continues to be the advice of the Department.

The Department circular also sets out the four key aspects of the *preferred draft approach* being developed to address the key aspects of the review of the 2006 Wind Energy guidelines as follows:

- > The application of a more stringent noise limit, consistent with World Health Organisation noise standards, in tandem with a new robust noise monitoring regime, to ensure compliance with noise standards;
- > A visual amenity setback of 4 times the turbine height between a wind turbine and the nearest residential property, subject to a mandatory minimum distance of 500 metres between a wind turbine and the nearest residential property;
- > The elimination of shadow flicker; and
- > The introduction of new obligations in relation to engagement with local communities by wind farm developers along with the provision of community benefit measures.

2.4.4.4 IWEA Best Practice Guidelines for the Irish Wind Energy Industry 2012

The Irish Wind Energy Association (IWEA) (now Wind Energy Ireland) published updated Wind Energy Best Practice Guidelines for the Irish Wind Industry in 2012. The guidelines aim to encourage and define best practice development in the wind energy industry, acting as a reference document and guide to the main issues relating to wind energy developments. The purpose of the guidelines is to encourage responsible and sensitive wind energy development, which takes into consideration the concerns of local communities, planners, and other interested groups. The guidelines outline the main aspects of wind energy development with emphasis on responsible and sustainable design and environmental practices, on aspects of development which affect external stakeholders, and on good community engagement practices. In approaching the development of IWEA's guidelines the aim was to be complementary to the Department of the Environment Heritage and Local Government's 'Wind Energy Development Guidelines' (2006).

2.4.4.5 IWEA Best Practice Principles in Community Engagement and Community Commitment 2013

IWEA extended its guidance with the publication of this Best Practice in Community Engagement and Commitment. IWEA and its members support the provision of financial contributions by wind farm operators to local communities and have sought to formulate best practice principles for the provision of a community commitment. The document sets out IWEA's best practice principles for delivering extended benefits to local communities for wind farm developments of 5 Megawatts (MW) or above. Best Practice Principles of community engagement when planning the engagement strategy and preparing associated literature are also outlined in the document. The aim of these guidelines is to ensure that the views of local communities are taken into account at all stages of a development and that local communities can share in the benefits.

Further details on the community engagement that has been undertaken as part of the Proposed Development are presented in Section 2.5 below.



In December 2016, the (then) Department of Communications, Climate Action and Environment (DCCAE) issued a Code of Practice for wind energy development in relation to community engagement. The Code of Good Practice is intended to ensure that wind energy development in Ireland is undertaken in adherence with the best industry practices, and with the full engagement of local communities. Community engagement is required through the different stages of a project, from the initial scoping, feasibility and concept stages, right through construction to the operational phase. The methods of engagement should reflect the nature of the project and the potential level of impact that it could have on a community. The guidelines advise that ignoring or poorly managing community concerns can have long-term negative impacts on a community's economic, environmental or social situation. Not involving communities in the project development process has the potential to impose costly time and financial delays for projects or prevent the realisation of projects in their entirety. Community engagement in relation to the Proposed Development is discussed in full in Section 2.5 below.

2.4.4.6 **Draft Guidelines**

DoEHLG Wind Energy Guidelines 2006 (Revisions)

Further to information set out in Section 2.2.4.1 in relation to the 2006 Wind Energy Guidelines it should be acknowledged that the (then) Department of the Environment, Community and Local Government published proposed revisions to the guidelines in December 2013 as part of a targeted review relating to Noise, Proximity and Shadow Flicker for discussion. Revisions to the Wind Energy Guidelines continue to be considered and draft revisions were published in December 2019, these are further discussed below.

Draft Revised Wind Energy Development Guidelines, December 2019

The (then) Department of Housing, Planning and Local Government published the *Draft Wind Energy Guidelines* (referred to as the Draft Revised Guidelines) in December 2019 and these Draft Guidelines were under public consultation until 19th February 2020. Following the previous 2013 consultation and subsequent detailed engagement between the relevant Government Departments, a "preferred draft approach" to inform and advance the conclusion of the review of the 2006 guidelines was announced in June 2017.

In line with the previously stated "*preferred draft approach*", the 2019 Draft Guidelines primarily focus on addressing a number of key aspects including, but not limited to:

- > Acceptable noise thresholds and monitoring frameworks;
- > Visual amenity setback and spacing;
- > Control of shadow flicker;
- Compliance with Community consultation and dividend requirements, as included within the obligatory Community Report; and
- > Consideration of the siting, route and design of the proposed grid connection as part of the whole project.

The design of the proposed project has taken account of the "preferred draft approach" as articulated by the Department in June 2017, and accordingly, has been developed with the provisions of the current Draft guidelines in mind.

Similar to the 2006 Guidelines, the Draft Revised Guidelines also state that underground grid connections for wind energy projects are considered the most appropriate environmental and/or engineering solution (e.g. default approach), particularly in sensitive landscapes. The EIAR is cognisant of the Draft Revised Wind Energy Development Guidelines and will address each key matter (e.g. noise and shadow flicker standards) in turn within the relevant sections of this EIAR. As demonstrated in the subsequent chapters, the Proposed Development will not result in any likely significant effects on the receiving environment. In relation to the Shadow Flicker, the Proposed Development can satisfy the draft guidelines requirement as this is an operational matter that can be controlled by the SCADA system if necessary. In relation to



the noise elements of the Draft Guidelines, it is this section that has given rise to the most scrutiny from industry experts who have sought significant amendments and clarifications. While the outcome of the public engagement process on the Draft Revised Guidelines is not yet known, the operational noise parameters can be controlled using the SCADA system, and therefore, the Glenora renewable energy development will ultimately comply with future guidelines should they be adopted/finalised during the consideration period of the current application. According to the Climate Action Plan 2021, the Revised Guidelines are expected in Q2 2023.

2.4.4.7 **Compliance with Design Guidelines**

2006 Wind Energy Development Guidelines for Planning Authorities were issued by the then Department of Environment, Heritage and Local Government (DoEHLG) in June 2006.

The aim of these guidelines was to assist the proper planning of wind power projects in appropriate locations around Ireland. The Guidelines highlight general considerations in the assessment of all planning applications for wind energy.

The Department of Housing, Planning and Local Government published the Draft Wind Energy Guidelines (referred to as the Draft Guidelines) in December 2019 and they remain in draft at the time of writing.

The design of the proposed project has taken account of the "preferred draft approach" as articulated by the Department in June 2017, and accordingly, has been developed with the provisions of the Draft Guidelines in mind (for example in relation to 4 times turbine tip height set back distance from third party sensitive receptors).

At time of writing, the Draft Guidelines have not yet been adopted, and the relevant guidelines for the purposes of section 28 of the Planning and Development Act 2000, as amended, remain those issued in 2006. Notwithstanding this, however, due to the timelines associated with the planning process for renewable energy projects and the commitment within the Climate Action Plan 2023 to publish new draft guidelines in 2023 and final guidelines 2024, it is possible that the new guidelines are adopted during the consideration period for the current proposed development.



2.5 **Planning History**

This Section of the EIAR sets out the relevant planning history of the Proposed Development site, planning applications in the vicinity of the site and other wind energy applications within the wider area. The period adopted for the purposes of this search is from 2013 – 2023, adopting the approach that any development permitted prior to that period has either expired or has been constructed and forms part of the baseline. This range was included to take into account 10 year implementation periods. For the purposes of reviewing and stating the relevant planning history for this project the following criteria have been adopted in relation to the various elements of the Proposed Development:

- 1. All planning applications which overlap or are within the red line planning application boundary of the current Proposed Development have been identified.
- 2. A buffer zone of c. 20 kilometres was established from the redline application boundary of the Proposed Development in order to identify other wind farm sites in the wider area. For the purposes of this EIAR the planning history was extended to this wide range for wind farm developments due to the nature of the projects, potential for cumulative visual and landscape effects to arise with the Proposed Development as identified in Chapter 12: Landscape and Visual Assessment.
- 3. Non-wind energy related planning applications within c. 2km of the turbine infrastructure were investigated. This search area is considered reasonable and was informed by the nature and scale of the Proposed Development and the potential impact on the surrounding environment (for example the reach of Shadow Flicker from individual turbines). This set back distance takes a conservative approach and exceeds the requirement of a 4 times tip height set back from turbines to residential dwellings.
- 4. The planning history covers the period from 2013-2023, based on the assumption that any permitted development prior to that date has either expired or has been constructed and therefore forms part of the baseline.
- 5. Finally, planning applications within a 200m distance of the proposed grid connection route were searched for. As the underground electrical cabling of the Proposed Development has limited scope for cumulative impacts to arise given its localised nature. For the cable route localised impacts arise from construction period only as all other activities continue once it is in place.

2.5.1 **Applications Within the Proposed Development Site**

A desk-based planning search was undertaken for the cumulative assessment study areas as defined by items 1-5 above using the Mayo County Council and An Bord Pleanála's online planning portal in December 2023. There have been no planning applications lodged to Mayo County Council for development on land located within the overall study area post 2017. Airtricity's Glenora Wind Farm and Coillte's Cluddaun Wind Farm were lodged within the planning application boundary and are therefore included in this study for completeness. These applications are outlined in greater detail below:

Mayo County Council - proposed Airtricity Glenora Wind Farm (Planning Reference 03/1383)

On the 11th of June 2003, Airtricty Developments (Ireland) LTD & Coillte Teoranta applied for planning permission for the following development:

"construct a wind farm consisting of 29 wind turbines(max hub height of 65m and max blade diameter 80m, with a total height not exceeding 100m), a 110 kv sub station incuding pylon and control building, one 65m high meteorological mast, construction and upgrading of site entrances, site tracks and associate works"



Following a request for further information by Mayo County Council on the 1st of August 2003, which was subsequently responded to by the applicant, Mayo County Council refused permission for the proposed development on the 17th of February 2004. The Planning Officer outlined the following reasons for refusal *inter alia:*

"The proposed development is premature in the absence of a comprehensive wind energy strategy for the county and it is an objective of the Mayo County Developing Plan 2003- 2009 to prepare such a strategy as a matter of priority. The proposed development would seriously prejudice the outcome of such a strategy and the proposed development would therefore be contrary to the proper planning and development of the area"

"insufficient information has been submitted with the application to determine the exact effects that proposed development will have on the surrounding area, an area designated as vulnerable in the landscape appraisal in the Mayo county development plan 2003 - 2009. In particular the applicant has not adequately addressed the potential impact of the proposed development on the visual amenity, water quality and ground conditions of the area."

This decision by Mayo County Council was subject to a first party appeal. In refusing permission for the development, An Bord Pleanála set out 2 No. grounds for refusal. These reasons concerned the location of the proposed site on the slopes of Maumakeogh Mountain and the potential visual prominence of the development on at this location. It was also outlined that:

"it is considered that the proposed wind farm sited at this location, which would be inter visible with existing on permitted wind farm developments at Bellacorick would constitute unobtrusive development which would detract from the rural character and scenic amenities of this sensitive and vulnerable area".

The second condition made reference to the absence of a wind energy strategy for county Mayo:

"It is considered that the proposed wind farm development at this location would be premature pending the preparation of a wind energy strategy for county Mayo"

In light of the above reasons for refusal it is worth noting that a Renewable Energy Strategy for County Mayo was adopted by Mayo County Council in 2011 and a comprehensive EIAR is submitted with this application. As such, these refusal reasons are not relevant to the proposed development. The planning policy has also significantly changed since 2003 in favour of renewable energy developments, which is further highlighted by the introduction of Renewable Energy Strategies.

An Bord Pleanála - proposed Cluddaun Wind Farm (ABP Ref. 16.PA0031)

On the 10th of October 2013, Coillte lodged an application to An Bord Pleanála for the following development:

The proposed development comprises various elements including, inter alia:

- 38 turbines reaching a maximum height of 150m (hub up to 100m, blades up to 60m),
- 4 turbines at a maximum height of 125m (hub up to 80m, blades up to 45m),
- 6 turbines totalling a maximum height of 115m (hub 70m, blades 45m),
- 2 permanent meteorological masts up to 100m,
- 4 temporary meteorological masts also up to 100m,
- 1 110 kV electrical substation with 2 control buildings,



- 2 x 33kV substations, each with 1 control building,
- Underground cabling and related infrastructure,
- Borrow pits,
- Wind farm operation and maintenance building housing a recreation hub, ancillary parking, and an access point for construction traffic via an existing N59 site entrance through Bord na Móna lands.

In their report, the Planning Inspector recommended refusal for the following reasons, inter alia:

- Potential for adverse impacts on Bellacorick Bog Complex cSAC, Glenamoy Bog Complex cSAC, Inagh Bog NHA, and Ummerantarry Bog NHA;
- Potential impact on the hydrology of the area;
- Potential impact on protected species of flora;
- Potential impact on archaeological heritage.

Following an oral hearing which commenced on the 8th of April 2014 and closed on the 22nd of May 2014, Cluddaun Wind Farm was refused permission by An Bord Pleanála on the 18th of May 2015.

It should be noted that only a small portion of this application is within the red line boundary of the Proposed Development. The application boundary of the Cluddaun wind farm extends to an area within the Proposed Development site to include a standalone borrow pit. No wind energy infrastructure was proposed within the Proposed Development site.

2.5.1 Wind Energy Applications Within 20km Application Boundary

Relevant planning history of potential cumulative wind energy projects are considered to be those within c. 20km of the Proposed Development, those that have not been listed previously. These are set out in Table 2-4 below. Other wind energy applications not listed below have either expired or were lodged prior to 2013. Refer to Figure 2-3.

Pl. Ref	Description	Decision			
Bellacorick Wind Farm					
20834 (ABP 311157)	10-year permission to develop an electricity service, entailing the laying of approximately 10.4 kilometres of 38kv underground cable from the granted Sheskin wind farm to connect the wind farm to the national grid at the existing Bellacorick 110kv ESB station. the proposed grid connection will be installed along existing private tracks, the public roadway and a short section of private agricultural land	Granted by ABP 31/08/2022 subject to 7 conditions.			
Mayo CC Ref: 19457	Amendments to existing planning permission PL5/825 for 8 turbines with an overall max height of 150m, amendments to include - an increase in the overall maximum height of the turbines from 150m to 176m (turbines 1-3) and from 150m to 165m (turbines 4-8) comprising a tower 95-120m high to	Granted by MCC 28/01/2020 subject to 51 conditions.			

 Table 2-4 Wind Energy Applications Within 20km of Application Boundary



	which three blades of 55-70m length will be attached. An	
	increase in the maximum height of the permanent met mast from 100m to 120m. an increase in the diameter of the foundation base from 22m to 26m. An amendment to condition no 46 to revise the community benefit payment to 2 euro//MWH to be consistent with government guidance set out under the renewable electricity support scheme. the red line boundary and all other aspects of the permitted development will remain unchanged.	
Oweninny V	Nind Farm	
ABP: PA0029	Proposed Oweninny Wind Farm and associated works, Bellacorick,	Granted by ABP 02/06/2016 subject to 20 conditions
ABP: 307261	Section 146B Planning application for amendments to An Bord Pleanála case reference PA0029 for Oweninny Wind Farm	Alter decision - Not a material Alteration (No EIS) (27/07/2020)
ABP: 309375	Pre-App Consultation - Oweninny Wind Farm Phase 3. Between 10 and 20 wind turbines (including tower sections, nacelle, hub, rotor blades) with an approximate capacity of 90 MW and a maximum blade tip height of 200 metres.	Determined it is an SID – 04/04/2022
ABP: 316178	Proposed development of Oweninny Wind Farm Phase 3 consisting of 18 wind turbines.	Decision due by 29/09/2023
Killala Com	munity Wind Farm	
17619	10 Year planning permission for 5 turbine wind farm. Proposed Development will be located in the townlands of Magherabrack, Mullafarry, Tawnaghmore Lower, Meelick and Tawnaghmore Upper, Killala approx. 1.3km south of Killala. development is an updated application to the consented 6 turbine wind farm p09/780. proposal is for a wind energy development comprising 5 electricity generating wind turbines, each with a rotor diameter not exceeding 103.2m a hub height not exceeding 73.5m and a blade tip height of not exceeding 126m. the development will include a meteorological mast not exceed 82m in height, internal underground electrical cabling, a substation building, an external underground grid connection cable and ducting to the existing 110kv Tawnaghmore substation, associated grid substation works, associated site access roads and ancillary site works including upgrades to existing site access, a temporary construction compound and haulage route works. the max output capacity of the wind farm will be up to 18mw and has an intended operation life of 25 years	Granted by MCC 15/02/2018 subject to 19 conditions
19260	25 Year permission for a single electricity generating wind turbine with an overall maximum height of up to 125m. The development will also consist of a turbine hardstand, access track of c.394m, internal cable trench of c.1,775m and ancillary site works. The planning application is accompanied by a Natura Impact Statement	Granted by MCC 15/10/2019 subject to 12 conditions


Dooleg More Single Turbine				
20467	Single wind turbine generator and 20kV grid connection to Bellacorick 110kV substation	Granted by MCC 25/03/2021 subject to 15 conditions		
Bunnahowe	n Wind Farm			
18873	Permission to modify the existing permission, p08/1997, to erect three (3) 1mw turbines, control house and ancillary associated works	Granted by MCC 10/03/2019 subject to 6 conditions		
Kilsallagh W	/ind Farm			
ABP: 312282	Proposed Kilsallagh Wind Farm consisting of 13 wind turbines and ancillary equipment including 110kV substation infrastructure.	Pre-App consultation request lodged 21/12/2021		
Sheskin Sou	th Wind Farm			
ABP: 315933	Proposed development of 21 no. wind turbines and all associated works.	Lodged on 28 th February 2023		
Tirawley Wi	nd Farm			
ABP: 315864	Construction of up to 31 wind turbines (Tirawley Wind Farm), a permanent 110kV substation, 110kV underground cable and grid connection to the existing 110kV substation at Tawnaghmore Co. Mayo.	Pre-App consultation request lodged 21/02/2023		
Keerglen W	Keerglen Wind Farm			
Not yet lodged		Project is still in the design process.		

Consented ABO Sheskin Wind Farm

ABO Wind Ireland Ltd. lodged a planning application under Pl Ref. 15/825 to the Planning Authority on the 21st December 2015 for 8 no. wind turbines with an overall blade tip height of up to 150m and ancillary site development works. Within the lodged application documentation, ABO emphasised the development's proximity to the larger Oweninny Wind Farm and the site's predominantly Tier 1 designation in arguing that ABO Sheskin Wind Farm should be read in conjunction with Oweninny rather than as a separate visually obstructive development. The applicant also emphasised the use of varying turbine heights between the two wind farm in order to compliment the surrounding topography.

The Planning Authority (MCC) did not raise any concerns with regard to potentially significant effects on landscape and visual amenity arising from the Proposed Development nor did they issue any further queries on these matters within the Request for Further Information (RFI) on the project. The RFI (dated 22^{nd} February 2016) comprised 16 no. queries predominantly relating to lodged Natura Impact Statement and its assessment methodology. These issues were adequately resolved by ABO within their RFI response, which included an amended NIS, and have been reviewed by the EIA Project Team in order to identify any items of relevance in the context of the Sheskin South project. The Planning Authority ultimately granted permission for the development on the 7th December 2016 without appeal proceedings.





ABO lodged a second application on ABO Sheskin Wind Farm (Pl Ref. 19/457) to the Planning Authority on the 12th June 2019 for amendments to the extant permission (Pl Ref . 15/825), including an increase in the overall maximum height of the turbines from 150m to 176m (turbines 1-3) and from 150m to 165m (turbines 4-8) and increases in height of the permanent met mast from 100m to 120m. Within their assessment of the proposal, the Authority highlights that, while it is reasonable to optimise wind energy infrastructure in Tier 1 and Tier 2 areas, this development should not be detrimental to the visual amenity of the wider area. In this context, the Authority concluded,

"The increased visual impact arising from the increases in turbine heights at 165m and 176m is considered to be relatively indiscernible, and as such, there are no concerns in relation to landscape protection particularly in light of the permitted development on site."

The Planning Authority granted permission for the development on the 28th January 2020, which was not subject to any subsequent appeal proceedings.

ABO most recently lodged an application to Mayo County Council under PL Ref. 20/834 on the 10th November 2020 in relation to the ABO Sheskin Wind Farm's proposed national grid connection comprising c. 10.4km of 38 kV underground cable from the consented wind farm to the 110 kV Bellacorick substation. The underground cable route corridor encompasses private track, the public roadway (L52926 and N59) and a short section of private agricultural land. Currently, the application is subject to an appeal (ABP: 311157).

2.5.2 Applications in the Vicinity of the Turbine Infrastructure

Following a desktop review of the Mayo County Council online planning portal there have been no new residential development applications within c. 2km of the proposed turbine infrastructure lodged in the last 5 years. The approach taken considers any permitted development identified prior to 2013 to be either expired or constructed (and therefore forms part of the baseline).

The study area is located in a rural setting with the majority of the land covered in dense coniferous forestry with low density residential development in the surrounding area. This suggests that the area is unsuitable for residential development. Previous planning applications are generally confined to lands to the northeast (clustered around Ballycastle and its environs– c. 4.8km) and to the east towards Gurran (1.5km) and Ballykinlettra (2.7km). The most recent residential development granted applications have been listed below:

Pl Ref. No: 20/347: Construct dwelling house, proprietary effluent treatment system, percolation area and detached domestic shed (Conditional Grant - 01/03/2021)

Pl Ref. No: 19/880: Demolition of semi habitable dwellinghouse and outbuilding, construction of single storey dwelling house with separate garage, construction of waste water treatment system and percolation area, complete with boundary treatment, parking and all ancillary site works (Conditional Grant - 29/01/2020).

The project design has effectively ensured a substantial separation distance from all residential homes and the planned wind turbines, taking into account the remote nature of the Proposed Development site. Within a one-kilometre radius of any proposed wind turbine location, there is only one currently vacant dwelling. This vacant dwelling is positioned approximately 944 meters southwest of Turbine no. 10, which significantly exceeds the setback requirement of 4 times the turbine's tip height as stipulated in the 2019 Draft Wind Energy Guidelines. The nearest occupied dwelling is approximately 1,170 meters away from Turbine no. 4. Additionally, there are only 12 more residential homes within a 3-kilometer radius of the planned turbines. Applications in the Vicinity of the Grid Connection Route



A desk-based planning search was undertaken to identify permitted developments in the 200m vicinity of the Grid Connection Route using the Mayo County Council planning portal in May 2023. There have been 10 No. planning applications lodged to Mayo County Councils for development comprising land located within the subject area post 2013.

Pl. Ref	oplications in the vicinity of the Grid Connection Route Description	Decision
17232	Demolition of existing 2 storey building and construction of 2 storey art gallery, workshop and studio space including all ancillary site development works and connection to public utilities	Granted Permission by MCC on 12/05/2017
17579	Construct a cattle underpass and effluent tank under the public road and associated site works	Granted Permission by MCC on 19/02/2018
18346	Demolish existing residential and commercial premises consisting of dwelling house and butcher shop and erect new dwelling house, together with all associated site works	Granted Permission by MCC on 13/08/2018
1821	Construct a single storey dwelling house, detached garage and proprietary effluent treatment system	Granted Permission by MCC on 12/03/2018
18115	Construct a slatted cow shed and associated works	Granted Permission on 16/04/2018
19477	A 4 bay slatted shed with a creep area and underground slurry storage tank along with all associated site works	Granted Permission by ABP on 13/02/2020
20230	Construction of an agricultural machinery storage shed together with all ancillary site works.	Granted Permission by MCC on 12/08/2020
20644	Construct new dwelling house, proprietary effluent treatment system, percolation area including all ancillary site works.	Granted Permission by MCC on 04/03/2021
211284	1.0 hectare extension to an existing authorised quarry and will comprise of the following: extraction of material by blasting means down to a level of -2.0mod; transportation of extracted material to the existing quarry for processing; landscaping and restoration of the site upon completion of works and all associated ancillary facilities. the applicant is seeking a 10 year permission	Granted Permission by MCC, Decision Appealed and awaiting a



		decision from ABP
21795	Extend and reconstruct dwelling house, construct domestic garage, retain minor alterations to include gable window, retain extension to rear of dwelling house	Granted Permission by MCC 13/12/2021

2.6 **Scoping and Consultations**

2.6.1 **Scoping**

Scoping is the process of determining the content, depth and extent of topics to be covered in the environmental information to be submitted to a competent authority for projects that are subject to an Environmental Impact Assessment (EIA). This process is conducted by contacting the relevant authorities and Non-Governmental Organisations (NGOs) with interest in the specific aspects of the environment with the potential to be affected by the proposal. These organisations are invited to submit comments on the scope of the EIAR and the specific standards of information they require. Comprehensive and timely scoping helps ensure that the EIAR refers to all relevant aspects of the Proposed Development and its potential effects on the environment and provides initial feedback in the early stages of the project, when alterations are still easily incorporated into the design. In this way scoping not only informs the content and scope of the EIAR, but it also provides a feedback mechanism for the proposal design itself.

2.6.1.1 **Scoping Responses**

Table 2-6 lists the responses received from the bodies to the scoping document circulated in March 2021. Copies of all scoping responses are included in Appendix 2-1 of this EIAR. If further responses are received, the comments of the consultees will be considered in the construction and operation of the Proposed Development in the event of a grant of planning permission. The recommendation of the consultees has informed the project design and scope of assessments undertaken and the contents of the EIAR.



No.	Consultee	Summary Response
1	2rn (RTE Transmission Network Ltd.)	 Response received 5th Feb 2021 and 16th Dec 2021 The Proposed Development will not have any impact on 2rn's fixed linking. Requested a Protocol be signed between the developer and 2rn should the site go ahead.
2	An Taisce	No response received to date
3	ATC- Shannon	No response received to date
4	Ballina Airfield	No response received to date
5	Ballyvarry Airstrip	No response received to date
6	Bat Conservation Ireland	 Response received 29th March 2021 BCI does not have the capacity to respond to scoping requests
7	Bellmullet Aerodrome	No response received to date
8	BirdWatch Ireland	No response received to date
9	Broadcasting Authority of Ireland (BAI)	• No impacts on FM transmission, no assets in area
10	Bunnconnellan Airstrip	No response received to date
11	Butterfly Conservation Ireland	No response received to date
12	Céide Fields Visitor Centre	No response received to date
13	Commission for Communications Regulation	 Response received 9th March 2021 List of potential telecom operators which may be impacted provided
14	Commission for Regulation of Utilities Water and Energy	 Response received 17th December 2021 Requested PDF Map of turbine locations which was issued 17th December 2021. No response received.
15	Crossmolina Airstrip	No response received to date
16	Department of Agriculture, Food and the Marine- Forestry	 Response received 8th April <i>Felling and forestry recommendations</i>
	and manife i oreouty	



No.	Consultee	Summary Response
		 Felling License from this Department before trees are felled or removed. The developer should take note of the contents of Felling and Reforestation Policy potential direct and indirect impacts on designated sites and water, is assessed
17	Department of Environment, Climate and Communications - (Geological Service Ireland)	 Response received 5th May 2021 Geoheritage: Their records show that there are no audited CGSs in the vicinity of the proposed road improvement study areas. Geohazards: Landslides are common in areas of peat, rock near surface and in fine to coarse range materials (such as glacial tills), areas which are found within the proposed area. Landslide susceptibility in the area of the proposed wind energy development is variable and is classed from Moderately Low / Moderately High to High. There have been previous landslide events in the vicinity of the proposed wind energy development. Geological Survey Ireland has information available on landslides in Ireland via the National Landslide Database and Landslide Susceptibility Map both of which are available for viewing on our dedicated Map Viewer. Associated guidance documentation relating to the National Landslide Susceptibility Map is also available.
18	Department of Defence- Aviation	 Response received 7th April 2021 All turbines or tall structures, should be illuminated by high intensity obstacle lights that will allow the hazard be identified and avoided by aircraft in flight. Obstruction lights used should be incandescent or of a type visible to Night Vision Equipment. Obstruction lighting fitted to obstacles must emit light at the near Infra-Red (IR) range of the electromagnetic spectrum specifically at or near 850 nanometres (nm) of wavelength. Light intensity to be of similar value to that emitted in the visible spectrum of light. Due to the nature of flight operations by the Irish Air Corps the above lighting requirements.
19	Department of Housing, Local Government and Heritage/Development Applications Unit- Nature Conservation	 Response received 13th July 2021 Surveys: Best Practise surveys and Data collection and survey methodology. The applicant should not use any proposed post construction monitoring as mitigation to supplement inadequate information in the assessment Ornithology: Sliabh Fyagh is an important site for breeding waders. Hinterland surveys, roost surveys should be included. Bats: An assessment of the impact of the proposed wind farm on bat species should be carried out noting recent



 guidance available, "Bat and Onshore Wind Turbing Survey, Assessment and Mitigation, 2019" publish jointly by Scottish Natural Heritage and E Conservation Trust and other stakeholders Watercourses and Welands The FIAR should include detailed assessment of the hydrological impacts of welands from the proposed development. Hoodplains Flood plains, if present, should be identifi in the EIAR and left undeveloped to allow for to protection of these valuable habitats and provide are for flood water retention (green infrastructure). Hedgerows, scrub and related habitats Hedgerows as scrub should be maintained where possible, as they for wildlife corridors and provide areas for birds to nest in Markh Fritillary. Marsh fritillary surveys should 1 carried out as per standard Marsh Fritillary Larval Wo Survey methodology. Invasive alien plant and animal species such Rhododendron ponticuum and Japanese Knotweed, an detail the methods required to ensure they are n accidentally introduced or spread during survey and construction. Impact Assessment The impact of the Proposs Development on the flora/ fatura and habitats press should be assessed with particular regard to: Natura 20 sites, Other designated sites, or sites proposed 1 designation, Protected species and natural habitats. Construction Management Plans and Mitigati Complete project details including Construction Management Plans (CMR) need to be provided an ord to allow an adequate ELAR and appropriate assessme to be undertaken. Appropriate Assessment Screening for appropria assessment should focus on the likely significant effect of the Proposed Development and related activities of the Proposed Development and related activities of the Proposed Issensity and are list in parts and water may occur over large distances using the sour- pathway-receptor model. The NIS should present robust and reasoned scientific assessment and analysis the implications of the proposa	No.	Consultee	<i>EIAR - 2023.12.01 - 201120 - 1</i> Summary Response
needs to be considered in the assessment of impacts	No.	Consultee	 Conservation Trust and other stakeholders Watercourses and Wetlands The EIAR should include a detailed assessment of the hydrological impacts on wetlands from the proposed development. Floodplains Flood plains, if present, should be identified in the EIAR and left undeveloped to allow for the protection of these valuable habitats and provide areas for flood water retention (green infrastructure). Hedgerows, scrub and related habitats Hedgerows and scrub should be maintained where possible, as they form wildlife corridors and provide areas for birds to nest in Marsh Fritillary: Marsh fritillary surveys should be carried out as per standard Marsh Fritillary Larval Web Survey methodology. Invasive Species The EIAR should also address the issue of invasive alien plant and animal species such as Rhododendron ponticuum and Japanese Knotweed, and detail the methods required to ensure they are not accidentally introduced or spread during survey and or construction. Impact Assessment The impact of the Proposed Development on the flora/ fauna and habitats present should be assessed with particular regard to: Natura 2000 sites, Other designated sites, or sites proposed for designation, Protected species and natural habitats. Construction Management Plans and Mitigation Complete project details including Construction Management Plans (CMPs) need to be provided in order to allow an adequate EIAR and appropriate assessment to be undertaken. Appropriate Assessment Screening for appropriate assessment to an exist proposed for distances using the source pathway-receptor model. The NIS should present a robust and reasoned scientific assessment and analysis of the implications of the proposals for the relevant to should wate ragord becalor and properate assessment and related activities on European sites noting that impacts to sites via air and water may occur over large distances using the source pathway-receptor model. The NI
			 Licences licenses may be required under the Wildlife Act 1976-2018 or derogations under the EC (Birds and



No.	Consultee	<i>EIAR – 2023.12.01 – 201120 – F</i> Summary Response
20	Department of Housing, Local Government and Heritage/Development Applications Unit- Heritage	 Acknowledgement received 20th August 202. Correspondence forwarded to relevant archaeologist for comment. None received to date.
21	Department of Transport, Tourism and Sport	 Response received 2nd June 2021 Cables in the road: Their presence within the public road could significantly restrict the Road Authority in carrying out its function to construct and maintain the public road and will likely add to the costs of those works. Their installation within the lands associated with the public road may affect the stability of the road. In particular where the road is a "legacy road" (where there is no designed road structure and the subgrade may be poor or poorly drained) the design needs to take account of all the variable conditions and not be based on a sample of the general conditions. The possible effect on the remaining available road space (noting that there may be need to accommodate other utilities within the road cross-section in the future). The proposal should include consideration of the following: Examination of options other than the routing of cables along the public road, Examination of options for connection to the national grid network at a point close to the wind farm so as to reduce the adverse impact on public roads.
22	Eir	No impacts predicted – no assets in area
23	Eirgrid	No response received to date
24	EMR Integrated Solutions	 None of their radio links in would be affected by a wind development at this site
25	ENET	 Response received 22nd Jan 2021 These won't affect our current network
26	Environmental Protection Agency	No response received to date
27	ESB Telecoms	• It will not impact their live point to point and our point to multipoint radio networks
28	Fáilte Ireland	• Refer to Fáilte Ireland's Guidelines for the Treatment of Tourism in an EIA. These guidelines are non-statutory and act as supplementary advice to the EPA EIAR Guidelines outlined in section 2.
29	Gas Networks Ireland	Response received 18 th May 2021



No.	Consultee	<i>EIAR – 2023.12.01 – 201120 – F</i> Summary Response
		• Issued a GNI Code of Practise; To be kept in formed regarding any siting of infrastructure; Permit required to excavate within GNI wayleaves
30	Geological Survey of Ireland (through the DECC)	Response received 5 th May 2021
31	Health Service Executive	 Response received 22nd April 2021 Recommendation that a number of documents should be considered in preparing the EIAR. Recommendations surrounding public consultations. EIAR should detail information surrounding decommissioning including eventual fate of materials. EIAR should include map and description of proposed turbine locations. The Proposed Development should be assessed with a view of including health gains. Recommendations surrounding noise assessment within the EIAR. Recommend that a shadow flicker assessment is carried out. Measures surrounding air quality during construction works are recommended. Drinking water sources should be identified. Any potential impacts should be assessed. Assessment of current ground stability and all proposed mitigation measures should be detailed in the EIAR. EIAR should detail the location of on site facilities. HSE South Emergency Management function does not have any specific observations to make with respect to this application but set out several recommendations.
32	Imagine Communications Group	• This site will not cause an issue for Imagine's links
33	Inland Fisheries Ireland	 Response received 23rd April 2021 and 13th Jan 2022 All watercourses that will receive drainage from the construction site including the turbines or the access roads must be assessed in terms of aquatic biodiversity Electrofishing surveys will be required for all waters The aquatic habitat and physical nature of any watercourse affected by the development must be fully described A construction and operational phase water quality and habitat monitoring programme must be put in place. The riparian habitat is integral to the functioning of the aquatic environment. The potential impacts of the development on the riparian habitat should be assessed A detailed geotechnical survey must be carried out and the potential for soil movement and landslides should be



No.	Consultee	Summary Response
		 assessed fully for all areas of the site and all proposed activities Assessment of the impacts on the hydrology of the site must be carried out The impact of site drainage must be assessed including the pumping of waters from excavations such as turbine excavations Road construction and surfacing materials used must be of adequate strength so as not to give rise to silt/fine solids discharges due to the action of traffic and erosion. Watercourse crossings existing on site or along the proposed delivery routes must be assessed. All instream works or other works which may impact directly on a watercourse should only be carried out during the open season which is from 1st July to 30th of September. The impact of site offices and the services should form part of the EIA. Should works be approved a detailed method statement addressing the issues outlined above, including all mitigations measures, precautions and environmental incident procedures must be forwarded to Inland Fisheries Ireland before works commence The imp the no spread of invasive species as a result of the proposed development. The IFI publication: Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites should be followed.
34	Ireland West Knock Airport	No response received to date
35	Irish Aviation Authority	 Response received 14th April 2021 Agree an aeronautical obstacle warning light scheme for the wind farm development, Provide as-constructed coordinates in WGS84 format together with above mean sea level tip height elevations at each wind turbine location Notify the Authority of intention to commence crane operations with at least 30 days prior notification of their erection.
36	Irish Peatland Conservation Council	 Response received 24th May 2021 Acknowledgement of notification. Stated responses will be forthcoming. None received to date
37	Irish Raptor Study Group	No response received to date
38	Irish Red Grouse Association	No response received to date



No.	Consultee	EIAR - 2023.12.01 - 201120 - F
39	Irish Sports Council	No response received to date
40	Irish Water	No response received to date
41	Irish Wildlife Trust	 Response received 26th May 2021 Do not have the capacity to response to scoping requests
		<i>at this time</i>
42	Lough Conn Airstrip	No response received to date
43	Mayo County Council- Environment Department	 Response received 16th June 2021 Terrain and Ground Conditions: EIAR should show and discuss the location of terrain and ground conditions including information on slope, soil type, depth to bedrock, groundwater and peat. Drainage Context: Existing drainage on site relative to the Proposed Development components, forestry, turbary and grid connections Hydrological Context: Details of overall site management relative to watercourses in the area are to be included. Regard must be given to the Water Framework Directive and relevant River Basin Management Plans. Noise Impact Assessment. Establish a baseline and submit an Noise Impact Assessment Cumulative Impacts Include, if relevant, other windfarms, quarries, flood relief work, cutover bogs, turbary, substations, grid connections Include a Construction and Environmental Management Plan; Provision should be made for a Community
44		Liaison Officer Response received 16 th June 2021
	Mayo County Council Heritage Officer	• Engage with a suitably qualified archaeologist, Any or all of the following may be required: Geophysical and or other non-invasive surveys, licenced pre-development testing, licenced archaeological excavation, archaeological monitoring of ground works.
45	Mayo County Council- Planning Department	 Response received 16th June 2021 Mayo Renewable Energy Strategy 2011 indicates the site is located within an area open for consideration therefore, in principle the location is considered acceptable. Turbines should be located away from steep slopes and higher ground and should harmonise visually with the existing and any proposed wind farm projects at this location.



No.	Consultee	<i>EIAR – 2023.12.01 – 201120 – F</i> Summary Response
46	Mayo County Council Roads Department	 Response received 16th June 2021 Assessment of the structural capacity of the local road network including Falling Weight Deflectometer and Visual Assessments Grid connection along the local road network and N59 is not acceptable. Secure a private wayleave for the grid route Include details of any significant additional strengthening and widening of the public road network along the haul route.
47	Met Éireann	 Response received 24th May 2021 Acknowledgement of request. Will respond in 2 weeks. No response received to date.
48	Northwestern Regional Assembly	No response received to date
49	Office of Public Works	No response received to date
50	Openeir	 Response received 22nd Jan 2021 This should have no impact on the eircom LTD fixed
51	Ripple Communications	line microwave radio network Response received 24 th May 2021 This development will not impact our network
52	Sligo Airport	 Response received 24th May 2021 and 16th Dec 2021 Development falls outside of the area that would be of concern to Sligo Airport. This information should be advised to the IAA.
53	Sustainable Energy Authority of Ireland	No response received to date
54	TETRA Ireland Communications Ltd.	Response received 12 th Feb 2021 • We anticipate no impact from the development as proposed
55	TG4	No response received to date
56	The Arts Council	No response received to date
57	The Heritage Council	Response received 24 th May 2021
		Acknowledgement of notification
58	Three Ireland	Response received 26 th Jan 2021



No.	Consultee	EIAR – 2023.12.01 – 201120 – F Summary Response
		• 3Ireland currently have no Microwave links that could potentially be affected
59	Towercom Ltd.	No response received to date
60	Transport Infrastructure Ireland	 Response received 30th March 2021 TII notes that the subject site accesses the local road network prior to access to the N59 national road. Consultations should be had with the relevant Local Authority/National Roads Design Office with regard to the locations of existing and future national road schemes. TII would be specifically concerned as to potential significant impacts the development would have on the national road network (and junctions with national roads) in the proximity of the proposed development. The developer should have regard to any Environmental Impact Statement and all conditions and/or modifications imposed by An Bord Pleanála, regarding road schemes in the area. The developer should, in particular, have regard to any potential cumulative impacts. The developer, in preparing ELAR, should have regard to TII Publications (formerly DMRB and the Manual of Contract Documents for Road Works), Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes' (National Roads Authority (NRA), 2006), Environmental Noise Regulations 2006' (SI 140 of 2006) and, in particular, how the development will affect future action plans by the relevant competent authority. The developer may need to consider the incorporation of noise barriers to reduce noise impacts (see' Guidelines for the Treatment of Air Quality During the Alenning and Construction of cabling along the national road, should be consider the incorporation of noise barriers to reduce noise and Vibration in National Road Schemes' (1st Rev., NRA, 2004)). In the context of existing national road, should be considered In relation to haul route identification, the applicant/developer should clearly identify haul routes
61	Údarás na Gaeltachta	proposed and fully assess the network to be traversed. Response received 24 th May 2021
		• Forwarded correspondence to the Regional Development Office in Mayo for response. No response received to date.
62	Viatel Ireland Ltd	Response received 25 th Jan 2021



No.	Consultee	Summary Response	
		• The site won't interfere with Viatel wireless network	
63	Virgin Media Ltd	Response received 26 th Jan 2021	
		• This will have no impact on Virgin media's presence in the area	
64	Vodafone Ireland Ltd.	Response received 21th Dec 2021	
		• Vodafone does not have any links passing through the site.	
65	Waterways Ireland	Response received 25 th March 2021	
		• The site is not within any zone of influence so WI will not be commenting.	
66	Western River Basin District	No response received to date	
67	Department of Defence	 All turbines should be fitted with adequate safety lighting. 	



2.7 **Other Consultations**

2.7.1 **Pre-Planning Meetings**

2.7.1.1 Mayo County Council

The prospective applicant and members of the design team met on two occasions with the County Council in relation to the Proposed Development prior to the submission of this planning application.

The first meeting took place on 9th September 2021 via MS Teams and included representatives from Mayo County council, MKO, SSE and Coillte. The team gave a PowerPoint presentation as an introduction to the site and development proposals, including a summary of the Strategic Infrastructure Development (SID) thresholds and criteria nothing the application would be made to An Bord Pleanála and SID.

Matters discussed included:

- > Site selection and location
- > Policy context
- > Public consultation overview of consultations to date and potential to the area
- Landscape appraisal designations, views and vulnerable areas
- > Stakeholder engagement scoping process and purpose
- > Wind Farm design process, grid and TDR

2.7.1.2 An Bord Pleanála

A first pre-application meeting with An Bord Pleanála was held and included representatives from SSE, MKO and An Bord Pleanála via MS Teams on 22nd September 2021. The Board invited the prospective applicant to outline the nature of the proposed developments and to highlight any matter that it wished to receive advice from the Board.

Matters discussed included:

- Site selection and location
- > Policy context
- > Planning history and previously refused applications
- Landscape appraisal site constraints, geotechnical site investigations, hydrological and hydrogeological surveys, ecological surveys and archaeological site walk over.
- > Public consultation overview of consultations to date and potential to the area
- Stakeholder engagement scoping process and purpose

A second meeting with the Board was held on 3rd February 2022 via a MS Teams call with representatives from MKO, SSE and ABP.

The meeting commenced with updates from MKO on the project since the last meeting held on 22nd September 2021, explaining that turbine locations have remained consistent since last meeting and that the project exceeds SID threshold, however highlighting that is for the discretion of the ABP.

Matters discussed included:

- > Design updates
- Planning and environmental considerations possibility of material contravention and need to highlight the material contravention in application accompanied by a strong justification, cumulative impacts,



- > Public Consultation and stakeholder engagement updates and dates
- > Biodiversity aquatic surveys, birds, drainage, habitat enhancement measures,

The meeting closed with no anticipated requirement for further meetings.

A letter received from An Bord Pleanála dated the 9^{th} of May 2023 stated that the under Section 37B (4)(A) that it is the opinion that the Proposed Development falls within the scope of the paragraphs 37A(2)(a) and (b) of the Planning and Development Act 2000 (as amended). This confirmed that the Proposed Development constitutes SID and therefore the planning application should be made directly to An Bord Pleanála.

2.7.2 **Other Public Consultation – Sept 2021 to date**

November 2021

> A virtual consultation room was created for Glenora Wind Farm. This compromised of an introduction video, information boards, and 360 photomontages. There was also a feedback form and a call back request button.

The website remains live and be accessed via the following link: https://www.glenorawindfarm.com/documents/

Press Release which received widespread coverage and was advertised over a four-week period using newspaper advertisements, radio advertisements and social media. This advertising was supported by proactive engagement via email and telephone calls to all elected representatives in the area, and other key stakeholder, and community groups, offering virtual meetings where necessary.

December 2021

- > Meeting with CEO of Mayo County Council to give overview of proposed project.
- > Meeting with Westport/Belmullet MDC to give an overview of the Sheskin South Project. Follow up meetings with some members of the MDC to discusses the SSER approach to the administration of the Community Benefit Fund for the project.
- > Meeting with the Western Development Commission to discuss proposed project.

January/February 2022

Brochures created from the information boards have now been printed out and will be delivered to all residents within 2km on the projects and to those residents that reside along the proposed turbine delivery route.

Full detail on each of the above is included in the Community Consultation Report (Appendix 2-3 of this EIAR)

In relation to consultation with the local community specifically, the Consultation Report details how the website <u>https://www.glenorawindfarm.com/documents/</u> went live before any consultation letters were issued or clinics were held. It was therefore the first point of contact for the wider process. The website is updated on a regular basis and the intention is to keep it updated throughout the planning application process.

It is concluded in the Report that the objectives outlined have been achieved and every effort made to identify and engage with key stakeholders in a flexible and facilitative manner. Community engagement will be maintained throughout the project stages, including while the planning application is under consideration and, should the planning permission be granted, the construction, operational and decommissioning phase.





2.8 Cumulative Impact Assessment

The EIA Directive and associated guidance documents state that as well as considering any direct, indirect, secondary, transboundary, short-, medium-, and long-term, permanent, and temporary, positive and negative effects of the project (all of which are considered in the various chapters of this EIAR), the description of likely significant effects should include an assessment of cumulative impacts that may arise. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project. The factors to be considered in relation to cumulative effects include population and human health, biodiversity, land, soil, water, air, climate, material assets, landscape, and cultural heritage as well as the interactions between these factors.

To gather a comprehensive view of cumulative impacts on these environmental considerations and to inform the EIAR process being undertaken by the consenting authority, each relevant chapter within this EIAR includes a cumulative impact assessment where appropriate.

The potential for cumulative impacts arising from other projects has therefore been fully considered within this EIAR.

2.8.1 Methodology for the Cumulative Assessment of Projects

To gather a comprehensive view of cumulative impacts on these above environmental considerations and to inform the EIA process being undertaken by the consenting authority, each relevant chapter within the EIAR addresses the potential for cumulative effects where appropriate.

The potential cumulative impact of the Proposed Development and other relevant developments has been carried out with the purpose of identifying what influence the Proposed Development will have on the surrounding environment when considered cumulatively and in combination with relevant approved, existing and planned projects in the vicinity of the proposed site.

The cumulative impact assessment of projects has three principle aims:

- > To establish the range and nature of existing and/or approved projects within the cumulative impact study area of the Proposed Development.
- > To summarise the relevant projects which have a potential to create cumulative impacts.
- > To identify the projects that hold the potential for cumulative interaction within the context of the Proposed Development, including the consideration of any range of flexibility proposed, and discard projects that will neither directly or indirectly contribute to cumulative impacts.

Assessment material for the cumulative impact assessments carried out within this EIAR was compiled in relation to the relevant developments within the various zones of sensitivity of and to the Proposed Development from which there may be potential for cumulative impacts to arise. The material was gathered through a search of relevant online planning registers, reviews of relevant EIS/EIAR documents, planning application details and planning drawings, and served to identify past and future projects, their activities and their environmental impacts.

2.8.2 **Projects Considered in Cumulative Assessment**

The projects considered in relation to the potential for cumulative impacts and for which all relevant data was reviewed (e.g. individual EIS/EIAR's, layouts, drawings etc) including those listed previously above in this EIAR and all relevant associated works. Each individual chapter will assess the Proposed Development in combination with these other projects which have been further detailed below.



2.8.2.1 Other Wind Farms

There are 8 no. wind farm developments operational, consented or proposed in proximity to the proposed wind farm:

- Sheskin Wind Farm (Consented Pl Ref. 19/457)
- > Bellacorick (Operational Pl Ref. 20/834, ABP 311157)
- > Bunnahowen (Operational Pl Ref. 18/873)
- Kilalla Wind Farm (Operational Pl Ref. 17619/19/260)
- > Oweninny Phase 1 (Operational, ABP PA0029)
- > Oweninny Phase 2 (Under Construction)
- > Oweninny Phase 3 (Awaiting Decision, ABP Ref. 316178)
- Kilsallagh Wind Farm (Pre-Application Phase ABP 312282)
- Sheskin South Wind Farm (ABP Ref. 315933 Application Lodged)
- > Tirawley Wind Farm (ABP Ref. 315864 Pre App Request Lodged)
- > Keerglen Wind Farm Note yet lodged.

As there is very limited information publicly available for the proposed Tirwaley and Keerglen Wind Farms, which are at Pre-Application Phase and early design phase respectively, these projects have been screened out for cumulative assessment. Any cumulative affects arising from the rest of the projects listed are considered in the relevant chapters of this EIAR.

2.8.2.2 **Other Developments/Land uses**

The review of the Mayo County Council planning register documented relevant general development planning applications within 2km of the Proposed Development site, all of which relate to the provision and/or alteration of one-off rural housing and agricultural buildings, as described in Planning History, Section 2.5 of this Chapter. These applications and land uses have also been taken account in describing the baseline environment and in the relevant assessments.

Furthermore, the cumulative impact assessments carried out in each of the subsequent chapters of this EIAR consider all potential significant cumulative effects arising from all land uses in the vicinity of the Proposed Development. These include permitted and existing wind farms in the area, and ongoing agricultural practices/forestry practices. The OPW (www.floodinfo.ie) does not record the presence of any Arterial Drainage Schemes or Benefited Lands within the Proposed Development, along the Grid Connection route or in the surrounding lands.

Overall, the Proposed Development has been designed to avoid and mitigate impacts on the environment and a suite of mitigation measures is set out within the EIAR. The mitigation measures set out in this EIAR will ensure that significant cumulative effects do not arise during the construction, operational or decommissioning phases of the Proposed Development. Additional detail in relation to the potential significant cumulative effects arising and, where appropriate, the specific suite of relevant mitigation measures proposed are set out within each of the relevant chapters of this EIAR.



2.8.2.3 **Forestry Felling and Replanting**

Forestry Operations

The Proposed Development site is used for commercial forestry. This land-use will continue in conjunction with the operation and decommissioning of the proposed wind farm. The potential for cumulative effects during the construction, operational and decommissioning phases of the proposed wind farm have therefore been assessed.

Forestry Felling associated with Proposed Development

The Forest Service is responsible for ensuring the development of Forestry within Ireland occurs in a manner and to a scale that maximises its contribution to national socio-economic well-being on a sustainable basis that is compatible with the protection of the environment. The forestry felling associated with the Proposed Development will be carried out under the relevant guidance and under licence from the Forest Service and full details are set out in Section 4.3.9 of this EIAR. In line with the Forest Service's published policy on granting felling licences for wind farm developments, areas cleared of forestry for turbine bases, access roads, and any other wind farm-related uses will have to be replaced by replanting at an alternative site or sites. The Forest Service policy requires replacement or replanting on a hectare for hectare basis for the footprint of the turbines and the other infrastructure.

Replacement of Forestry

The replacement of forestry, felled as part of the proposed development, may occur on any lands, within the state, benefitting from Forest Service Technical Approval¹⁰ for afforestation, should the Proposed Development receive planning permission. Under the Forestry Regulations 2017, all applications for licences for afforestation require the prior written approval (technical approval) of the Minister for Agriculture, Food and the Marine.

The requirements for afforestation licencing are set out in the Forestry Regulations 2017 - this includes consideration of Environmental Impact Assessment and Appropriate Assessment as set out in parts 7 and 8 of the Regulations, respectively. Further detail is set out in the Environmental Requirements for Afforestation (DAFM, 2016)¹¹. This ensures that afforestation takes place in a way that complies with environmental legislation and enhances the contribution new woodlands and forests can make to the environment and to the provision of ecosystem services, such as water protection and landscape enhancement.

The typical environmental effects of afforestation include potential effects on biodiversity, soils and geology, hydrology and hydrogeology, cultural heritage, landscape and visual, and air and climate.

The applicant is seeking a ten-year planning permission which incorporates time to secure a grid connection agreement, a route to market (RESS or equivalent Power Purchase Agreement), select the preferred equipment suppliers and put the necessary capital funding in place to allow construction and delivery to commence. Thus, the identification of forestry replacement lands at this stage is seen as premature. If a licence for afforestation was obtained prior to seeking and/or obtaining planning permission, it is highly likely that any licencing approvals sought from the Forest Service would have expired before it could be taken up due to the time required for the planning processes and post-planning delivery preparations. The Forest Service Afforestation Licences expire after 3 years from when they are consented.

¹⁰ All proposed forestry developments where the area involved is greater than 0.1 hectare must receive the prior written approval of the Forest Service. The application for approval is known as Pre-Planting Approval – Form 1. ¹¹https://www.gov.ie/en/publication/642e6-forestry/#environmental-requirements



Furthermore, as mentioned above, the key environmental issues relating to afforestation include water, biodiversity, archaeology, and landscape. Each is subject to regular updates in terms of best practice, guidelines, standards and national policies. Delaying the identification of alternative afforestation lands until such time as they are required enables identification of optimum lands available (from an environmental perspective) for afforestation at that time.

For the purposes of this project, the applicant commits that the location of any replanting (alternative afforestation) associated with the project will be greater than 10km from the wind farm site and also outside any potential hydrological pathways of connectivity (i.e. outside the catchment within which the proposed project is located) with the proposed project. On this basis, it is reasonable to conclude that there will be no more than imperceptible in-combination cumulative effects associated with the replanting. Therefore, forestry replanting is not considered further in the impact assessment chapters of this EIAR.

In addition, the applicant commits to not commencing the project until both a felling and afforestation licence(s) is in place and, therefore, this ensures the afforested lands are identified, assessed and licenced appropriately by the relevant consenting authority.

Further details in relation to the consideration forestry replanting is included in Appendix 2-4 of this EIAR.