2. BACKGROUND TO THE PROPOSED PROJECT

This Chapter of the Environmental Impact Assessment Report (EIAR) sets out the energy and climate change related policy and targets along with the strategic, regional, and local planning policies relevant to the Proposed Project (with the primary focus of this chapter being the Proposed Wind Farm, subject of this planning application). It also summarises EIAR Scoping and Consultation undertaken and the Cumulative Impact Assessment process.

2.1 Introduction

This Chapter of the EIAR presents the policies and targets which have been put in place at the various levels of Government including international, national, regional and local in relation to planning, renewable energy and climate change. The details below set out the need for the Proposed Project to aid Ireland in meeting its national targets and European commitments in relation to climate change and decarbonisation. This Chapter also provides a summary of the planning policy context relevant to the Proposed Wind Farm and should be read in conjunction with the Planning Report provided separately with the full suite of documentation supporting the planning application.

The Proposed Project, which will be known as the 'Laurclavagh Renewable Energy Development' is being brought forward in response to local, national, regional and European policy regarding Ireland's transition to a low-carbon economy, associated climate change policy objectives and to reduce Ireland's dependence on imported fossil fuels for the production of electricity.
For the purposes of this EIAR:

- The 'Proposed Wind Farm' refers to the 8 no. turbines and supporting infrastructure which is the subject of this Section 37E application.
- The 'Proposed Grid Connection' refers to the 110kV substation and supporting infrastructure which will be the subject of a separate Section 182A application.
- The 'Proposed Project' comprises the Proposed Wind Farm and the Proposed Grid Connection, all of which are located within the EIAR Study Boundary (the 'Site') and assessed together within this EIAR

The Proposed Project includes the provision of the Proposed Wind Farm which will generate renewable electricity for export onto the national grid. The need to decarbonise 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) first published by the Government in 2019, and updated in 2021, 2023 and 2024 sets out a roadmap to halve emissions by 2030 and reach net zero no later than 2050. Central to this is the set of measures set out to increase the proportion of renewable electricity to 80% by 2030. The CAP places front and centre the facts that without urgent action, global heating is likely to reach more than 2°C above pre-industrial levels by 2060, with '*devastating*' impacts on nature and '*irreversible changes to many ecosystems*' arising.

Furthermore, the Programme for Government released in June 2020 also highlights that "the reliable supply of safe, secure and clean energy is essential in order to deliver a phase-out of fossil fuels. We need to facilitate the increased electrification of heat and transport. This will create rapid growth in demand for electricity which must be planned and delivered in a cost-effective way."

The primary driver behind the Proposed Project 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. The Proposed Wind Farm represents the provision of a significant wind energy proposal and will contribute considerably towards Ireland reaching its 2030 and 2050 renewable energy targets.

2.1.1 Statement of Authority

This Section of the EIAR was prepared by Tommy Harlin and John Willoughby, and reviewed by Colm Ryan, all of MKO. Tommy is a Planner with MKO and has over 1 years' experience working in planning and development. Tommy holds a BSc (Hons) in City Planning and Environmental Policy, and an MSc (Hons) in Urban and Regional Planning from University College Dublin. Tommy is also a member of the Irish Planning Institute. John is a Project Planner with MKO and has over 8 years' experience across planning consultancy and environmental management and is a corporate member of the Irish Planning Institute. John holds a BA (Hons) in Geography, Planning and Environmental Policy, and an MSc (Hons) in Environmental Policy, both from University College Dublin, and has completed an Advanced Diploma in Planning and Environmental Law at Kings Inns in 2021. Colm is Project Director of the Planning Team in MKO and has over 18 years' experience in planning and development. Colm holds a BA (Hons) Geography and Irish from UCD and an MCD Town & Regional Planning from the University of Liverpool.

2.1.2 Renewable Energy Resources

Renewable energy resources are constantly replenished, unlike fossil fuels, which are finite resources that are becoming increasingly scarce and expensive to extract. Renewable energy resources offer sustainable alternatives to our dependency on fossil fuels as well as a means of reducing greenhouse gas emissions and opportunities to reduce our reliance on imported fuels. These resources are abundantly available in Ireland, yet only a fraction has been tapped so far[1].

A gradual shift towards increasing our use of renewable energy is no longer viable. There is an urgency now to ensure real changes takes place without delay. 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 is heavily dependent on the importation of fossil fuels to meet its energy need. 70% of energy used in Ireland is imported from abroad, higher than the EU average of almost 60% (National Energy Security Framework 2022). This high dependency on energy imports is highly risky and Ireland is currently extremely vulnerable both in terms of meeting future energy needs and ensuring price stability. As such, expanding indigenous renewable energy supply is critical for climate action, energy security and price stability. The provision of the Proposed Project would aid in achieving this shift to decarbonising the electricity sector.

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, universally accepted stance, 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 Report[2] 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 caused by climate change up to this point is now likely irreversible, such as the rise in sea levels over the 21st century.

[1] *'Energy in Ireland 2022 Report' Sustainable Energy Authority of Ireland (SEAI) website, www.seai.ie*
[2] *Climate Change 2021 'The Physical Science Basis' (Intergovernmental Panel on Climate Change, August 2021)*

"*The Status of Ireland's Climate 2020*" produced by MET Eireann[3], similarly reflects on clear and distinct impacts arising from climate change effects within an Irish context:

Greenhouse gas emissions continue to rise:

- Background carbon dioxide (CO2) concentrations reached 414 ppm in 2020 which is approximately a 50% increase compared to pre-industrial levels.
- Methane (CH4) concentrations are at 1940 ppb - which is approximately a 170% increase compared to pre-industrial levels.
- Nitrous oxide (N2O) concentrations are now above 330 ppb - which is approximately a 20% increase compared to pre-industrial levels.

Annual average amounts of precipitation are increasing:

- Annual precipitation was 6% higher in the period 1989 to 2018, compared to the 30-year period 1961 to 1990. The decade 2006 to 2015 was the wettest on record.

Annual average air temperature is rising:

- The annual average surface air temperature in Ireland has increased by approximately 0.9°C over the last 120 years, with a rise in temperatures being observed in all seasons.
- An increase in the number of warm spell days the last 60 years with very little change in cold spell duration;

Sea level continues to rise:

- Satellite observations indicate that the sea level around Ireland has risen by approximately 2-3mm/year since the early 1990s. Analysis of sea level data from Dublin Bay suggests a rise of approximately 1.7mm/year since 1938 which is consistent with global average rates.

The ocean is becoming more acidic:

- Measurements in the surface waters to the west of Ireland between 1991 and 2013 indicate an increase in ocean acidity which threatens calcifying species such as corals, shellfish and crustaceans.

The ocean is getting warmer:

- The average sea surface temperature at Malin Head over the 10 years between 2009 and 2018 was 0.47°C above the 1981-2010 mean.

There is an increase in river flows across most of the country:

- However, there is evidence in recent years of an increase in potential drought conditions especially in the east.

The area of forests and artificial surfaces has increased:

- Land cover observations since 1990 show increases in the area covered by both artificial surfaces and forests and a decrease in wetland areas which include

[3] *Climate Status Report for Ireland 2020 (Environmental Protection Agency, Marine Institute, Met Éireann, August 2021)*

peatlands. There was an increase of 38% in the volume of trees between 2006 and 2017.

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 Project 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 International Climate Policy

United Nations Framework Convention on Climate Change

In 1992, countries 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.

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.

COP27 Egypt

COP27 took place in Sharm el-Sheikh from the 6th of November 2022 to the 20th of November. The Conference of the Parties (COP) is a supreme decision-making body of the United Nations Framework Convention on Climate Change (UNFCCC). COP 27 centered around three major topics:

- Closing the emissions gap to keep 1.5°C alive.
- Loss and Damage
- Climate Finance

COP 27 officially ended on the 18th of November, but due to the nature of negotiations an outcome text and the final press conference was not held until November 20th. The first outcomes of the negotiations of the COP 27 agenda were seen in the first draft document. A consolidated final document followed and while it removed much of the vague wording of the draft, it also removed some critical key points, particularly in relation to the strengthening of actions required by developed nations. The most significant outcomes from COP 27 are outlined below:

- **Phase down/out language**: In Glasgow last year, the final agreement was delayed due to the stance if China and India, among others, who were not comfortable the 'phase out' of coal wording in the draft text. This led to the watering down of this commitment to a 'phase down' of coal use. The hope was that COP27 would work to include further language on coal and fossil fuel reduction efforts. However, the wider commitment to phase out all fossil fuels, led by India, and backed by the US and the EU, was taken out and can be marked as the biggest disappointment of COP27.
- **1.5°C Pathway:** The 1.5°C warming limit has been retained and reassurances have been made that there is no room for backsliding. It gives the key political signals that the phase down of all fossil fuels is happening. There has been the setting of a workplan for 2023 to help articulate the nature and components of a global collective goal on adaptation and resilience and how it can be formatted in a way to take into account the Global Stocktake.
- **Climate Finance & Loss and Damage:** There has been the launch of an initiative by the V20 and G7 known as the Global Shield Against Climate Risk (GSACR). The intention of this initiative has been framed almost as an insurance policy backed by the World Bank to prepare and protect those most vulnerable to climate change disasters. The initiative seeks to reform the current climate finance model currently operating in the form of loans, typically with high interest rates and repayment requirements. The beginnings of a framework to compensate for the unequal distribution of harm that has been caused by climate change and the unequal contributions of emissions has also been put in place.

COP – 28 United Arab Emirates

The 28th session of the COP to the UN Framework Convention on Climate Change, was held in Dubai from 30 November to 13 December 2023. The main objective of COP was to assess the progress made by all parties on the implementation of the 2015 Paris Agreement through the concluding phase of the 'global stocktake', which began after COP26 in 2021.

The outcomes from COP 28 are as follows:

- **Loss and Damage:** Initiated at COP 27, the fund for the loss and damage to developing countries due to climate change was established. Unlike other forms of climate finance, there is no firm obligation for developed countries to pay into the fund. The loss-and-damage fund being launched was marked as a substantial outcome had been achieved during the COP28 opening session.
- **Fossil Fuel Phase-Out & Increasement of Renewable Energy Capacity:** Another result of the COP 28 was the adoption of a fossil fuel phase-out agreement which commits parties to the transition away from the fossil fuels in energy systems. The agreement calls for a tripling of renewable energy capacity globally by 2030. This was the first time that the COP explicitly addressed the need to end the use of fossil fuels.
- **Adaptation Framework:** An important decision to come out of COP 28 was a "framework" that is meant to guide nations in their efforts to protect their people and ecosystems from climate change. The 'global goal on adaptation' was first established by the Paris Agreement in 2015 but received little attention up until COP 26. Developing countries pushed for financial adaptation targets to be introduced, however, ultimately no quantifiable financial targets were included in the final text.

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:

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

The European Climate Law[4] 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 proposals[5] 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 Project.

[4] *Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law') published in the Official Journal on 9 July 2021 and came into force on 29 July 2021.*
[5] *'Fit for 55': delivering the EU's 2030 Climate Target on the way to climate neutrality (July 2021)*

2.2.2 National Climate 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 2024 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('CALCDA'), which was signed into law on the 23rd of 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 ('CALCDA'), 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 CALCDA, 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 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 Proposed Project represents a significant opportunity 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 Project will contribute significantly to achieving binding emissions reduction targets at both a European and National level.

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 budgets[6]. The total emissions allowed under each budget are shown in Table 2-1 below.

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

	2021 – 2025 Carbon Budget 1	2026 – 2030 Carbon Budget 2	2031 – 2035 Provisional Carbon Budget 3
	All Gases		
Carbon Budget (Mt CO_2eq)	295	200	151
Annual Average Percentage Change in Emissions	-4.8%	-8.3%	-3.5%
The figures are consistent with emissions in 2018 of 68.3 Mt CO_2eq reducing to 33.5 Mt CO_2eq 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 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 2022 – 2031' (October 2022)).

Given the clear concern that the county's future emissions targets may be missed, it is crucial that projects such as the Proposed Project 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.

[6] *Climate Change Advisory Council Carbon Budget Technical Report (October 2021)* https://www.gov.ie/en/publication/9af1b-carbon-budgets/

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 CALCDA. The CALCDA, 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 generating assets, such as the Proposed Project.

Climate Action Plan 2024

The Climate Action Plan 2024 ('CAP 24') builds on CAP 23 by refining and updating the status of the actions required to deliver the decarbonisation required under the carbon budgets and sectoral emissions ceilings. The renewable electricity generation targets are unchanged from the CAP 23 (9GW of onshore wind & 80% renewable electricity share).

CAP 24 includes the latest trends in the electricity sector:

- In 2022, renewable generation accounted for 38.6% of electricity, an increase from 35% in 2021.
- Electricity accounted for 14.4% of Ireland's greenhouse gas (GHG) emissions in 2022.

- To meet the first carbon budget the electricity sector requires a decarbonisation rate of 17.3% per annum in the period 2023-2025. For context, the decarbonisation rate between 2018 and 2022 was 1.4% per annum.

CAP 24 acknowledges the urgency and importance of the decarbonising the electricity sector. The plan states:

"Given that the programme of large-scale offshore wind deployment is expected to be realised towards end decade, deployment rates for onshore renewables will need to increase to match demand growth to ensure we keep electricity emissions within range of the carbon budgets. This requires a major upscaling and accelerating in current deployment of renewables, particularly onshore wind."

The scale of the challenge is apparent when quantified:

"As an example, the historical average deployment of onshore wind installed capacity connected between 2008 and 2020 inclusive was ~280 MW per annum from 19 projects (with an annual maximum of 612 MW). To achieve the necessary emissions abatement, an approximately eight-times increase of renewable energy deployment to 2.3 GW annually would be needed between 2024 and 2030."

CAP 24 identifies the alignment of local and national policy as a critical to accelerate renewable energy rollout.

"greater alignment between local plans and renewable energy targets at national and regional level to support investment in and delivery of onshore wind and solar renewable energy is also critical".

2.2.3 Climate Target Progress

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

The Environmental Protection Agency (EPA) publish Ireland's Greenhouse Gas Emission Projections and at the time of writing, the most recent report, '*Ireland's Greenhouse Gas Emissions Projections 2021–2040'* was published in June 2023. The report includes an assessment of Ireland's progress towards achieving its emission reduction targets out to 2030 set under the EU ESD and Effort Sharing Regulation (ESR).

The EPA has produced two scenarios in preparing these greenhouse gas emissions projections: a "With Existing Measures" (WEM) scenario and a "With Additional Measures" (WAM) scenario. These scenarios forecast Irelands greenhouse gas emissions in different ways. The WEM scenario assumes that no additional policies and measures, beyond those already in place by the end of 2021. This is the cut off point for which the latest national greenhouse gas emission inventory data is available, known as the 'base year' for projections. The WAM scenario has a higher level of ambition and includes government policies and measures to reduce emissions such as those in Ireland's Climate Action Plan 2023.

The EPA Emission Projections Update notes the following key trends:

- Ireland is not on track to meet the 51 per cent emissions reduction target (by 2030 compared to 2018) based on these projections which include most 2023 Climate Action Plan measures.
- Emissions from the Energy Industries sector are projected to decrease by between 50 and 60 per cent over the period 2021 to 2030. Renewable energy generation is projected to range from 68 to over 80 per cent of electricity generation as a result of projected further and rapid expansion in wind energy and other renewables.
- Sectoral emissions ceilings for 2025 and 2030 are projected to be exceeded in almost all cases, including Agriculture, Electricity, Industry, and Transport.

- The first two carbon budgets (2021-2030), which aim to support achievement of the 51 per cent emissions reduction goal, are projected to be exceeded by a significant margin of between 24 and 34 per cent.

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 Project must be encouraged and supported if carbon saving targets are to be met.

2.3 Renewable Energy Policy and Targets

This section of the EIAR provides a breakdown of international and national renewable energy policy with regards to the Proposed Project. Under the Renewable Energy Policy and Targets, section, the following are discussed:

- EU Renewable Energy Policy;
- National Renewable Energy Policy;
- International and National Target Progress.

National policy has developed in line with European and International policies, targets and commitments, in that the importance and urgency of decarbonising the energy generation sector, the economy in general and reducing greenhouse gas emissions has become increasingly more apparent.

The Proposed Project complies with the nationally stated need to provide a greater amount of renewable energy onto the national grid and will further reduce the national reliance on fossil fuels for electricity generation.

2.3.1 European Renewable Energy Policy

2030 Climate and Energy Framework

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.

Effort sharing 2021-2030

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 2.1.1.1, 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.

Renewable Energy Directive (EU) 2018/2001

The revised Renewable Energy Directive (EU) 2018/2001 came into force in December 2018. It establishes a binding EU target of at least 42.5%. The revised Directive sets a 2030 target of 32.5% energy from renewable sources.

European Green Deal/ Renewable Energy Directive

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)[7].

On 30 March 2023, a provisional agreement was reached for a binding target of at least 42.5% by 2030 but aiming for 45%. Once this process is completed, the new legislation will be formally adopted and enter into force. The agreement includes targets and measures to support the uptake of renewables across various sectors of the economy. The revised Directive strengthens annual renewables targets for the heating and cooling sector and for renewable energy used in district heating systems. It introduces a specific renewable energy benchmark of 49% for energy consumption in buildings by 2030 to complement EU buildings legislation and guide Member States' efforts.

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.

REPowerEU

The European Commission has proposed an outline of a plan to make Europe independent from Russian fossil fuels including oil and gas, due to the high and volatile energy prices, and security of supply concerns following Russia's unprecedented military attack on Ukraine. At the time of publication, the EU imported 90% of its gas consumption, with Russia providing around 45% of those inputs. Russia also accounted 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.

Article 3 of the REPowerEU plan is centred around the roll out of renewable energy projects in order to accelerate the phasing out of Russian fossil fuels. 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 to minimise the time for roll-out of renewable projects and grid infrastructure improvements'*. Article 3 of the plan states that:

"Slow and complex permitting processes are a key obstacle to unleashing the renewables revolution and for the competitiveness of the renewable energy industry."

[7] *https://www.consilium.europa.eu/en/policies/eu-plan-for-a-green-transition/*

The REPowerEU plan also presents measures to streamline the permitting process at a national level and outlines best practices within member states. Article 3 of the REPowerEU plan also states that member states should take steps to introduce permitting related country specific recommendations in the European semester. The plan also states that all member states must as a matter of urgency, fully implement the Renewable Energy Directive in order to simplify the permitting procedures.

The RePowerEU plan also operationalises the principle of renewable energy development as ***"an overriding public interest".*** This coupled with the introduction of "go-to" areas and other ways to shorten and simplify permitting while also minimising potential risks and negative impacts on the environment further highlights the importance at EU level of the increased provision of renewable energy projects such as the Proposed Project. At the time of writing, Ireland has not yet designated areas for the development of renewable energy projects however, the proposed directive eliminates the member states' option to opt out and, instead, mandates that they designate sufficient areas for accelerating renewables within a period of 18 months.

As such, it is submitted that the Proposed Project is strongly supported by EU energy policy. Many of the measures outlined in RePowerEU have been incorporated into national policy through the National Energy Security Framework, which was published by the Government in April 2022, and discussed in further detail in Section 2.3.2. The Proposed Project also offers an opportunity to increase the amount of indigenous renewable energy onto the national grid thereby further increasing Irelands energy security in line with the principle aim of the Re power EU plan.

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 2022 Annual Review (August 2022) that to reach "*demanding emissions reductions targets required under our climate targets, wind and solar resources will need to be harnessed to a greater and faster extent than previously considered*". 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.

The Proposed Project will aid in achieving the scenarios set out in the Energy Roadmap 2050 as if consented, the Proposed Project will increase the share of renewable energy being produced onto the national grid thereby reducing the reliance on more unsustainable forms of electricity production.

2.3.1.2 Project Compliance with EU Policy

The Proposed Project is considered to be fully in accordance with and supported by the above-mentioned EU Policy. The Proposed Project will contribute to the targets outlined in the 2030 Climate and Energy Framework. 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 can be achieved through the delivery of the Proposed Project and other similar projects. The target of increasing the binding target of the EU's energy mix from 32% to a minimum of 42.5% 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 Project 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 Project is strongly supported by EU energy policy.

2.3.2 National Renewable Energy Policy

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."

With regard to the above, it is clear that the provision of the Proposed Project will ensure the safe and secure supply of renewable electricity onto the national grid. Furthermore, this energy policy document highlights the importance of decarbonising the electricity sector which if consented, the Proposed Project will aid with.

National Energy Security Framework

The National Energy Security Framework (DECC, April 2022) highlights clearly the impacts the Russian invasion of Ukraine and the resulting war has had on Europe's energy system. The resulting decision by the European Union to phase out the import of Russian gas, oil and coal (REPowerEU) has brought to the fore the importance of security of supply and how energy policy is designed for long-term resilience. It takes account of the need to decarbonise society and economy, to reduce Ireland's emissions by 51% over the decade to 2030 and reach net zero emissions by 2050. According to the SEAI's Energy in Ireland (2021) report, oil accounts for 45% of Ireland's primary energy requirement making it one of the highest rates of oil dependency in the EU. The International Energy Agency, of which Ireland is a member country, includes a 10-point plan to cut oil use which calls for an acceleration in the deployment of wind and solar projects. Ireland's response per the Framework is set out over three themes:

- Theme 1 – managing the impact on consumers and businesses.
- Theme 2 – ensuring security of energy supply in the near-term.
- Theme 3 – reducing our dependency on imported fossil fuels in the context of the phasing out of Russian energy imports across the EU.

In relation to theme 3, the Framework highlights that replacing fossil fuels with renewables, including wind energy, will be a focus area of work. The Framework calls for "*Supportive policies across Government and State agencies"* which *"can reduce barriers and fast track permitting for renewable energy generation projects. Similarly, renewable energy developers need to match this through taking a leadership role in delivering high quality applications to relevant consenting authorities, meeting project milestones on time and minimising delays."* There are a number of 'Responses' set out in the Framework aimed at reducing reliance on imported fossil fuels and increasing indigenous renewable energy generation, including Response 25 which seeks the alignment of all elements of the planning system to support accelerated renewable energy development.

The Government published an update to this in November 2023 which outlines a new strategy to ensure energy security in Ireland for this decade, while ensuring a sustainable transition to a carbon neutral energy system by 2050. The Energy Security Package emphasizes the need to prioritize, monitor, and regularly review energy security during the transition period. It proposes measures focusing on:

1. Reduced and Responsive Demand
2. Transition to Renewables
3. Building More Resilient Systems
4. Implementing Robust Risk Governance

The report details mitigation measures under each area, such as expanding indigenous renewable energy capacity, diversifying fuel sources, and enhancing governance structures. Lessons from European energy supply disruptions and domestic electricity sector challenges inform the strategic approach.

Six key pillars guide the response and recommendations outlined in "Energy Security in Ireland to 2030," which includes a public consultation and external reviews. The Government plans to release

follow-up reports every five years, with implementation oversight by the Governments Energy Security Group.

Having regard to the above, it is clear that the provision of additional renewable energy generation, such as the Proposed Project, is vital in helping to secure the State's energy supplies and reduce reliance on imported fossil fuels.

2.3.3 Renewable Energy Target Progress

The SEAI *Energy in Ireland 2023* was published in December 2023 and set outs the most recent updates to Ireland's progress towards its binding European and National renewable energy targets. Some of the key points from this report are outlined below (from 2022):

- Ireland imported 81.6% of its total primary energy requirement.
- 85.8% of Ireland's primary energy requirement came from fossil fuel.
- Ireland's total energy demand was 4.7% higher than in 2021.
- Demand for electricity was 2.5% higher than in 2021, consistent with the annual growth of recent years.

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 6: Carbon budgets and sectoral ceilings for 2021–2025 and 2026–2030

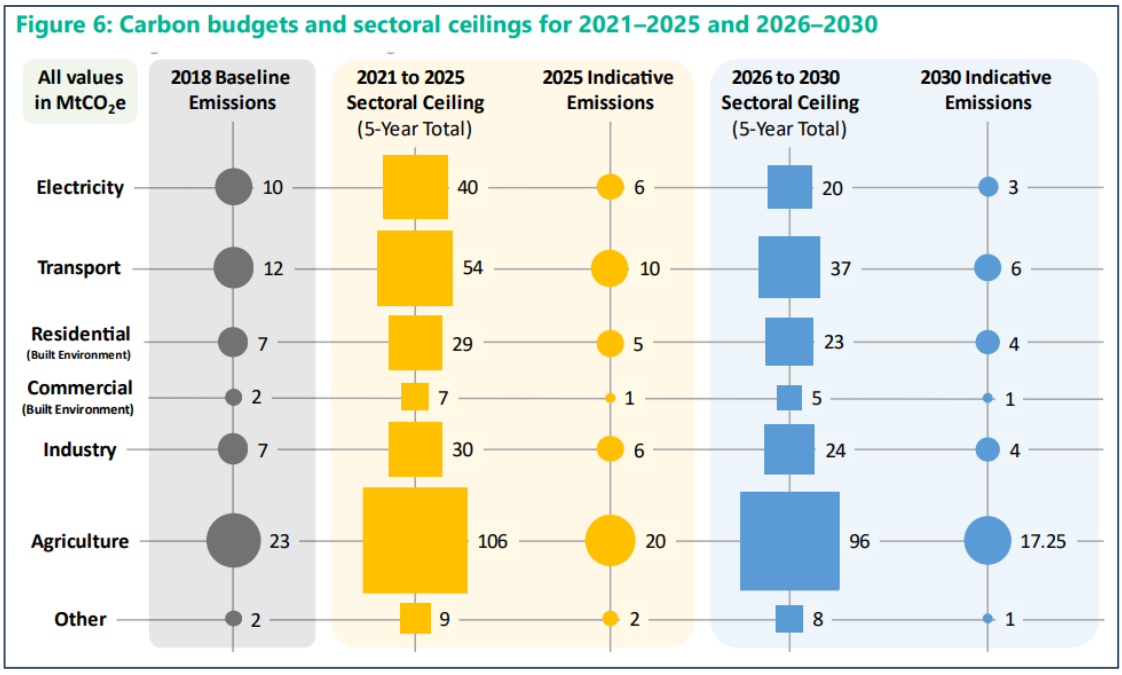

Figure 2-1 Proposed Carbon Budgets of the Climate Change Advisory Council

The emissions ceiling for the electricity sector from 2021 to 2025 stands at 40 MtCO2e in total, with an annual average of 8 MtCO2e (indicated by the dotted bars). In the initial two years of this period, sectoral emissions totalled 19.74 MtCO2e, leaving a remaining budget of 20.26 MtCO2e for 2023-2025, equivalent to an annual average of 6.75 MtCO2e (shown by the dark grey bars).

The report confirms that wind accounted for 85.7% of renewable electricity generated in 2022 having 4.54GW of installed wind capacity in 2022. SEAI's provisional estimate for installed wind capacity in 2023 is based on EirGrid data to the end of August, and ESBN data to the end of September, and totals 4.59 GW.

Security of supply is a focus in the report, noting *"In 2022, Ireland imported 81.6% of its total primary energy requirement. For comparison, the average energy import dependency of all EU member states*

was 57.5% in 2020. Ireland has a high energy import dependency because it imported all its coal and oil products, and 74.0% of its natural gas supplies."

In order to reduce Ireland's 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:

Table-2-2 National renewable energy targets

	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.	80%
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%

**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. The revised Renewable Energy Directive EU/2023/2413 raises the EU's binding renewable target for 2030 to a minimum of 42.5%, up from the previous 32% target, with the aspiration to reach 45%. It means almost doubling the existing share of renewable energy in the EU. As per the National Energy and Climate Plant (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 current RES-E target to 2030 of 80% ensures that "*renewable electricity continues to form the backbone of our renewable energy use for the coming decade and beyond.*"

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 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. Accordingly, the Proposed Project will serve to only contribute to meeting this increasing electricity demand.

With regard to the requirements needed to achieve the ambitions targets set in the Governments Climate Action Plan 2024, it is stated that:

> *"The electricity sector continues to face an immense challenge in meeting its requirements under the sectoral emissions ceiling, as the decarbonisation of other sectors, including transport, heating, and industry, relies to a significant degree on electrification. The deployment rates of renewable energy and grid infrastructure required to meet the carbon budget programme for electricity is unprecedented and requires urgent action across all actors to align with the national targets."*

The CAP also states the following in relation to onshore wind:

> *"Given that the programme of large-scale offshore wind deployment is expected to be realised towards end decade, deployment rates for onshore renewables will need to increase to match demand growth to ensure we keep electricity emissions within range of the carbon budgets. This requires a major upscaling and accelerating in current deployment of renewables, particularly onshore wind."*

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 Project will aid Ireland in addressing these challenges as well as addressing the country's over-dependence on imported fossil fuels.

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 additional wind energy output of approximately 56 MW from the Proposed Project will further assist Ireland's overall capability to meet its future targets of climate, energy security and renewable energy.

2.4 Strategic Planning Policy Context

2.4.1 Introduction

This section of the EIAR provides the strategic planning context applicable to the Proposed Project. As is examined below, the Proposed Project is in line with national, regional and local policies, frameworks, guidelines and plans. This section has been broken down to the following sections:

- National Policy Context
- Regional Policy Context
- Local policy Context

As a renewable energy project, the Proposed Project strongly supported in principle by the overall national policy objectives to increase penetration and deployment of renewable energy resources and has been designed in accordance national, regional and local planning policy. This chapter should be read in conjunction with the accompanying Planning Report which sets out a detailed planning assessment of the Proposed Project.

2.4.2 National Policy Context

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 Proposed Project, 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 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 CAP 2021 & 2024) which established the fundamental objective of achieving transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050. The NPF emphasises that rural areas have a strong role to play in securing a 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"*.

2.4.3 Project Compliance with the National Planning Framework

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. The Proposed Project, if consented, will aid in reaching the targets of reducing GHG emissions from the energy sector

and further strengthen Ireland's energy security. 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. As such, it is considered that the Proposed Project is in line with the National Planning Framework.

This shift from fossil fuels is dependent 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 8 no. wind turbines, with an estimated electricity generation capacity of 56 MW, will 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.

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 CO_2 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.

The Proposed Project is considered to be in compliance with the aims and objectives of the National Development Plan. One of the NDP's strategic climate priorities is the need for low-carbon, resilient electricity systems; specifically, the plan commits to increasing the share of renewable electricity up to 80% by 2030. This is characterised by the NDP as an '*unprecedented commitment to the decarbonisation of electricity supplies*', which is certainly an ambitious and an explicit driver for the deployment of new renewable generators such as the Proposed Wind Farm. The focus of investment in renewable energy infrastructure is to contribute to a long-term, sustainable and competitive energy future for Ireland.

2.4.4 Project Compliance with National Policy

The Proposed Wind Farm of 8 No. wind turbines and associated infrastructure is also considered to be in line with National Policy objectives as outlined in section 2.4.2. The CAP24 as outlined herein was published to outline national actions required to meet EU climate targets. According to CAP24, Ireland aims to utilise its 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 Wind Farm of an additional 8 No. wind turbines with an approximate electricity generation capacity of 56 MW 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 Ireland's transition to renewable energy. 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 and enhance energy security.

2.4.5 Regional Policy Context

2.4.5.1 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. 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 policy support 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 220kV and 400kV 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.

2.4.5.2 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 of the Proposed Project 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 Proposed Project is considered to be in line with Regional Policy.

2.4.6 Local Policy Context

2.4.7 Galway County Development Plan 2022 – 2028

The Galway County Development Plan 2022 – 2028 (the CDP) was adopted by the Elected Members of Galway County Council at the conclusion of the Special Meeting on the 9th of May 2022 and came into effect on the 20th of June 2022. The CDP is the statutory county development plan in effect for the County and provides the framework against which all planning applications for development in the county are assessed.

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 Galway County Council acknowledging that continual action is needed for Galway to become a low carbon and climate resilient county. Please refer to the accompanying Planning Report submitted with this application which contains a detailed planning assessment of the Proposed Wind Farm against all relevant policies and objectives in the CDP.

The importance of climate action is outlined at the beginning of this chapter as it states, *"climate action is integrated into every chapter and strategy of the plan"*. The strategic aim of this chapter is outlined below:

> *"To reduce the carbon footprint by integrating climate action into the planning system in support of national targets, support indigenous renewable sources in order to reduce*

dependence on fossil fuels and improve security of supply and the move to a competitive low carbon economy."

The CDP recognises that an efficient and secure energy supply is essential to the future growth and sustainable development of County Galway:

> *"Reliable and low-cost energy is essential for a high quality of life for the residents of County Galway and also to ensure that the County is an attractive place in which to do business. However, it is essential to ensure that energy demands are met without compromising environmental quality. Energy efficiency, renewable energy development and progression towards a low carbon economy are therefore central themes of this Plan."*

The CDP presents an "Energy Expectation" for Galway to 2028. The relevant expectations and how the Proposed Project is in compliance with these expectations is set out in Table 2-3 below. As mentioned previously, the please refer to the Planning Report for a detailed assessment of the Proposed Wind Farm against all relevant policies and objectives of the CDP.

Table-2-3 Galway CPD Energy Predictions

Energy Expectation	Proposed Project Compliance
"A reduction in demand for non-renewable energy sources, such as coal and oil, as well as an increased demand for electricity from all sectors, leading to more sustainable energy usage across the county."	The Proposed Project will generate clean, renewable electricity, which can be integrated into the grid to meet the increasing demand for electricity across various sectors. By supplying sustainable renewable energy, the Proposed Project will reduce the need for non-renewable sources like coal and oil, helping to transition toward cleaner energy usage in the county.
"A significant increase in the demand for electricity is predicted resulting in a decrease in utilisation of fossil fuels. A large factor in this will be the Transport sector, as electric vehicles are developed and become more widespread, the oil usage by the sector is projected to decrease."	Wind-generated electricity can power electric vehicles (EVs). As wind farms contribute to the grid's capacity, the increase in clean energy availability can support the growth of EVs. This transition from traditional gasoline and diesel vehicles to EVs leads to a decrease in oil usage, especially in the transport sector, and can be supported by renewable electricity generation.
"A significant reduction in the use of coal and peat for home heating is anticipated due to advances in home heating technology, improvements in home insulation and new laws restricting the burning of fossil fuels for home heating due to environmental and climate change obligations."	Projects such as the Proposed Project are a critical component in decoupling the county from reliance on fossil fuels. By generating renewable energy, wind farms contribute to achieving the long-term goal of replacing fossil fuels with sustainable energy sources. This aligns with the Strategy for Renewable Energy 2012 - 2020, emphasizing a transition away from traditional non-renewable fuels in the energy sector.
"In the longer-term fossil fuels will be replaced by renewable energy sources in County Galway in line with the Strategy for Renewable Energy 2012 – 2020 which is aimed at decoupling energy from reliance on fossil fuels. *The implementation of the targets and policy objectives outlined in the Renewable Energy Strategy which has been prepared for County Galway as part of the County Development Plan is contained within Appendix 1"*	

The CDP outlines several policies relating to renewable energy, the environment and climate. These policies, along with how the Proposed Project complies with them is outlined in Table 2-4 below:

Table 2-4 Relevant Policies from the CDP

Policy	Description	Proposed Project Compliance
CC1 Climate Change	*"Support and facilitate the implementation of European, National and Regional objectives for climate adaptation and mitigation taking into account other provisions of the Plan (including those relating to land use planning, energy, sustainable mobility, flood risk management and drainage) and having regard to the Climate mitigation and adaptation measures."*	The Proposed Project has the potential to further decarbonise the electricity sector by increasing the supply of renewable electricity onto the national grid and thereby decreasing the need for fossil fuel dependant forms of electricity generation. The Proposed Project also has regard to the objectives for climate adaptation and mitigation at all levels of policy as outlined herein. Compliance with specific elements of policy like flood risk management can be found in Chapter 9 of this EIAR.
CC2 Transition to a low carbon, climate-resilient society	*"It is a policy objective of the Planning Authority 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."*	The implementation of the Proposed Wind Farm will aid with decreasing the requirement for fossil fuel derived electricity generation methods. This will therefore aid with decreasing the levels of greenhouse gas emissions from the electricity sector.
EG1 Enhancement of Electricity Infrastructure	*"Support and promote the sustainable improvement and expansion of the electricity transmission and distribution network that supply the County, while taking into consideration landscape, residential, amenity and environmental considerations."*	The Proposed Project will (if permitted) include 110kV infrastructure to facilitate the connection and distribution of the renewable energy generated by the Proposed Wind Farm. This enabling infrastructure will be subject to a separate application to An Bord Pleanála however, it is comprehensively assessed within this EIAR.
EG3 Power Capacity	*"To support and liaise with statutory and other energy providers in relation to power generation, in order to ensure adequate power capacity for the existing and future needs of the County"*	The Proposed Project will contribute positively to the levels of renewable electricity on the national grid. This will aid in ensuring there is adequate capacity for the growing energy needs of the Country.

Policy	Description	Proposed Project Compliance
NHB 4 Ecological Appraisal of Biodiversity	*"Ensure, where appropriate, the protection and conservation of areas, sites, species and ecological/networks of biodiversity value outside designated sites. Where appropriate require an ecological appraisal, for development not directly connected with or necessary to the management of European Sites, or a proposed European Site and which are likely to have significant effects on that site either individually or cumulatively."*	The Site has been subject to a comprehensive environmental and ecological appraisal to ensure that the Proposed Project does not result in any significant adverse environmental or ecological impacts. A detailed analysis of site-specific constraints was carried out in order to inform the placement of the proposed infrastructure. These assessments are mainly included within Chapter 6 of this EIAR however ecological and environmental considerations are included throughout each chapter of the EIAR.
RE1 - Renewable Energy Generation and ancillary facilities	*"To facilitate and support appropriate levels of renewable energy generation and ancillary facilities in the county to meet national, regional and county renewable energy targets, to facilitate a reduction in CO2 emissions and the promotion of a low carbon economy."*	The Proposed Wind Farm has the potential to generate c. 56MW of renewable energy which will be connected to the National grid. This will aid in achieving the climate change and renewable energy objectives at a National and International level.
RE2 - Local Authority Renewable Energy Strategy	*"The policy objectives and Development Management Standards set out in the Local Authority Renewable Energy Strategy for County Galway shall be deemed the policy objectives and development management standards for the purpose of the Galway County Development Plan 2022-2028."*	The Proposed Wind Farm is considered to be in line with the policy objectives of the LARES. The Proposed Wind Farm is located in an area classified as "Generally to be Discouraged" for wind energy development however it is fully in accordance with the relevant development management standards, policies and guidelines. Following analysis of the wind energy capacity assessment carried out for the accompanying Planning Report, it was concluded that it is not possible for County Galway to reach its potential wind energy capacity under the current classifications set out in the LARES. Given the urgency of national climate and energy targets, it is imperative that all viable sites within the county are considered for wind energy development.

Policy	Description	Proposed Project Compliance
		Please refer to the Planning Report which contains a detailed assessment of the Proposed Wind Farm against the LARES and includes a full wind energy capacity assessment for County Galway.
RE3 – Wind Energy Developments	*"Promote and facilitate wind farm developments in suitable locations, having regard to areas of the County designated for this purpose in the Local Authority Renewable Energy Strategy. The Planning Authority will assess any planning application proposals for wind energy production in accordance with the Local Authority Renewable Energy Strategy, the DoEHLG Guidelines for Planning Authorities on Wind Energy Development, 2006 (or any updated/superseded documents), having due regard to the Habitats Directive and to the detailed policy objectives and Development Standards set out in the Local Authority Renewable Energy Strategy."*	The Proposed Wind Farm has been designed in accordance with all relevant planning policy requirements including the 2006 Wind Energy Development Guidelines (the Guidelines) and the 2019 draft Wind Energy Development Guidelines (the draft Guidelines). Please refer to the Planning Report enclosed with this application which contains a detailed assessment of the Proposed Wind Farm against all relevant Development Management Standards applicable to the Proposed Wind Farm and demonstrates that the Proposed Project is consistent with all relevant planning policy. A Natura Impact Statement has been prepared and submitted with this planning application. Please refer to Chapter 6 of this EIAR and the NIS submitted with this application. The Planning Report concluded by stating that the Proposed Wind Farm site scores well when examined across the opportunity and sensitivity factors set out in the Local Area Renewable Energy Strategy. Therefore, it is not evident why the Proposed Wind Farm site is zoned as "Generally to be Discouraged" considering it was classified as Open to Consideration in the previous County Galway Wind Energy Strategy 2015-2020. Notably, the Local Area Renewable Energy Strategy does not restrict applications for wind turbines within the Generally to be Discouraged areas, but rather, they are assessed on their merits on the principles of proper planning and sustainable development. The NIS concluded with the following: *"Where the potential for any adverse effect on any European Site has been identified, the pathway by which any such effect may occur has been robustly*

Policy	Description	Proposed Project Compliance
		blocked through the use of avoidance, appropriate design and mitigation measures as set out within this report and its appendices. The measures ensure that the construction and operation of the Proposed Project does not adversely affect the integrity of European sites."
RE 5 – Renewable Energy Strategy	*"Support and facilitate the sustainable development and the use of appropriate renewable energy resources and associated infrastructure within the County having due regard to the Habitats Directive and to the detailed policy objectives and Development Standards set out in the Local Authority Renewable Energy Strategy."*	This EIAR outlines the expected environmental impact of the Proposed Project. The EIAR also outlines mitigation measures to minimise the impact on the receiving environment. Please refer to the NIS included with this application which assesses the Proposed Project in accordance with the Habitats Directive. A detailed analysis of the Proposed Project against the LARES is outlined in the accompanying Planning Report which demonstrates that the Proposed Wind Farm is consistent with the policy objectives and development standards of the LARES. Furthermore, there is an insufficient quantum of favourably zoned land to reach the estimated wind energy yield in County Galway by 2030. The estimated MW shortfall is over 400MWs shy of the 1,350MW estimated total capacity set out in the LARES.
RE 7 - Renewable Energy Generation - Transition to a Low Carbon Economy	*"To facilitate and support appropriate levels of renewable energy generation in County Galway, considering the need to transition to a low carbon economy and to reduce dependency on fossil fuels."*	The Proposed Project has an estimated generating capacity of c. 56MW. If consented, this will be transferred to the National electricity grid which will aid with decarbonising the electricity sector.

As demonstrated above, the Proposed Project is consistent with the policies and objectives of the CDP 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 of this Chapter

2.4.8 Galway Renewable Energy Strategy

County Galway's Local Authority Renewable Energy Strategy (LARES) is included as Appendix 1 of the CDP. The LARES for Galway sets out guidance designed to allow County Galway 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 vision as outlined in the LARES is as follows:

"To facilitate and encourage renewable energy generation and a low carbon energy transition across County Galway, in the interests of future generations, through the application of energy efficient technology and the harnessing of indigenous renewable energy resources, whilst respecting the need to conserve areas of environmental, cultural and economic value."

Lands classified in Map 15 of the LARES are as follows:

- Strategic Area
- Acceptable in Principle
- Open to Consideration
- Not Normally Permissible
- Generally to be Discouraged

The LARES classification that applies to the Proposed Project site is "Generally to be Discouraged". This classification is outlined in the LARES (Map 15) as follows:

"Areas where Wind Energy development is unlikely to be favourably considered on account of potential to adversely effect protected landscape, water, ecological resources and residential amenity."

Having regard to the above, the following section sets out a brief summary of how the Proposed Project complies with the mitigation requirements applicable to such a development. However, it should be noted that the accompanying Planning Report and this EIAR provide further and more detailed analysis on these matters. MAP 15 of the LARES was created by mapping individual factors. Each factor is assigned a 'priority' and identified as a 'opportunity' or 'sensitivity'. Figure 2-3 below has been extracted from the LARES and demonstrates the factors identified as sensitivities and opportunities within the LARES.

Factor as Opportunity or Sensitivity				
	Wind	**Solar**	**Hydro**	**Bio**
Energy Network	Opportunity	Opportunity	Opportunity	Opportunity
Road Network	Opportunity	Opportunity	Opportunity	Opportunity
Population Density	Sensitivity	Sensitivity	Sensitivity	Sensitivity
Settlements	Sensitivity	Sensitivity	Sensitivity	Sensitivity
Land Use	Opportunity	Opportunity	Neutral	Opportunity
Slope	Sensitivity	Opportunity	Opportunity	Sensitivity
Elevation	Opportunity	Opportunity	Opportunity	Neutral
Protected Areas	Sensitivity	Sensitivity	Sensitivity	Sensitivity
Flooding	Sensitivity	Sensitivity	Opportunity	Sensitivity
Landslide	Sensitivity	Sensitivity	Sensitivity	Sensitivity
Wind Speed	Opportunity	Opportunity	Neutral	Neutral
Aspect	Opportunity	Opportunity	Neutral	Neutral
Solar Radiation	Neutral	Opportunity	Neutral	Neutral
Crop potential	Neutral	Opportunity	Neutral	Opportunity

Figure 2-2 Factors Categorised as Opportunities or Sensitivities for Each Type of Renewable Energy (Extracted from the LARES)

The Proposed Wind Farm site was examined against the relevant factors as outlined in Figure 2-2 above. The examination of the Proposed Project against these factors is outlined in Table 2-5 below.

Table-2-5 Opportunities and Sensitivities of the Site

Opportunities		Sensitivities	
Energy Network (High priority)	Proximity to the Cloon 110kV Substation	**Pop. Density (High priority)**	>20 and <= 50 (Second lowest population category)
Road Network (High priority)	Proximity to the National Road Network (N83)	**Settlements (High priority)**	Not situated in the excluded settlement areas
Land use (Medium priority)	Pastures	**Slope (Medium priority)**	Lowest rating (less than 10 degrees)
Elevation (High priority)	38 – 50 mAOD	**Protected Areas (High priority)**	Not located within the excluded landscape, geological, natura 2000 or natural heritage area sites
Wind Speed (High priority)	>7 and <=8 (m/s)	**Flooding (Medium priority)**	Does not overlap with fluvial & Coastal flood areas
		Landslide (High priority)	Low (inferred)

As set out in this EIAR and the accompanying Planning Report, the Proposed Wind Farm has been designed in accordance with the opportunities and sensitivities set out in the LARES and presents an appropriate and suitable opportunity for wind energy development. Having regard to the factors listed above, the Proposed Wind Farm is in close proximity to the existing energy transmission network and road network, requires minimal vegetation removal and has suitable wind speeds. Furthermore, the Proposed Wind Farm has few sensitivities constraining wind energy development. The site is not prone to landslides or flooding and is not located within an ecologically protected area. The population density is between 20 and 50 persons per square kilometre which is the second lowest category on the population density map. As such it is considered that the Proposed Wind Farm is in accordance with the aims and objectives of the LARES and represents an opportunity to increase the supply of renewable electricity to the national grid on a suitable site.

Please refer to the accompanying Planning Report which sets out in detail how the Proposed Wind Farm is consistent with the policies, objectives and development management standards of the LARES.

2.4.9 Other Relevant Material Considerations

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 (as amended). 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.

The Proposed Project has been designed in accordance with the Guidelines and a detailed assessment can be found in the Planning Report. While the Guidelines remain the relevant guidelines in place, at the time of lodgement, decision makers (Planning Authorities and An Bord Pleanála) are not bound to their provisions and they can (and do) consider updated standards/requirements/specifications in assessing impacts and the proper planning and sustainable development of the area.

Draft Revised Wind Energy Guidelines 2019

The Department of Housing, Planning and Local Government published the '*Draft Wind Energy Development Guidelines*' in December 2019 (the draft Guidelines). A consultation process in relation to the draft Guidelines concluded on the 19th of February 2020. A further review of the draft Guidelines is currently underway by the Department of Housing, Local Government and Heritage (DHLGH) and the Department of Environment, Climate and Communications (DECC) in relation to the noise limits in particular. Since the publication of the draft Guidelines, there have been significant changes in national policy regarding renewable energy targets, giving further impetus to the importance of the further review. The draft Guidelines set out that that the proper planning and sustainable development of areas and regions must be taken into account when local authorities prepare their development plans and assess planning applications, irrespective of the significant role renewable energy has to play in tackling climate change.

The draft Guidelines note that potential impacts of wind energy development proposals on the landscape, including the natural and built environment, must be considered along with the legitimate concerns of local communities. With this in mind, and in line with the previously stated "*preferred draft approach*", the 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;
- 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 draft Guidelines in mind (for example in relation to set back, a minimum of 4 times turbine tip height distance from third party sensitive receptors has been achieved).

The submission period for the draft Guidelines closed in February 2020. Under the consultation it was evident that a number of submissions made appeared to have observations surrounding similar points, these include but are not limited to themes such as noise, visual amenity set back and shadow flicker. With regards to noise, a number of the received submissions noted that the provisions put forward in the draft Guidelines were unworkable, as such it was considered that should the noise measures be implemented there is the potential for an on-going impact on the development of onshore wind energy in the future. In relation to set back distances there was strong criticism with regards to this distance being measured to the curtilage of a property due to this measurement being ambiguous and difficult to implement. Furthermore, questions were raised surrounding the strict measures which have been put in place surrounding shadow flicker, the draft Guidelines put forward the provision that '*there will be no shadow flicker at any existing nearby dwelling or other relevant existing affected sensitive property*'. While the overall provision is possible a number of clarifications were sought to ensure that this provision could be implemented in a reasonable manner.

At time of writing the draft Guidelines are not yet finalised and are not in force, with the relevant guidelines for the purposes of Section 28 of the Planning and Development Act 2000 (as amended)

remaining those published in 2006. Notwithstanding this, however, due to the timelines associated with the planning process for renewable energy projects it is possible that an updated version of the draft Guidelines may be finalised during the consideration period for the Proposed Project. Towards this end on the basis of the details available from the draft Guidelines it is anticipated that the Proposed Wind Farm will be capable of adhering to the relevant noise and shadow flicker standards, albeit without sight of the final, adopted guidelines the processes by which the Proposed Project will comply with the same cannot be confirmed at this stage. It should be noted that Noise and Shadow Flicker are entirely controllable and are discussed further in Chapter 12 and Chapter 5, respectively. While the final guidelines have not yet been published it should be noted that the Proposed Project maintains a four times tip height set back between turbines and sensitive receptors which is currently the recognised standard for visual amenity purposes, as outlined in the draft Guidelines. Furthermore, detailed community consultations have been carried out (refer to Appendix 2-1) and detail of the Proposed Grid Connection for the Proposed Project has been provided and assessed as part of this EIAR.

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).

IWEA Best Practice Principles in Community Engagement and Community Commitments 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 Project are presented below. A Community Engagement Report has been prepared by MKO and in included in Appendix 2-1 to this chapter. This report outlines the steps taken by the Applicant to communicate effectively with the local community in respect of the Proposed Project.

DCCAE Code of Practice for Wind Energy Development Ireland – Guidelines for Community Engagement 2016

In December 2016, the 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.

2.5 Planning History

This Section of the EIAR sets out the relevant planning history of the Proposed Wind Farm application site, and other wind energy applications within the wider area (25km from the proposed turbines). The approach has considered all valid applications made post 2014, 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 planning permissions and the potential for extension of duration of planning permissions.

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 Wind Farm:

1. All planning applications which overlap or are within the planning application boundary of the Proposed Wind Farm have been identified (red line application boundary).
2. A buffer zone of c. 25 kilometres was established from the proposed turbines 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 potential for cumulative effects to arise with the Proposed Wind Farm from a landscape and visual perspective as identified in Chapter 14: Landscape and Visual Assessment, and from an Ornithological perspective, as identified in Chapter 7 - Birds
3. The planning history covers the period from 2014-2024, 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.

Further details on the cumulative assessment study areas for each environmental criteria are set out in Section 2.8 of this Chapter.

2.5.1 Planning applications within the Proposed Wind Farm Application Boundary

A planning search was carried out through the national planning application database[8] and An Bord Pleanála's online planning portal in February 2024 for relevant planning applications lodged since 2014 within the planning application boundary of the Proposed Wind Farm. The planning applications within the Proposed Wind Farm site are outlined in Table 2-6 below.

Table-2-6 Planning applications within the Proposed Wind Farm

Pl. Ref.	Applicant	Description	Decision
Pl. Ref. 201188	Shane & Margaret Connolly	for the construction of a single storey dwelling house and garage with on-site sewerage treatment works and all other site services. Gross floor space of proposed works: 60 sqm	Granted Permission by Galway County Council subject to 14 No. conditions

[8] *https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=9cf2a09799d74d8e9316a3d3a4d3a8de*

Pl. Ref.	Applicant	Description	Decision
Pl. Ref. 21693	Marion Byrne	permission to construct a new sewage treatment system and percolation area to rear of existing dwellinghouse, decommissioning of existing septic tank and, all associated site work and services.	Granted Permission by Galway County Council subject to 3 No. conditions

Table 2-6 above outlines the 2 no. planning applications which have been made within the Proposed Wind Farm site boundary subject to this application. These applications comprise of small-scale permissions relating to one off rural dwellings and agriculture.

2.5.2 Other Developments/Land uses

The review of the national planning application database documented relevant general development planning applications in the vicinity of the Proposed Wind Farm site, the majority of which relate to the provision and/or alteration of one-off rural housing and the provision of agricultural buildings. These applications and land uses in the vicinity of the site 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 Project.

The Proposed Wind Farm site comprises agricultural land. This land-use will continue in conjunction with the operation and decommissioning of the Proposed Wind Farm. Each environmental discipline has considered the various existing land uses in the vicinity of the site which include agriculture, peat extraction, housing, quarrying, and forestry.

The potential for cumulative effects during the construction, operational and decommissioning phases of Proposed Project have therefore been assessed. The long list of applications which have been considered in the cumulative assessment of this EIAR are included as Appendix 2-3 of this EIAR.

2.5.3 Wind Energy Developments within 25km

A planning search was carried out to establish permitted, operational and proposed wind energy developments within 25km of the proposed turbines for the purposes of informing the potential cumulative effects (see Section 2.8 of this Chapter for further details and Table 2-13 for details on the rationale for this study area). The search was carried out using the relevant local authority, An Bord Pleanála and EIA planning portals in February 2024 for relevant planning applications. In total, 17 no applications relating to wind energy were identified within 25km of the proposed turbines, 5 of which relate to single turbine developments and a further 5 of which relate to amendments to permitted developments. These are outlined in greater detail in Table 2-7 below:

Table-2-7 Wind Energy Applications within 25km of the Proposed Turbines

Pl. Ref.	Applicant	Wind Farm	Description	Decision	Status	Turbine No.	Approximate Distance to Nearest Turbine (km)
Single/ Domestic Turbines							
Pl. Ref: 09/1675	Tim Silke	Domestic turbine	To erect an electricity generating wind turbine for the supply of domestic electricity.	Granted by Galway County Council on 23/11/2009 subject to 3 No. conditions	Operational	1	9.8km
Pl. Ref: 09/1571	Joe and Ann Monaghan	Domestic turbine	To erect a domestic wind turbine and all associated site works on revised site boundaries	Granted by Galway County Council on 16/11/2009 subject to 2 No. conditions	Operational	1	10.9km
Pl Ref: 13/68	Atlantic Enterprises Ltd.	Single turbine	Permission for the retention of a renewable energy wind turbine as constructed along with associated site works	Granted by Galway City Council on 16/04/2014	Operational	1	16km

Pl. Ref.	Applicant	Wind Farm	Description	Decision	Status	Turbine No.	Approximate Distance to Nearest Turbine (km)
Pl. Ref: 221175	Sub. of Sharedturbine Ltd. Cloonascragh Locally Owned Turbine Limited	Single turbine	For the development consisting of a wind energy development comprising of one electricity generating wind turbine, with an overall blade tip height of up to 168m, construction of c. 150m of permanent access track, 110m of temporary access track, road widening works along the existing local access road from the R327 to the proposed site access track, a crane hardstand, a 20kV substation, site electrical & fibre optic cabling & ancillary site works. The maximum output capacity of the wind farm will be c.4.8MW. This application is seeking a 10-year permission & a 35-year operational life from the date of commissioning of the wind farm. The planning application is accompanied by Natura Impact Statement (NIS)	Granted by Galway County Council on 20/11/2023 subject to 20 No. conditions	Permitted	1	7.8km
Pl Ref: **23/74**	John Flaherty	Domestic turbine	to erect 20kw domestic wind turbine and associated site works.	Granted by Galway County Council on 09/02/2024 subject to 9 No. Conditions	Permitted	1	17.9km
Larger Wind Energy Applications							
Pl Ref:	ProVENTO Ireland plc	Galway Wind Park	to erect an electricity generating windfarm consisting of twenty (20) wind turbines of hub	Granted by Galway County Council	Existing	20	23.9km

Pl. Ref.	Applicant	Wind Farm	Description	Decision	Status	Turbine No.	Approximate Distance to Nearest Turbine (km)
036992			height 70m and rotor diameter 80m, a 70m meteorological mast, a control building incorporating a transformer substation and associated site roads.	subject to 30 no. conditions			
Pl. Ref. 08/2407 ABP Ref. 07.232902	Oliver Tierney	Cloonlusk Wind Farm	To construct 2 No. 2 megawatt wind turbines on 75m towers plus substation, access road and crane stand (gross floor space 31.7sqm)	Granted by ABP on 17/11/2009 subject to 15 No. conditions	Operational	2	9.3km
Pl Ref: 034656	Coir na Gaoithe Teo	Lettergunnet Wind Farm	For construction of a wind farm comprising 8 No. Wind Turbines, small control building, site tracks, hard standing areas, underground cabling and site signage. Extension of duration permitted under Pl Ref. 09/1239.	Granted by GCC on 25/05/2003 subject to 21 no. conditions.	Not Commenced (built under Pl. Ref. 10/1214)	8 (Increased under Pl. Ref 10/1214)	21.3km
Pl Ref: 09/573 ABP Ref: PL07.235051	Coir na Gaoithe Teoranta	Lettergunnet Wind Farm	Amendments to Pl Ref. 03/4656 comprising Alterations to hub heights and blade lengths of wind turbines together with an increase in wattage from 1.75 megawatt to 2.3 megawatt.	Granted by ABP on 09/03/2010 subject to 15 no. conditions	Operational	8	21.3km
Pl Ref. 09/1326, ABP Ref. PL07.234861)	Coir na Gaoithe Teo	Lettergunnet Wind Farm	Amendments to Pl Ref. 03/4656, to increase hub heights from 60m to 64m and increase of rotor blade length from 33m to 35.5m together with an increase in wattage from 1.75 megawatt to 2.3 megawatt and alterations to	Granted by GCC on 27/08/2009. Granted by ABP 09/03/2010	Operational	10	21.3km

Pl. Ref.	Applicant	Wind Farm	Description	Decision	Status	Turbine No.	Approximate Distance to Nearest Turbine (km)
			turbine layout and internal access arrangements.				
Pl Ref: **10/1214**	Coir na Gaoithe Teo	Lettergunnet Wind Farm	Amendments and alterations to the permitted Lettergunnet wind farm (09/1326, PL07.234861)	Granted by GCC on 04/05/2011 subject to 15 no. conditions.	Operational	10	21.3km
Pl Ref: **10/1225** **ABP Ref:** **PL 07.238762**	Enerco Energy Ltd	Letterpeak (Shannagurran) Wind Farm	The windfarm will consist of 7 wind turbines (each with a maximum hub height of 78m, a maximum rotor diameter of 82m and total tip height of 119m), anemometry mast (80m), underground electricity connection to site boundary, associated equipment, all ancillary site works including borrow pits, upgrade of existing and provision of new internal access roads and facilitating works to existing road junctions.	Granted by ABP on 08/10/2011 subject to 22 no. conditions.	Operational	7	25.3km (Application Boundary is within 25km but no turbines fall within 25km)
Pl Ref: **14/1273**	Knockalough Wind Farm Limited	Knockalough Wind Farm	for a ten-year planning permission to construct a wind farm in the townlands of Knockalough, Finisklin and Laughil. The proposed windfarm will comprise the provision of a total of up to 11 no. wind turbines with a maximum overall blade tip height of up to 131m, new internal access roads and upgrading of existing roads, wind anemometry mast (up to 90m in height), 2 no.	Granted by GCC on 05/10/2015 subject to 27 no. conditions	Operational	11	22.6km

Pl. Ref.	Applicant	Wind Farm	Description	Decision	Status	Turbine No.	Approximate Distance to Nearest Turbine (km)
			borrow pits, 1 no. electricity sub-station (at one of two possible locations) with control buildings and associated equipment.				
Pl Ref: **16/1211**	Knockalough Wind Farm Limited	Knockalough Wind Farm	for a ten-year planning permission for the relocation of one turbine (Turbine no. 4) of the previously permitted Knockalough Wind Farm (Pl. Ref. 14/1273). The proposed development consists of the relocation of Turbine no. 4, with a permitted maximum overall blade tip height of up to 131m, and associated infrastructure to a location northwest of its permitted position and the provision of additional internal access road and all ancillary works.	Granted by ABP on 13/10/2017 subject to 5 no. conditions.	Operational	1	22.6km
Pl Ref: **13/829**	Western Power Developments Ltd	Knockranny Wind Farm	10-year permission for wind farm - 11 turbines, mast, 110 kv substation, new entrance, roads and site works.	Granted by ABP on 20/01/2016 subject to 17 No. conditions	Permitted	11	20.7km
Pl Ref **23225** **ABP Ref:** **318723**	Western Power Developments Ltd.	Knockranny Wind Farm	Alterations to the permitted wind farm (13/829, ABP Ref. 07.243094).	Granted by GCC 22/11/2023 Appealed to An Bord Pleanála	Undecided	N/A	20.7km

Pl. Ref.	Applicant	Wind Farm	Description	Decision	Status	Turbine No.	Approximate Distance to Nearest Turbine (km)
ABP Ref: 303086	Ardderroo Windfarm Ltd	Ardderroo Windfarm	Construction of up to 25 number wind turbines, one permanent meteorological mast, one 110kV substation and all associated site development works.	Granted by ABP on 15/07/2019 subject to 25 No. conditions	Operational	25	21.8km
ABP Ref. 307058	Clonberne Windfarm Ltd.	Clonberne Wind Farm	The Proposed Wind Farm would comprise of a wind farm development with a power output of 52.8 MW. It would consist of 11 no 4.8 MW turbines, each with a tip height of 170 meters and with an overall output of 52.8 MW. The development would include all associated works, including access roads, 110KV substation, battery storage compound and temporary construction compound. It is intended to include the electrical connection in the planning application in due course and at present two routes are being progressed.	N/A	Pre-Application Stage	11	19.9km
ABP Ref. 317307	RWE Renewables Ireland Limited	Shancloon Wind Farm	Windfarm development of up to 13 no. wind turbines and associated works.	N/A	Pre-Application Stage	13	10.7km
ABP Ref. 316466	Neoen Renewables Ireland Limited	Cooloo Wind Farm	Cooloo Windfarm consisting of 9 no. wind turbines with an estimated maximum energy capacity of c. 54MW.	N/A	Pre-Application Stage	9	17.43km

Pl. Ref.	Applicant	Wind Farm	Description	Decision	Status	Turbine No.	Approximate Distance to Nearest Turbine (km)
Alterations to Permissions Under Section 146B of the Act							
ABP Ref: **308302**	Ardderroo Windfarm Ltd	Ardderroo Windfarm	application for alterations to ABP-303086-18 in the townlands of Ardderroo, Letter, Finnaun, County Galway consisting of amendments to the route of the internal electrical cabling, amendments to the internal roads network, amendments to the electricity substation and ancillary works.	Granted by ABP on 23/11/2020	N/A	N/A	21.8km
ABP Ref: **314439**	Ardderroo Windfarm Ltd	Ardderroo Windfarm	Amendment to ABP-303086-18 to amend the internal access road arrangement providing access to Turbines Number T14, T17 and T22.	Granted by ABP on 26/10/2023	N/A	N/A	21.8km

Following a review of aerial imagery, it is acknowledged that there are also several single turbine developments within 25km which appear to not have planning permission. The location of these turbines and their proximity to the Proposed Wind Farm site is outlined in Table 2-8 below.

Table-2-8 Singular Turbines within 25km without planning permission

Townland of Turbine	Coordinates of Turbine in ITM	Approximate Distance to Proposed Wind Farm site
Cloghanower	527890.61, 744809.82	7km Northwest
Pollnaclogha	522228.537, 727724.852	19.5km Southwest
Galway City Harbour	530211.05, 724733.81	18.6km Southwest
Galway City (Ballybrit)	532916.60, 727145.38	15km Southwest
Glennascaul	538580.40, 726975.84	16km South
Bushfield	542268.93, 725289.87	19km South
Lisheenykyle West	543745.76, 727113.99	17km Southeast
Moor	543387.7, 729267.1	15km Southeast
Pollacappul	552050.31, 728311.37	19.5km Southeast
Cahergowan or Summerfield	536540.20, 732330.03	11km South

There appears to be no planning permissions in place for these turbines, however we note that the following exemptions from the requirement to obtain planning permission are currently in place. As set out in Schedule 2 part 1, class 2 (b) of the Planning and Development Regulations 2001 (as amended) the following is classed as exempted development:

> *"The construction, erection or placing within the curtilage of a house of a wind turbine."*
>
> 1. *"The turbine shall not be erected on or attached to the house or any building or other structure within its curtilage."*
> 2. *"The total height of the turbine shall not exceed 13 metres"*
> 3. "*The rotor diameter shall not exceed 6 metres"*

The following exemptions for turbines are in place for turbines in agricultural settings as set out in Schedule 2-part 1 class 18 (b):

> *"The construction, erection or placing within an agricultural holding of a wind turbine."*
>
> 1. *"The turbine shall not be erected on or attached to a building or other structure."*
> 2. *"The total height of the turbine shall not exceed 20 metres."*
> 3. *"The rotor diameter shall not exceed 8 metres."*

The following exemptions for turbines are in place for turbines in industrial settings as set out in Schedule 2-part 1 class 56 (b):

"The construction, erection or placing within the curtilage of an industrial building or light industrial building, or business premises of a wind turbine."

1. *"The turbine shall not be erected on or attached to the premises or building or any other structure within the curtilage of the building or premises."*
2. *"The total height of the turbine shall not exceed 20 metres."*
3. *"The rotor diameter shall not exceed 8 metres."*

All existing, permitted and proposed turbines in the LVIA study area (20km from the Proposed Wind Farm turbines) have been considered in Chapter 14 of the EIAR, however, as set out in Chapter 14 of this EIAR, certain single turbine developments have been scoped out of the LVIA cumulative assessment based on the size of the turbines and the distance from the Proposed Wind Farm:

"There are several singular turbines located within the LVIA Study Area. Whilst it is acknowledged these singular turbines exist, due to the distance beyond 5km and the height of the singular turbines below 50m, these turbines have been screened out from assessment. There is no potential for significant cumulative effects to arise between these singular turbines and the Proposed Project due to scale and set back distance."

2.6 Scoping and Consultation

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 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 Project and its potential effects on the environment and provides initial feedback in the early stages of the design iteration process. In this way scoping not only informs the content and scope of the EIAR, it also provides a feedback mechanism for the proposal design itself.

A scoping report, providing details of the Proposed Project, was prepared by MKO and circulated in May 2023. MKO requested the comments of the relevant personnel/bodies in their respective capacities as consultees with regards to the EIAR process. As part of the constraints mapping process, which is detailed in Chapter 3 of this EIAR, telecommunications operators were contacted in February 2022 in order to determine the presence of telecommunications links either traversing or in close proximity to the Proposed Project site.

2.6.2 Scoping Reponses

Table 2-10 and Table 2-11 lists the responses received to the scoping document circulated. Telecommunications operators were scoped at an earlier stage for the purposes of constraints mapping. Copies of all scoping responses received as of March 2024 are included in Appendix 2-2 of this EIAR. The recommendations of the consultees have informed the scope of the assessments undertaken and the contents of the EIAR. If further responses are received, the comments of the consultees will be considered in the construction, operation and decommissioning of the Proposed Project in the event of both planning permissions being granted. Those bodies engaged with at scoping stage are set out below in Table 2-9.

Table-2-9: Scoping List and Date of Response

No.	Consultee	Date of Response
1	An Taisce	25/05/2023
2	Bat Conservation Ireland	No Response
3	BirdWatch Ireland	No Response
4	Broadcasting Authority of Ireland	25/05/2023
4	Commission for Regulation of Utilities	No Response
5	Department of Agriculture, Food and the Marine	29/06/2023
6	Department of the Environment, Climate and Communications	25/05/2023
7	Department of Defence	15/06/2023
8	Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media	30/06/2023
9	Department of Housing, Local Government and Heritage	No Response
10	Department of Transport, Tourism and Sport	14/06/2023
11	EirGrid	No Response
12	Failte Ireland	07/06/2023
13	Forest Service	No Response
14	Gas Networks Ireland	27/11/2023
15	Galway Airport	No Response
16	Galway County Council – Environment Department	No Response
17	Galway County Council – Heritage Department	26/05/2023
18	Galway County Council – Roads Department	No Response
19	Geological Survey of Ireland	08/06/2023
20	Health Service Executive	19/06/2023
21	Iarnród Éireann	No Response
22	Inland Fisheries Ireland	No Response
23	Irish Aviation Authority	07/06/2023
24	Irish Peatland Conservation Council	No Response
25	Irish Red Grouse Association	No Response
26	Irish Raptor Study Group	No Response
27	Irish Sports Council	No Response
28	Irish Water	No Response
29	Irish Wildlife Trust	25/05/2023
30	Office of Public Works	No Response
31	Sustainable Energy Authority of Ireland	No Response
32	West Local Authority Waters Programme	No Response
33	The Heritage Council	25/05/2023
34	Transport Infrastructure Ireland	14/06/2023
35	Waterways Ireland	No Response

Table 2-10 sets out the detail of Telecommunication consultation responses received. The responses received were fully considered and issues raised where followed up through contact with the respondent where clarification was necessary and addressed throughout the EIAR.

Table -2-10: Telecommunications Scoping and Responses

No.	Consultee	Date of Response
1	ComReg	No Response
2	Eircom Ltd	No Response
3	Imagine Networks Services Ltd	28/02/2022
4	Eir	25/02/2022 06/04/2022
5	Meteor Mobile Communications Limited	No Response
6	Ripplecom Communications	No Response
7	Three Ireland (Hutchinson) Ltd	01/09/2022
8	Viatel Ireland Ltd.	No Response
9	Virgin Media Ireland Ltd.	01/03/2022
10	RTE Transmission Network Ltd.	25/02/2022
11	Vodafone Ireland Ltd.	28/03/2022 16/05/2022
12	Enet	24/02/2022 09/05/2022 10/05/2022 16/05/2022 17/05/2022
13	BT Communications Ireland	24/02/2022
14	ESB Telecoms	07/06/2022
15	2rn – RTÉ/ Saorview	No Response
16	Tetra Ireland Communications Ltd.	25/02/2022
17	Towercon	No Response
18	Broadcasting Authority of Ireland	28/02/2022
19	Ajisko Ltd	No Response
20	AirWire	No Response
21	Lighthouse Networks Limited	15/03/2022

Table 2-11 below provides a summary of the details received from the consultees. The table also identifies the relevant chapter where the points raised by each of the consultees are addressed.

Table-2-11: Consultee responses and relevant chapter they are addressed in.

Consultee	Points Raised by Consultee	Addressed in Chapter
Department of Agriculture, Food, and the Marine	Response from the felling division: › If the proposed development will involve the felling or removal of any trees, the developer must obtain a felling licence from this department before trees are felled or removed. A Felling licence application form can be obtained from Felling Section, Department of Agriculture, Food and the Marine, Johnstown Castle Estate, Co. Wexford. › A felling licence granted by the Minister provides authority under the Forestry Act 2014 to fell or otherwise remove a tree or trees and/or to thin a forest for silvicultural reasons.	Chapter 4 Description Chapter 6 Biodiversity
Department of Defence	Response noted that: › The department does not comment on individual cases during the scoping process. The Department provided the following general comments: › All turbines should be illuminated by type C Medium intensity fixed red obstacle lighting with a minimum output of 2,000 candela to be visible in all directions, operational 24/7 › Obstacle lighting should be incandescent. Obstacle lighting must emit light at the near infrared range of electromagnetic spectrum. › Light intensity to be of similar value to that of the visible spectrum of light. › The scoping document shows that the Proposed Laurclavagh Renewable Energy Development lays in proximity to the Irish Air Corps critical route N84 › Irish Air Corps requirements are separate to Irish Aviation Authority (IAA) Requirements.	Chapter 15.2 Material Assets
Department of Transport, Tourism and Sport	› Where the developer proposes the placement of any cables in the public road network, it is necessary to consider the following: 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 cost 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' the design needs to take account of all the variable conditions and not be based on a sample of general conditions. - The possible effect on the remaining available road space (noting that there may be need to	Chapter 15.1 Material Assets

Consultee	Points Raised by Consultee	Addressed in Chapter
	accommodate other utilities within the road in the future) - The necessity to have the power in the cables be switched off where the road authority considers this necessary in order to carry out its function to construct and maintain the public road. › The department consider it important that the examination of 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 closer to the wind farm in order to reduce the adverse impact on public roads. -details of where within the road cross section cables are set to be placed so as to minimise the effect on the Roads authority in its role of construction and maintenance. › Examination of details of any chambers proposed within the public road network so as to minimise the effect on the roads authority in their remit. -examine the elimination of jointing bays and use of temporary removable jointing bays to protect the integrity of the road structure for the safety of those driving. -rationalisation of the number of cables involved (including existing electric or possible future cables) and their diversion into one trench, in order to minimise the impacts on the road and the hedgerows adjacent. › The department considers the following should be considered when applying conditions to any approval: › a condition requiring the specific approval of the local authority to the detail of the final route of cables through the public road space, if during construction there is a need to deviate from the detailed design then the approval of the local authority would need to be sought. › A condition requiring the developer to comply with all appropriate standards and inter alia the Guidelines for Managing Openings in Public Roads › A condition requiring that the location of the cables would be recorded as exactly as possible to facilitate future use of the road space. › A condition to require the elimination of jointing bays and the use of temp removable jointing bays instead to protect the integrity of the road structure › A condition requiring the developer to route cables away from bridge structures and specifically preventing the developer from attaching cables to road bridges	

Consultee	Points Raised by Consultee	Addressed in Chapter
	› A condition requiring the developer to notify the Roads Authority of the owner of the cables and the controller of the power transmitted along the cables. In addition, the condition should require Owner-Power Controller to notify the roads authority of any change of ownership or change in power controller.	
Department of Culture, Heritage and the Gaeltacht	4. Acknowledgement of receipt - aiming to send full response at a later date. It noted that: 5. *'The Department is not in a position to make specific comments on this particular referral at this time. No inference should be drawn from this that the Department is satisfied or otherwise with the* proposed *activity. The Department may submit observations/recommendations at a later stage in the process.'*	N/A
Fáilte Ireland	Fáilte Ireland responded with a copy of their non-statutory supplementary Guidelines for the Treatment of Tourism in an EIA. This document outlined a number of EIAR Chapters which may have effects on tourism receptors.	Chapter 5 Population and Human Health Chapter 14 Landscape
Geological Survey of Ireland	6. GSI responded with a document outlining potential risks and attached the relevant datasets which need to be examined. › **Geoheritage:** › GSI records show that there are County Geological Sites close to the Proposed EIAR site boundary of the proposed development. › **Knockmaa**: › IGH themes IGH1 Karst, IGH3 Carboniferous to Pliocene Palaentology, IGH7 Quaternary, IGH12 Mesozoic and Cenozoic. A large area of landscape between Headford and Tuam within glacial deposits which have only slightly modified a pre-=Pleistocene karst landscape, developed on Carboniferous limestones, which contains late Pleistocene sediments. This is a site of international importance and is recommended to NPWS for geological NHA status.	Chapter 8 Land, Soils and Geology Chapter 9 Hydrology and Hydrogeology

Consultee	Points Raised by Consultee	Addressed in Chapter
	Pollnahallia: › Under IGH themes IGH7 Quaternary, IGH12 Mesozoic and Cenozoic. A deep abandoned sand pit on the southern footslopes of the hills west of Knockmaa hill. **Knockmaa quarries:** › Under IGH themes IGH1 Karst, IGH8 Lower Carboniferous, IGH12Mesozoic and Cenozoic. The site includes two large working quarries, side by side, on the southeastern slopes of Knckmaa hill, about 7km west of Tuam. these quarries provide a good representative site displaying the Carboniferous limestone bedrock geology of mid-Galway, with additional features of pre-glacial and Karstic interest. 7. GSI request that the above features be assessed as environmental constraints and that no negative impact occur on these as a result if the proposed development. Where impacts cannot be avoided, it is requested that mitigation measures be put in place. **Groundwater:** › The Groundwater Karst viewer indicates numerous karst landforms in the vicinity including a karst spring, enclosed depressions and caves. › The Groundwater Data Viewer indicates an aquifer classed as a 'Regionally important aquifer - karstified (conduit)' underlies the proposed development site. The groundwater vulnerability map indicates the range of groundwater vulnerabilities within the area covered is variable. We would therefore recommend the use if the groundwater viewer to identify areas of high to extreme vulnerability and 'Rock at or near surface' in your assessments, as any groundwater-surface water interactions that might occur would be greatest in these areas. The document names the GWSs that are present in the area. › Key to groundwater protection in general, and protection of specific drinking water supplies, is preventing ingress of runoff to the aquifer. Design and drainage will need to be cognisant of the public water scheme and the interactions between surface water and groundwater as well as run off. Appropriate design should	

Consultee	Points Raised by Consultee	Addressed in Chapter
	be undertaken by qualified and competent persons to include mitigation measures as necessary, such as SUDS or other drainage mitigation measures. › Any excavations/cuttings required for realignment should ensure that groundwater flow within the zones of contribution to the groundwater abstraction points is not disputed, resulting in diminished yields. **Geotechnical Database Resources:** › GSI encourage use of their Geotechnical Map Viewer in the course of the EIAR. **Natural Resources:** › GSI would recommend the use of Aggregate Potential Mapping viewer in order to identify areas of high to very high source aggregate potential within the area.	
Health Service Executive	The HSE Response noted: › **Public Consultation** - CLO be appointed, in-person public consultation to be held. › **Decommissioning** - EIAR should assess decommissioning of all components. › **Siting of infrastructure** - all infrastructure must be clearly shown on figures. › **Assessment of Alternatives** - alternatives to onshore wind farms should be assessed within the EIAR. › **Noise and Vibration** - potential for noise and vibration at all noise sensitive locations must be identified in the EIAR. EIAR must also consider appropriateness of all mitigation measures. Baseline noise monitoring survey to be carried out. predicted noise levels from construction, operation and decommissioning to be carried out also. The EIAR should have consideration to the 2019 Guidelines. › **Shadow Flicker** - shadow flicker assessment to be carried out. no dwelling should be exposed to shadow flicker. › **Air Quality** - A CEMP should be prepared which details dust mitigation measures, such as sweeping of hard surfaces, provision of a water bowser onsite, regular spraying of haul roads, wheel washing facilities at exist, speed restrictions onsite, covers to all delivery trucks, inspect ad clean public roads if necessary, material stockpiling provided with adequate protection from the wind, dust monitoring at the site boundary, truck inspection and maintenance, details of road maintenance agreement between the operator and the local roads authority. › **Surface and Groundwater quality** - all drinking water sources must be identified. Public and group water scheme sources and supplied should be identified in addition to any private wells supplying potable water to houses in the vicinity. EHS recommends that a walkover survey is undertaken in addition to desktop Geological Survey of Ireland data in order to identify private and public wells. Details of bedrock,	Chapter 2 Background Chapter 3 Reasonable Alternatives Chapter 4 Description Chapter 5 Population and Human Health Chapter 8 Land, Soils, Geology Chapter 9 Hydrology and Hydrogeology Chapter 10 Air Chapter 12 Noise and Vibration Chapter 17 Interaction

Consultee	Points Raised by Consultee	Addressed in Chapter
	overburden, vulnerability, groundwater flows, aquifers and catchment areas should be considered when assessing potential impact and any proposed mitigation measures. Impacts as a result of the underground cables should also be identified and addressed. › **Geotechnical and Peat Stability Assessment** - a detailed assessment of the current ground stability and relevant mitigation measures should be detailed in the EIAR. Assessment should include for construction impacts on future ground stability. This should take into account the potential for soil erosion. information should be included on the make and model and construction methodologies. The EHS recommends a detailed Peat/Stability/Geotechnical Assessment of the proposed development be undertaken to assess the suitability of the soil. › **Ancillary Facilities** - EIAR to include details of site office, construction compound fuel storage depot etc. › **Cumulative Impacts** - all existing or proposed wind farm developments in the vicinity should be clearly identified and assessed in the EIAR	Appendix 4-5 Construction and Environmental Management Plan Appendix 4-7 Decommissioning Plan
Iarnród Éireann	The development is of no concern for Irish Rail. In the event that a grid connection for the development plans to cross railway property, the developer must enter into a wayleave agreement with Irish rail.	Chapter 15 Material Assets
Irish Aviation Authority	IAA had no specific comments, but provided some examples of requests that IAA will likely make once the Proposed Project has lodged its planning, incl. lighting, providing coordinates etc. Requested the coping document also be sent to ANSP email address.	Chapter 15 Material Assets
Transport Infrastructure Ireland	The developer/scheme promoter should have regard to the following: › Consultation should be had with the relevant local authority/national roads design office with regards to the locations of existing and future national road schemes. › TII would be specifically concerned as to potential significant impacts the development might have on the national road network; › The developer should assess visual impacts from existing national roads. › The developer should have regard to any EIARs/EISs, and all conditions or modifications imposed by ABP regarding road schemes in the area. also have regard to cumulative impacts. › Have regard to TII publications;	Chapter 1 Introduction Chapter 10 Air Chapter 12 Noise and Vibration Chapter 14 Landscape Chapter 15 Material Assets

Consultee	Points Raised by Consultee	Addressed in Chapter
	› Have regard to TII's Environmental Assessment and Construction Guidelines, including the 'Guidelines for the Treatment of Air Quality during the planning and construction of national road schemes' › The EIAR should consider the 'Environmental Noise Regulations 2006'. developer may need to incorporate noise barriers. › It would be important that a traffic and transport assessment be carried out in accordance with relevant guidelines including TII's 'Traffic and Transport Assessment Guidelines)' › The designers are asked to consult TII's publications to determine whether a road safety audit is required. › The EIAR should identify the methods/techniques proposed for any works traversing/in proximity to the national road network. › TII recommends the developer clearly identify the haul routes proposed.	
Gas Networks Ireland	GNI responded with details of a gas pipeline which travels through the site of the Proposed Project. GNI had a number of requests in relation to safety, see below: › closest wind turbine needs to be 2 x hub height away from the closest transmission pipeline. › any ducts crossing above the pipeline will have to be installed as per GNI code of Practice (also issued) with 600mm separation between services. If more than 1 cable passing, must be in trefoil formation. › any new access roads would need to be assessed to ascertain whether load bearing slabs are required › all works must be carried out in accordance with the GNI Code of Practice › an electrical interference assessment may be required for the cables crossing the gas pipeline. Code of practice, map of site and safety advice for working within the vicinity of a gas pipeline documents were also issued as part of the scoping response.	Chapter 15 Material Assets

Table 2-12 below displays the scoping responses received from telecommunication providers within the vicinity of the Proposed Project.

Table-2-12: Scoping Responses Received from Telecommunication Providers

Consultee	Points Raised by Consultee	Addressed in Chapter
Commission for the Regulation of Utilities	ComReg responded with a list of 15 no. operators, many of whom had already been contacted. Any remaining operators were contacted.	Chapter 15 Material Assets
2rn – RTÉ/ Saorview	2rn noted: › The proposed windfarm location poses no risk to our fixed linking services. › There is however a risk of interference to viewers receiving from our sites at Maghera and Tonabrocky to the north of the Proposed Wind Farm site. › We would therefore ask that a protocol be signed between the developer and 2rn should the site go ahead.	Chapter 15 Material Assets
Broadcasting Authority Ireland	The BAI does not perform an in-depth analysis of the effect of wind turbines on FM networks. However, we are not aware of any issues from existing windfarms into existing FM networks. Also, the proposed windfarms are not located close to any existing or planned FM transmission sites.	Chapter 15 Material Assets
BT Communications Ireland	Confirmation that the planned development will have no impact on the BT Ireland microwave network.	Chapter 15 Material Assets
Eir Telecommunications	We have three transmission links within the area that would be at risk, the end points of the transmission links are below, if you could keep a buffer of 100meters radius away from this transmission path when placing your turbines and send them on for further analysis.	Chapter 3 Site Selection and Reasonable Alternatives Chapter 15 Material Assets
Enet Ireland	eNET identified 2 no. links in proximity to the Proposed Project, and it was found that 2 no. turbines would fall within the requested clearance zones of 70m. Enet subsequently confirmed that they would be decommissioning both links in question and re-routing to fibre, so no impact would be expected.	Chapter 15 Material Assets

Consultee	Points Raised by Consultee	Addressed in Chapter
ESB Telecoms	ESB identified 3 no. links in the vicinity of the Proposed Project. Upon mapping these links, it could be seen that the nearest link to the proposed turbines was located approximately 1.5km away. Therefore, no impact is anticipated.	Chapter 15 Material Assets
Imagine Networks Services Ltd	Imagine identified 1 no. link within the vicinity of the Proposed Project. Once the link was mapped, it was not located within close proximity of the site and therefore no impact is to be expected.	Chapter 15 Material Assets
Lighthouse Networks Limited	4 no. links were identified by Lightnet in the vicinity of the Proposed Project. The F1 clearance zone of 20m was required. This has been achieved.	Chapter 3 Site Selection and Reasonable Alternatives Chapter 15 Material Assets
Tetra Ireland Communications Ltd.	TETRA Ireland confirmed that they do not expect any impact to arise from the Proposed Project on their equipment.	Chapter 15 Material Assets
Three Ireland (Hutchinson) Ltd	Three identified 4 no. microwave links in the area and requested a 30m setback distance from this. It was subsequently confirmed with MKO and client that these links would not pose an issue to the proposed turbine locations.	Chapter 3 Site Selection and Reasonable Alternatives Chapter 15 Material Assets
Virgin Media Ireland Ltd.	Virgin Media confirmed that there is no infrastructure located within close proximity of the proposed development, and so no impact is anticipated.	Chapter 15 Material Assets
Vodafone Ireland Ltd	Vodafone identified 12 no. active links in this area, the minimum setback distance was required as being 30m to the Fresnel zone of the link. The height of 2 no. masts in the area was requested so a height study could be carried out.	Chapter 3 Site Selection and Reasonable Alternatives Chapter 15 Material Assets

2.7 Other Consultations

2.7.1 Community Engagement

The Applicant has engaged with the wider communities with regards to the Proposed Project. Public consultation began in November 2022, through engagement with near neighbours, local representatives, and local community groups. This included door-to-door engagement with near neighbours within a c. 2 km radius of the Proposed Project. A Community Liaison Officer was also appointed and a dedicated project website with the relevant project information went live. In May and November 2023, Public Information Events were held in the Claregalway Hotel. The objective of the consultations was to ensure that the views and concerns of all were considered as part of the Proposed Project design and Environmental Impact Assessment (EIA) process. Appendix 2-1 of this EIAR contains a full and detailed community engagement report. The report was prepared to record the consultation carried out with the local community in respect of the Proposed Project.

The Proposed Project has the potential to have significant benefits for the local economy, by means of job creation, landowner payments and commercial rate payments. An important part of any renewable energy development, which Laurclavagh Limited has been at the forefront of developing, is its Community Benefit Package. The concept of directing benefits from wind farms to the local community is promoted by the National Economic and Social Council (NESC) and the Wind Energy Ireland (WEI) among others. While it may be simpler and easier to put a total fund aside for a wider community area, the applicant is endeavouring to develop new ways to direct increased gain towards the local community with particular focus on those living closest to the Proposed Project.

The Wind Energy Development Guidelines (2006) (the Guidelines) state that:

> *"While it is not a mandatory requirement, it is strongly recommended that developers of a wind energy project should engage in active consultation and dialogue with the local community at an early stage in the planning process, ideally prior to submitting a planning application".*

This was further addressed in the Preferred Draft Approach to Wind Energy Development in Ireland (June 2017) which stated the following with respect to planning applications for wind farms:

> *"Planning applications must contain a Community Report prepared by the applicant which will specify how the final proposal reflects community consultation. The Community Report must also outline steps taken to ensure that the proposed development will be of enduring economic benefit to the communities concerned".*

The Draft Revised Wind Energy Guidelines (Department of Housing, Planning and Local Government, 2019) (the draft Guidelines) has retained this position stating the following:

> *"In order to promote the observance of best practice, planning authorities should require applicants to prepare and submit a Community Report with their planning application and a condition on any subsequent planning permission should require developers to carry out the development in accordance with the approved Community Report".*

Appendix 2-1 outlines the consultation and community engagement initiatives undertaken by the applicant prior to the submission of the planning application. It also outlines the main issues identified during this process, and how the final proposal reflects community consultation

An important element of this report was to display how the development of the proposed Laurclavagh Renewable Energy Development will provide an enduring economic benefit to the communities surrounding the Proposed Project. As outlined in the above sections, and in Appendix 2-1 to this EIAR,

this will occur through the potential community benefit package for residents and community groups, employment during the construction and operation of the Proposed Project, and through the annual rates payable to the local authority.

2.7.2 Pre-Planning Meetings

2.7.2.1 Galway County Council

Members of the team and the prospective Applicant met with representatives from Galway County Council (Galway County Council) on the 26th of October 2023. Those in attendance were:

- Colm Ryan – MKO
- Ronan Dunne – MKO
- Órla Murphy- MKO
- William O'Connor – Laurclavagh Ltd
- Niall Galvin – Laurclavagh Ltd
- Liam Hanrahan – Galway County Council
- Patrick O'Sullivan – Galway County Council
- Lawrence Nea – Galway County Council

The team gave an overview of the Proposed Project in a Power Point Presentation. Matters discussed included:

- The prospective applicant
- Site location and context
- Local policy and wind energy classification
- Site Constraints
- Photomontages
- EIAR structure and work carried out to date
- Public consultation
- Project timeline

Following this presentation, there was further discussion held between the project team and the representatives of GCC. Matters discussed included:

- Wind Energy classification policy
- Public consultation meetings
- Residential impacts
- Landscape impacts
- Karst landscape sensitivities
- Grid connection and engagement with Galway County Council roads engineer and TII

2.7.3 Meetings With An Bord Pleanála

First Meeting

Members of the team and the prospective Applicant met with representatives from An Bord Pleanála (ABP) on the 30th of January 2023 to discuss the Proposed Wind Farm under Section 37B of the Act. Those in attendance were:

- John Willoughby - MKO
- Órla Murphy- MKO
- Niamh McHugh – MKO

- William O'Connor – Laurclavagh Ltd
- Niall Galvin - Laurclavagh Ltd
- Ciara Kellett – ABP
- Sarah Lynch – ABP
- Niamh Thornton - ABP

The team gave an overview of the Proposed Project in a power point presentation. Matters discussed included:

- The prospective applicant
- Site location and context
- Site zoning
- Constraints
- Project scoping
- EIAR structure

Following this presentation, there was further discussion held between the project team and the representatives of ABP. Matters discussed included:

- Zoning justification;
- Birds;
- Grid connection application; and
- Karst landscape sensitivities

Second Meeting

Members of the team and the prospective Applicant met with representatives from An Bord Pleanála for the second and final time on the 22nd of September 2023. Those in attendance were:

- Ronan Dunne – MKO
- Alan Clancy – MKO
- Niamh McHugh - MKO
- Órla Murphy- MKO
- Niall Galvin – Laurclavagh Ltd
- William O'Connor – Laurclavagh Ltd
- Ciara Kellett – ABP
- Sarah Lynch – ABP
- Niamh Thornton - ABP

The Board's representatives began the meeting by asking the prospective applicant to clarify the purpose of the meeting as the presentation provided in advance of the meeting related to the grid connection element of the development. ABP's representatives informed the prospective applicant that a separate meeting is to be held in relation to the Section 182A element of the development. It was agreed that there had been a misunderstanding in relation to the purpose of the meeting and any discussion regarding the grid connection would not commence.

Both parties agreed to terminate the meeting. Prior to the closure of the meeting, the prospective applicant in response to a query from ABP's representative in relation to the Proposed Project stated that they are yet to engage with Galway County Council. The prospective applicant stated that no further meetings with ABP regarding the Section 37B application would be required and that it is sought to close out the Section 37B pre-application process shortly.

Pre-Application Close Out Letter

A letter received from An Bord Pleanála dated the 16th November 2023 stated that under Section 37B (4)(A), it is the opinion of the Board that the Proposed Wind Farm 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 Wind Farm constitutes SID and therefore the planning application should be made directly to An Bord Pleanála.

S182E Consultation

Following the S37B meetings, the Applicant engaged with ABP in relation to the future separate application for a substation and grid connection under the provisions of S182E of the Act. This meeting took place on the 9th of October 2023. Those in attendance were:

- Paul Caprani – ABP
- Sarah Lynch – Senior Planning Inspector
- Lauren Murphy – Executive Officer
- John Willoughby – MKO
- Órla Murphy – MKO
- William O'Connor – Laurclavagh Ltd
- Niall Galvin – Laurclavagh Ltd

The team gave an overview of the Proposed Project in a power point presentation. Matters discussed included:

- The Applicant
- Site location
- The Proposed Project
- Grid route
- Policy context
- Community consultation

Following the presentation, ABP's representatives stated that it was their preliminary opinion that the Proposed Grid Connection would constitute strategic infrastructure. The applicant confirmed that the Proposed Project would be fully assessed in an EIAR. ABP's representatives stated the importance of engaging with Transport Infrastructure Ireland and Galway County Council.

On Monday 11th March 2024, the applicant requested the closure of the pre-application consultation process for the Proposed Grid Connection under S182E of the Act. An opinion from ABP determining the SID status of the Proposed Grid Connection is awaited.

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 a proposed development or 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 a proposed development or project. The factors to be considered in relation to cumulative effects include population and human health, biodiversity, birds, land, soil & geology, water, air quality, climate, material assets (including traffic and transportation), landscape and visual, cultural heritage and vulnerability to accidents and/or natural disasters, as well as the interactions between these factors.

To gather a comprehensive view of cumulative impacts on these environmental considerations and to inform the EIA 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 plans and/or projects has therefore been fully considered within this EIAR.

2.8.1 Methodology for Cumulative Assessment

The potential cumulative impact of the Proposed Project and combined with the potential impact of other projects has been carried out with the purpose of identifying what influence the Proposed Project will have on the environment when considered collectively with existing, approved and proposed projects in the defined cumulative assessment study areas as set out in Table 2-13 below. The long list of planning applications which have been considered as part of the cumulative assessment are included in Appendix 2-3 of this EIAR.

The cumulative impact assessment of projects has three principle aims:

1) To establish the range and nature of existing, approved and proposed projects within the cumulative impact study area of the Proposed Project.
2) To summarise the relevant projects which have a potential to create cumulative impacts.
3) To identify the projects that hold the potential for cumulative interaction within the context of the Proposed Project and discard projects that will neither directly or indirectly contribute to cumulative impacts.

Plans have also been considered and assessed for potential cumulative impacts throughout the EIAR where necessary (e.g. the Galway County Development Plan 2022-2028, the Northern and Western Regional Spatial and Economic Strategy, the National Planning Framework, the National Development Plan, National Biodiversity Action Plan, etc). Where specific plans have been assessed for potential cumulative effects, these are identified in the relevant chapters of this EIAR.

Assessment material for this cumulative impact assessment was compiled on the relevant projects within the vicinity of the Proposed Project. The material was gathered through a search of relevant online Planning Registers and EIA portal, reviews of relevant EIAR (or historical EIS) documents, planning application details and planning drawings, and served to identify past and future projects, their activities and their environmental impacts.

2.8.2 Cumulative Study Area

The geographical boundaries of the various zones of sensitivity of and to the Proposed Project from which there may be potential for cumulative impacts to arise relative to each individual EIAR topic, i.e. each chapter, is presented below in Table 2-13. Following consultation with the EIAR team on each individual topic, the maximum geographical extent and justification for this extent was established and is presented below.

Table-2-13: Cumulative Study Areas and Justification

Individual Topic	Maximum Extent	Justification
Population & Human Health (Incl. Shadow Flicker)	**Proposed Wind Farm:** Shadow Flicker Study Area (10xRD buffer from proposed turbines) **Proposed Grid Connection:** Grid Connection Study Area for Population (100m from underground electrical cabling route) Consideration for the Population & Human Health cumulative extent is also given to the Air Quality, Climate, Noise and Landscape & Visual (i.e. Residential Visual Amenity) Cumulative Study areas	For the assessment of cumulative shadow flicker, any other existing, permitted or proposed wind farms are considered where their ten times rotor diameter shadow flicker study area are located within the Shadow Flicker Study Area of 1.63km (ten times the rotor diameter from proposed turbines) for the Proposed Wind Farm. As the nearest proposed, permitted or existing wind farms is approx. 6km from the proposed turbines, there is no potential for cumulative shadow flicker effects. The Study Area for Population is identified in Section 5.1.2 in Chapter 5 as the District Electoral Divisions where the Proposed Wind Farm site is located (i.e. Annaghdown, Cummer Killlower and Claretuam. For the Grid Connection, the Study Area for Population is identified as 100m from the proposed underground electrical cabling route. Both the Proposed Wind Farm site and Proposed Grid Connection Study Areas for Population identified are considered for cumulative effects on Population.
Biodiversity	**Proposed Wind Farm** 1km from the Proposed Wind Farm site **Proposed Grid Connection** 200m from the Proposed Grid Connection underground electrical cabling route Consideration for the Biodiversity cumulative extent is also given to the Bats, Birds and Water Cumulative geographical boundaries.	Using the precautionary approach and given the nature and scale of the Proposed Project, the geographical boundary for terrestrial ecological aspects, i.e. habitats, is 1km for cumulative assessment for the Wind Farm site and 200m from Grid Connection underground electrical cabling route.
Biodiversity (Bats)	10km from the Proposed Turbines	A 10km buffer of the proposed turbines is used as is recommended for the desktop study and cumulative assessment by NatureScot Guidelines 2021 (Section 4).
Birds	25km from the proposed turbines for large infrastructural development, such as wind farms, energy and public transport developments	NatureScot guidance '*Assessing the Cumulative Impacts of onshore Wind Energy Developments*' (SNH, 2012; 2018) was consulted while undertaking

Individual Topic	Maximum Extent	Justification
		the cumulative assessment. SNH (2012; 2018) emphasises that its priority is to '*maintain the conservation status of the species population at the national level.*' However, it is acknowledged that consideration should also be allowed for impacts at the regional level '*where regional impacts have national implications (for example where a specific region holds the majority of the national population)*'. Following the guidance of SNH (2012), the cumulative impact assessment has been carried out at the scale of the importance rating of the receptor. A 25km radius of the Proposed Wind Farm turbines was considered a reasonable approximation of the size of a county and a 25km radius of the Proposed Wind Farm turbines was considered a reasonable approximation for the local level.
Land, Soils and Geology	EIAR Site Boundary	As there is no pathway for offsite cumulative impacts for Land, Soils and Geology, the cumulative study area is the EIAR Site Boundary
Water	**Proposed Wind Farm:** A combination of surface water and groundwater bodies which show potential connectivity to the Proposed Wind Farm site. **Proposed Grid Connection**: Within a 200m buffer zone of the proposed underground electrical cabling connection route.	Regional surface water catchments are used for cumulative impact assessment with regard large infrastructural developments such as wind farms, energy and public transport developments. The potential for cumulative effects for these developments likely exists on a regional catchment scale (i.e. significant works likely existing in several sub-basins). The combined sub basin area encompasses the area of the Inny [Shannon]_SC_090 subcatchment. There will be no potential for cumulative impacts beyond Inny [Shannon]_SC_090 due to increases in flow volume (as the catchment area increases) and increasing distance from the Proposed Project. River Sub Basins are used for smaller developments (i.e. private & commercial type developments). These developments are not likely to present a significant cumulative impact risk on a regional catchment scale as any effects would likely be imperceptible as a result

Individual Topic	Maximum Extent	Justification
		of the setback distances and localised nature of the associated works. Given the nature and scale of the proposed works and the lack of hydrological cumulative impact potential beyond the river sub basin scale, the Water cumulative study area is defined by river sub basins in which the Proposed Wind Farm site is located. Due to the narrow nature of the underground electrical cabling route trench (~0.6m wide), a 200m buffer zone is an appropriate scale when considering potential cumulative effects on the water environment.
Air Quality	**Proposed Wind Farm:** Air Quality Study Area is 1km from Wind Farm Site. **Proposed Grid Connection:** 500m from Grid Connection underground electrical cabling route.	Given dust particles do not generally travel greater than 500m from source (*Guidance on the Assessment of Mineral Dust Impacts for Planning*, IAQM 2016) the geographical boundary for the cumulative dust impact is 500m. In line with the TII Publication Air Quality Assessment of Proposed National Roads – Standard PE-ENV-01107, December 2022, a geographical boundary of 1km was used for cumulative air quality assessment
Climate	The Climate assessment has been considered on a national basis and not confined to a specific study area.	The Climate assessment has considered the cumulative effects of the Proposed Project with other developments on a national basis under the relevant national Sectoral Emissions Ceilings.
Noise & Vibration	**Proposed Wind Farm:** The list of wind farms which were initially considered in cumulative assessment extended to 25 km 5km buffer from proposed turbines **Proposed Grid Connection:** 200m from Grid Connection underground electrical cabling route.	The geographical boundary for the cumulative noise assessment is the area within which noise levels from the proposed, consented and existing wind turbine(s) may exceed 35 dB LA90 at up to 10 m/s wind speed (Institute of Acoustics document *Good Practice Guide To The Application Of Etsu-R-97 For The Assessment And Rating Of Wind Turbine Noise*). As the nearest proposed, permitted or existing wind farm is greater than 6km from the proposed turbines, there is no potential for cumulative noise effects. Due to the narrow nature of the underground electrical cabling route trench (~0.6m wide), a 200m buffer zone

Individual Topic	Maximum Extent	Justification
		is an appropriate scale when considering potential cumulative noise effects
Cultural Heritage	**Proposed Wind Farm:** 20km buffer from proposed turbines **Proposed Grid Connection:** 200m from Grid Connection underground electrical cabling route.	Cumulative impacts on setting are more likely to occur at the operational stage of the development (i.e. post-construction). In this regard in order to assess overall cumulative effects on archaeology and cultural heritage the Proposed Project is considered in the context of other developments, in particular other permitted and proposed wind farms within 25km of the Proposed Wind Farm turbines. Direct effects for the Proposed Project are considered to be confined to within the EIAR Site Boundary and relate to construction effects. Due to the narrow nature of the underground electrical cabling route trench (~0.6m wide), a 200m buffer zone is an appropriate scale when considering potential cumulative noise effects
Landscape & Visual	20km from proposed turbines for visual and landscape effects. 15km from proposed turbines for effects on landscape character.	The Wind Energy Development Guidelines (DoEHLG, 2006) ('the Guidelines') require that *"in areas where landscapes of national or international renown are located within 25 km of a proposed wind energy development, the Zone of Theoretical Visibility should be extended as far (and in the direction of) that landscape".* There are no landscapes of national or international renown within 25km of the Proposed Wind Farm, and therefore the cumulative boundary for visual and landscape effects is reduced to 20km from the Proposed turbines. The Landscape Character Areas (LCA) study area has been chosen as 15 kilometres for effects on landscape character. Through experience conducting LVIA for other wind energy development projects, the assessment team determined that no significant effects on landscape character are likely to arise beyond distances of 15km from the proposed turbines. Therefore, a LCA Study Area of 15km is deemed appropriate for effects on landscape character in relation to the assessment of

Individual Topic	Maximum Extent	Justification
		effects upon designated Landscape Character Areas.
Material Assets: Traffic & Transport	**Proposed Wind Farm:** 25km buffer from proposed turbines for large infrastructural developments such as wind farms, energy and public transport developments. Following that, the proposed transport route for each project is considered. **Proposed Grid Connection:** 200m from Grid Connection underground electrical cabling route	Informed by traffic modelling scenario and the area of influence the Proposed Project has on changing traffic volumes. The potential cumulative traffic effects with the Proposed Project are assessed on the following criteria; › Project status (proposed to operational) › Degree of overlap with the Proposed Project delivery highway network (low to high) › Traffic volumes (low to high) The geographical boundary for the traffic & transport cumulative assessment is defined by the potential for other projects to overlap with the Proposed Project delivery highway network, and so a 25km buffer from turbines and 200m buffer from the proposed underground electrical cabling route is deemed appropriate to capture other plans and projects with the potential for cumulative effects with the Proposed Project. Please refer to Chapter 14 Material Assets for further details on the cumulative assessment methodology.
Material Assets: Telecoms & Aviation	**Proposed Wind Farm:** The list of wind farms and other projects which were initially considered in cumulative assessment extended to 25 km. **Proposed Grid Connection:** 200m from Grid Connection underground electrical cabling route.	The geographical boundary for the telecoms cumulative assessment is defined by the potential for other wind farm projects to interfere with broadcast signals that interact with the Proposed Wind Farm. As the nearest proposed, permitted or existing wind farms is c.6km from the proposed turbines, there is no potential for cumulative telecoms or aviation effects.

To gather a comprehensive view of potential cumulative impacts within the cumulative study areas 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 and within the context of their identified cumulative study area. A long list of projects considered (i.e. the largest cumulative study boundary of 25km list) across all disciplines in their cumulative impact assessment is included in Appendix 2-3 Each of the impact assessment chapters in this EIAR have assessed the relevant projects within the respective cumulative study areas in line with Table 2-13 above.

2.8.3 Summary

The cumulative impact assessments carried out in each of the subsequent chapters of this EIAR consider all potential significant cumulative effects arising from relevant projects, plans and land uses within the cumulative study area as relevant to each chapter.

Overall, the Proposed Project has been designed to mitigate impacts on the environment and particularly water, and a suite of mitigation measures is set out within the EIAR. 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.