Planning and Environmental Consultants

Environmental Impact Assessment Report

Lackareagh Wind Farm- EIAR

Chapter 2- Background

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2. BACKGROUND

This Chapter of the EIAR sets out the energy and climate change related policy and targets along with the strategic, European, national, regional, and local planning policies relevant to the proposed Lackareagh Wind Farm, Co. Clare (henceforth referred to as the Proposed Project). The terminology set out in Chapter 1 Section 1.1.1 (i.e. the Proposed Wind Farm, the Proposed Grid Connection, the site) will also be used to describe elements of the Proposed Project. It also summarises EIA 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 both national and international in relation to 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.

The Proposed Project comprises 7 no. wind turbines, and associated infrastructure at Lackareagh and adjacent townlands in Co. Clare. The Proposed Project will also include an onsite 38kV substation and underground grid connection to Ardnacrusha 110kV substation, a battery energy storage facility, access roads and entrances, 1 no. borrow pit, a temporary construction compound, and other associated infrastructure.

As the anticipated installed capacity of the Proposed Project is c. 46.2MW, and as this is below the Strategic Infrastructure Development (SID) threshold of 50MW, the application for the Proposed Project will be made to the relevant Local Authority under Section 34 of the Planning and Development Act 2000 (as amended) ("the Act").

The Proposed Project comprises the provision of a wind farm which will generate 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 up to 80% by 2030. The CAP places front and centre the facts that without urgent action, global warming is likely to be more than 2°C above pre-industrial levels by 2060, with '*devastating*' impacts on nature and '*irreversible changes to many ecosystems*' arising.

Furthermore, the 2024 Electricity Sectoral Review published by the Climate Change Advisory Council highlights that the *"The burning of coal to generate electricity must cease at the earliest opportunity. The timeframe for the urgent phasing out of the use of oil must also be agreed, as the continued use of coal and oil for electricity generation risks exceeding the sectoral emissions ceiling."*

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 current proposal represents the provision of a significant wind energy proposal and will contribute considerably towards Ireland satisfying its 2030 and 2050 renewable energy targets.

2.1.1 Renewable Energy Resources

Renewable energy resources are constantly replenished through the cycles of nature, 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]. The Wind resource of the west of Ireland and in particular Co. Clare is one of the best in Europe also.

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. As of 2023, over 81% of energy used in Ireland was imported from abroad[2], higher than the EU average of almost 60%[3].). 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.

2.2 Climate Change Policy and Targets

International and national policy consistently identifies the need to reduce greenhouse gas (GHG) emissions and stresses the importance of reducing global warming. The context of international policy has altered over the last 30-years from being of a warning nature to the current, almost universally accepted evidenced based understanding, 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. The Synthesis Report[4] of the IPCC Sixth Assessment Report published in March 2023 summarises the state of knowledge of climate change, its widespread impacts and risks. The Synthesis Report states that *'continued global warming is projected to further intensify the global water cycle, including its variability, global monsoon precipitation, and very wet and very dry weather and climate events and seasons'.*

The IPCC's projections are evident in extreme climate events occurring across the world. According to the World Meteorological Organisation's 30th November 2023 report[5]:

- Based on the data to October, it is virtually certain that 2023 will be the warmest year in the 174-year observational record, surpassing the previous joint warmest years, 2016 and 2020.
- June, July, August, September and October 2023 each surpassed the previous record for the respective month by a wide margin in all datasets used by WMO for the climate report.
- July 2023 became the all-time warmest month on record.
- Global average sea-surface temperatures (SSTs) were at a record observed high for the time of year, starting in the late Northern Hemisphere spring. For April through September 2023 (the latest month for which data is available), SSTs were all at a

[1] *Source: Sustainable Energy Authority of Ireland (SEAI) website, www.seai.ie*
[2] *https://www.seai.ie/publications/Energy-in-Ireland-2023.pdf*
[3] *https://www.gov.ie/pdf/?file=https://assets.gov.ie/221399/86cb99f5-58e3-4821-bc4c-e1bb1fa706fb.pdf#page=null*
[4] *https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_FullVolume.pdf*
[5] https://wmo.int/resources/publications/provisional-state-of-global-climate-2023

record warm high, and the records for July, August and September were each broken by a large margin (around 0.21 to 0.27 °C).
- In 2023, global mean sea level reached a record high in the satellite record (since 1993), reflecting continued ocean warming as well as the melting of glaciers and ice sheets. The rate of global mean sea level rise in the past ten years (2013–2022) is more than twice the rate of sea level rise in the first decade of the satellite record (1993–2002).

In Ireland, extreme weather and climate events driven by climate change are also having major impacts:

- March 2023 was the wettest March on record at four stations in Ireland.
- June 2023 was the hottest June on record in Ireland, with average day and night temperatures above 16 degrees.
- July 2023 brought flash floods in Donegal after 76mm of rain fell on a single day.
- July 2023 was the wettest July on record at 12 weather stations across Ireland.
- September 2023 saw all-time temperatures records broken at fourteen Irish weather stations.

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.

COP21 Paris Agreement

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

> *"Humanity has emitted 2,560 billion equivalent tons of CO_2 since 1750, and we only have a budget of 500 more if we want to limit warming to 1.5°C.*
>
> *By following a trajectory of very low GHG emissions (SSP1-1.9), the threshold of 1.5°C will be reached in the short term, between 2021 and 2040, before being very slightly exceeded (1.6°C anticipated over the period 2041-2060) then respected in the long term (1.4°C anticipated over the period 2081-2100).*
>
> *Everything is not lost, but we must pursue the Paris Agreement's most ambitious goal of limiting warming to 1.5°C."*

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

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 centred 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:** The final agreement contains a commitment to a 'phase down' of coal use, as opposed to a wider commitment to phase out all fossil fuels..
- **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.
- **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.

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.

A key outcome from COP 28 was the agreement to phase out fossil fuels and increase renewable energy capacity. 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. The agreement was signed by the Irish government among 116 other nations. The acceleration of the permitting of renewable projects and related infrastructure is identified as a crucial enabler to achieve the renewable energy targets set out under the agreement.

European Green Deal – European Climate Law (2021)

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

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

The European Climate Law 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 Next Generation EU 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 is crucial to Europe becoming the world's first climate-neutral continent by 2050. This milestone will only be achieved through the permitting and construction of renewable energy projects, such as the Proposed Project. BESS play a crucial role in achieving the objectives of the European Green Deal by supporting renewable energy integration and enhancing grid stability.

2.2.1.2 Project Compliance with International Climate Policy

From the review of the relevant policy documents, it is considered that the Proposed Wind Farm of 7 no. turbines will aid in reducing reliance on fossil fuels for electricity generation. This will help to achieve the United Nations Framework Convention on Climate Change goals of limiting global temperatures as a result of climate change and the goals of the Kyoto Protocol and the several Conference of Parties agreements as outlined above. By making a just transition to more renewable forms of electricity generation, the level of carbon emissions will drop as our reliance on non-renewable forms of energy lessen.

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

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".* This target has been updated by subsequent Climate Action Plans.

The Climate Action and Low Carbon Development Act 2015 (as amended)

The Climate Action and Low Carbon Development Act 2015 (as amended) ("the Climate Act") legally binds Ireland to achieve net-zero emissions no later than 2050, and to a **51% reduction in emissions by the end of this decade**.

The Act provides the framework for Ireland to meet its international and EU climate commitments and to become a leader in addressing climate change. As indicated by the premise of the legislation, the reduction of emissions is a key proponent of the Climate Act 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. Under Section 15 of the Climate Act, public bodies are obliged to, in so far as practical, perform their functions in a manner consistent with the latest Climate Action Plan, the National Energy & Climate Plan 2021 – 2030 and other national climate mitigation and adaptation plans. Clare County Council, as a public body, with consenting functions must comply with this obligation in determining the subject application.

The Proposed Project represents a significant opportunity to be a nationally important wind energy generator, contributing to the 51% reduction in emissions being sought, which is as outlined above a legally binding requirement. The BESS helps balance the grid by storing access energy generated from renewable sources, ensuring that there is a stable continuous supply of renewable energy. The Proposed Project is therefore consistent with binding emissions reduction targets at both a European and National level.

Carbon Budgets

To achieve the 51% emissions reduction target, the Climate Act requires the Climate Change Advisory Council (CCAC) to recommend a proposed programme of economy-wide 5-year Carbon Budgets to the Minister for the Environment, Climate and Communications. 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.

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

Table 2-1: 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.			

Section 6C of the Climate Act provides that the Minister shall prepare, within the limits of the carbon budget, the Sectoral Emissions Ceilings. These ceilings set out the maximum amount of greenhouse gas emissions that are permitted in each sector. The Government approved Sectoral Emissions Ceilings on 28 July 2022. The electricity sector is allocated a sectoral ceiling of 40 Mt CO2 eq for the first budget (2021-2025) and a sectoral ceiling of 20 Mt CO2 eq for the second budget period (2026-2030). In 2022, the electricity sector emissions were 10.1 Mt CO2 eq[7].

Climate Action Plan 2023

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

The CAP23 states that to do so, Ireland must harness the untapped indigenous renewable resources, and has a target of achieving 80% of energy being produced from renewable sources by 2030 (unchanged from the previous Climate Action Plan, 2022) with a target of 9GW of that being produced by onshore wind. Measures set out in CAP23 to achieve these targets include to 'accelerate and increase the deployment of renewable energy to replace fossil fuels' (Section 12.1.4 CAP23). It is clear from the message and ambition of CAP23 that the drive to deploy renewable energy projects such as the Proposed Project in Ireland are critical to achieving the aims and objectives of CAP23 including the 9GW of onshore wind energy by 2030 and carbon neutrality by 2050.

> *"Achieving these ambitions will require a coordinated effort across Ireland and every economic sector will be involved. It requires no less than a national transformation over the coming years in how we work, travel, heat our homes, source our energy and use our land".*
>
> *"Decarbonisation of the electricity sector is, as noted in CAP23, key to the decarbonisation of other sectors who will depend on electrification including transport, heating and industry. The increase in portion of renewable electricity of 80% by 2023 will come in part from a targeted 9GW of onshore wind. The plan notes: "Achieving further emissions reductions between now and 2030 requires a major step up in how we accelerate and increase the deployment of renewable energy to replace fossil fuels, deliver a flexible system to support renewables, and manage electricity demand ".*

[7] *Climate Change Advisory Council Annual Review 2023 (July 2023) https://www.climatecouncil.ie/councilpublications/annualreviewandreport/CCAC-AR-2023-postfinal.pdf*

Chapter 12 of CAP 23 sets out the state of play, targets and actions for the decarbonisation of the Electricity sector. Carbon emissions from electricity have fallen by 45% between 2005 and 2020, falling by 19% between 2005-2012 and by 33% between 2012 and 2020. This trend is largely due to the availability of renewable energy generated electricity (a sixfold increase between 2005 and 2020) and an associated reduction in the use of carbon heavy fuels such as peat and coal.

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

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

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

Having regard to the targets and measures set out above, it is clear that there is strong policy support for the provision of additional renewable energy generators, such as 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." (emphasis added)*

The deployment rates of renewable energy and grid infrastructure required to keep electricity emissions within the carbon budget programme is described as "*unprecedented*". Furthermore, CAP 24 notes that it will require "*urgent action across all actors to align with the national targets*". 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." (emphasis added)*

CAP 24 notes:

> *"Transformational policies, measures, and actions, along with societal change, are required to meet the electricity sector's sectoral emissions ceiling. During the second carbon budget period, as the necessary infrastructure and projects come online, we will start to realise Ireland's enormous potential for offshore wind. In the meantime, to facilitate the major acceleration and increase in onshore wind turbines and solar PV required nationwide to achieve our national and regional targets, a previously unseen level of electricity network upgrades and construction will be required.*
>
> *For onshore renewables, greater alignment between national, regional and local plans and renewable energy targets to support investment in and delivery of onshore wind and solar renewable energy is also critical in this context."*

CAP 24 identifies the alignment of local and national policy as critical to accelerate renewable energy rollout, noting:

> *"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".*

To meet the challenge posed, an acceleration of the deployment of renewable electricity generation is required, to include: (inter alia)

> *"Accelerate the delivery of utility-scale onshore wind, offshore wind, and solar projects through a competitive framework;*
>
> - *Target 6 GW of onshore wind and up to 5 GW of solar by 2025;*
> - *Target 9 GW of onshore wind, 8 GW of solar, and at least 5 GW of offshore wind by 2030;*
> - *All new or repowered renewable electricity generation projects shall implement a Community Benefit Fund equivalent to the RESS requirements of €2/MWh;*
> - *Most fundamentally, significant investment is needed in the transmission and distribution systems to maximise the usage of renewable electricity and to reduce constraints and congestion on the system...*
> - *Deliver a streamlined electricity generation grid connection policy and process, and remove barriers, where possible, for the installation of renewables and flexible technologies reducing the need to build new grid, including hybrid (wind/solar/storage) connections;*
> - *Provide for greater alignment between local plans and renewable energy targets at national (and regional) levels, taking into account regional targets once established and the revised National Planning Framework;*
> - *In line with transposing the revised Renewable Energy Directive, which entered into force in November 2023, ensure that the permit-granting procedure, the planning, construction and operation of renewable energy plants, the connection of such plants*

to the grid, the related grid itself, and storage assets are presumed as being in the overriding public interest."

2.2.3 Project Compliance with National Climate Policy

The Proposed Project, consisting of 7 no. wind turbines and associated infrastructure aligns with the national climate policy objectives. The Proposed Project will make a significant contribution to achieving the CAP 24 target of 9GW of onshore wind energy by the year 2030. Furthermore, the Proposed Project will aid Ireland in adhering to, or limiting the exceedance of, the country's carbon budgets. Currently, the electricity sector is rapidly approaching the designated sectoral ceiling of 20 Mt CO2 eq for the first carbon budget period from 2020 to 2025. The national renewable energy targets and the carbon budgets are integral to the government's response to the climate crisis.

2.3 Renewable Energy Policy and Targets

2.3.1 European Renewable Energy Policy

Renewable Energy Directive

The Renewable Energy Directive is the EU legal framework for the development of renewable energy across all sectors of the EU economy, supporting clean energy cooperation across EU countries. Since the introduction of the Renewable Energy Directive (RED) in 2009, it has undergone several revisions since then and these revisions. Since its adoption in 2009, the share of renewable energy sources in energy consumption has increased from 12.5% in 2010 to 23% in 2022[8]. Of the 27 EU member states the lowest proportions of renewables were recorded in Ireland (13.1%). Crucially, the Renewable Energy Directive sets the overall target for renewable energy in the EU.

RED I - 2009

Renewable Energy Directive 2009 (RED I - the original RED) (2009/28/EC), adopted in 2009, set binding targets for EU member states to achieve a 20% share of renewable energy in final energy consumption by 2020. It established a framework for national renewable energy action plans, sustainability criteria for biofuels and bioliquids, and a system of guarantees of origin for renewable energy.

RED II – 2018

RED II, the first major amendment to the RED, (2018/2001/EU) entered into force in December 2018, as part of the Clean Energy for all Europeans package. In RED II, the overall EU target for Renewable Energy Sources consumption by 2030 was raised to 32%.

RED III – 2023

In November 2023, a revision of the Renewable Energy Directive[9] (RED III), came into force. RED III increases the EU wide renewable energy target from 32% set under the previous revision of the directive to at 42.5%, with an ambition to reach 45% by 2030. The increase was proposed under the publication of REPowerEU plan in May 2022. The Directive also introduces specific targets for Member States in the industry, transport, and building (district heating and cooling) sectors.

[8] *https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20231222-2*
[9] *Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast)*

Under RED III, EU member states must identify areas for the acceleration of renewables where projects will undergo a simplified and fast-track procedure. The deployment of renewables will also be of "*overriding public interest*" in order to limit the number of legal challenges on new renewable energy installations. These measures came in response to REPowerEU which found that permitting is the biggest bottleneck for deploying wind at scale, with approximately 80 GW of wind power capacity stuck in permitting procedures across Europe.

There is an 18-month period to transpose most of the directive's provisions into national law, with a shorter deadline of July 2024 for some of the provisions related to permitting for renewables, in particular Article 16(f) which establishes the legal presumption that the construction and operation of renewable energy development and storage assets are in the "*overriding public interest and serving public health and safety when balancing legal interest in individual cases for the purposes of Article 6(4) and Article 16(1), point (c), of Directive 92/43/EEC [the 'Habitats Directive'], Article 4(7) of Directive 2000/60/EC [the 'Water Framework Directive'] and Article 9(1), point (a), of Directive 2009/147/EC.[the 'Birds Directive']*".

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.*

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'*. This will make the sector more efficient and reach the set goals faster.

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.

Regulation 2022/2577

In recognition of the worsening energy crises arising from Russia's war against Ukraine, the Council of the European Union adopted Regulation (EU) 2022/2577 on 22 December 2022, '*Laying down a framework to accelerate the deployment of renewable energy*.' This regulation, which has immediate and direct effect in Member States, applies to "*all permit-granting processes that have a starting date within the period of its application*" and includes a number of tangible measures aimed at streamlining the permit-granting process and facilitating the accelerated deployment of renewable energy. The period of application of the Regulation is the 30 December 2022 to 29 June 2024 with a provision for this to be reviewed and extended. The period of application of the Regulation was subsequently extended to the 30 June 2025 and therefore applies to the present application and EIA.

> *'A fast deployment of renewable energy sources can help to mitigate the effects of the current energy crisis, by forming a defence against Russia's actions. Renewable energy can significantly contribute to counter Russia's weaponisation of energy by strengthening the Union's security of supply, reducing volatility in the market and lowering energy prices.'*[10]

Central to the regulation is the presumption that renewable energy development must be considered to be in the overriding public interest when addressing competing interests under the Habitats Directive (92/43/EEC), Birds Directive (2009/147/EEC) and the Water Framework Directive (2006/60/EC) and that renewable energy projects should be given priority when balancing legal interests in a given case – Article 3:

> 1. *'The planning, construction and operation of plants and installations for the production of energy from renewable sources, and their connection to the grid, the related grid itself and storage assets shall be presumed as being in the overriding public interest and serving public health and safety when balancing legal interests in the individual case, for the purposes of Article 6(4) and Article 16(1)(c) of Council Directive 92/43/EEC, Article 4(7) of Directive 2000/60/EC of the European Parliament and of the Council and Article 9(1)(a) of Directive 2009/147/EC of the European Parliament and of the Council....'*
> 2. *'Member States shall ensure, at least for projects which are recognised as being of overriding public interest, that in the planning and permit-granting process, the construction and operation of plants and installations for the production of energy from renewable sources and the related grid infrastructure development are given priority when balancing legal interests in the individual case.... (emphasis added)'*

The Regulation was introduced as a temporary, emergency measure and included provision for the EU Commission to review the application of, and continued need for, the measures included in the Regulation. The Commission completed its review of the Regulation and furnished its report to the Council on the 28 November 2023. In its report the Commission recommended the prolongation of the validity of certain measures in the Regulation, including Article 3(2), and by Regulation 2024/223 of the 22 December 2023 the Council of the European Union, Regulation 2022/2577 was extended and amended, with Article 3 applying to the all permit-granting processes commenced up to the 30 June 2025.

The importance, continued need and effectiveness of Article 3(2) of Regulation 2022/2577 in aiding the accelerated deployment of renewable energy is explained in Recital 14 of Regulation 2024/223:

> *'...Article 3(2) of Regulation (EU) 2022/2577 requires priority to be given to projects that are recognised as being of overriding public interest whenever the balancing of legal interests is required in individual cases and where those projects introduce additional compensation requirements for species protection... The first sentence of Article 3(2) of Regulation (EU) 2022/2577 has the potential, in the current urgent and still unstable energy situation on the energy market which the Union is facing, to further accelerate renewable energy projects since it requires Member States to promote those renewable energy projects by giving them priority when dealing with different conflicting interests beyond environmental matters in the context of Member States' planning and the permit-granting process. The Commission's report demonstrated the value of the first sentence of Article 3(2) of Regulation (EU) 2022/2577 which recognises the relative importance of renewable energy deployment in the current difficult energy context beyond the specific objectives of the derogations foreseen in the Directives referred to in Article 3(1) of Regulation (EU) 2022/2577. Given the particularly severe situation in the supply of energy which the Union is currently facing, it is appropriate to prolong the application of Article 3(2) of Regulation (EU) 2022/2577 in order to appropriately recognise the crucial role played by renewable energy plants to fight climate change and pollution, reduce*

[10] *Council Regulation (EU) 2022/2577, at Recital 1*

energy prices, decrease the Union's dependence on fossil fuels and to ensure the Union's security of supply in the context of the balancing of legal interests carried out by permit-granting authorities or national courts. At the same time, it is also appropriate to keep the environmental safeguard that, for projects recognised as being of overriding public interest, appropriate species conservation measures, underpinned by sufficient financial resources, are adopted. (emphasis added)'.

While Article 3(1) of the Regulation is mirrored in Article 16(f) of REDIII, the wider obligation placed on competent authorities engaged in the consenting of renewable energy projects under Article 3(2) of Regulation 2022/2577 is not and, as explained in Recital 14 of Regulation 2024/223, is an appropriate additional temporary measure given the particular difficulties which the Union is currently facing in the supply of energy. In considering applications for the development of such projects planning authorities are obliged to give effect to this legislative imperative.

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.

2.3.1.2 Project Compliance with European Renewable Energy Policy

The Proposed Project is considered to be fully in accordance with the above-mentioned EU Policy targets. The targets outlined in the 2030 Climate and Energy Framework are in line with the Proposed Project. An EU wide binding target of 27% renewable energy by 2030 and a target of at least 27% energy efficiency by 2030 are both targets that could be achieved by the implementation of the Proposed Project and similar projects. The target of increasing the binding target of the EU's energy mix from 32% to 40% by 2030 is also considered to be a target that would be achievable by the construction of schemes such as the one proposed. Similarly, in the Energy Roadmap 2050 which considers scenarios which will lead to achieving the EU's climate action and energy goals. The Roadmap notes that all scenarios show the biggest share of energy supply technologies in 2050 comes from renewables. Therefore, it is submitted that the Proposed 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. Furthermore, Regulation 2022/2577 introduced significant measures to facilitate the acceleration of the deployment of renewable energy, including an obligation on member states to prioritise the roll of renewable energy projects when balancing competing legal interests. This Regulation applies to the present planning applications and EIA and further justifies the granting of consent for the Proposed Project.

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."*

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.

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

Energy Security in Ireland to 2030 – Energy Security Package

Published in November 2023, the energy security package titled '*Energy Security in Ireland to 2030*' builds on the policies set out in the NESF. The energy security package is based on the recognition of the following fact:

> *"Ireland's future energy will be secure by moving from an oil-, peat-, coal- and gas-based energy system to an electricity-led system maximising our renewable energy potential, flexibility and being integrated into Europe's energy systems."*

The energy security package includes a range of measures to implement this approach by the prioritisation of the following:

1. *Reduced and Responsive Demand.*
2. *Renewables-Led System.*
3. *More Resilient Systems.*
4. *Robust Risk Governance.*

Independent research undertaken as part of the package, McCarthy Report[11], , provides an analysis of developments in the electricity sector in Ireland. The McCarthy Report makes the following observation in relation to the consenting process:

> *"The problem of delays encountered by major infrastructure projects, including in the electricity system, due to planning and environmental consent issues was evident. They had been commented upon by the International Energy Agency in its 2019 review of Ireland which named planning delays as the principal challenge to delivery of policy for the sector."*

A key finding from the technical analysis conducted as part of the energy security package is the interdependence of energy security on two essential pillars: 'harnessing our indigenous renewable energy resources at speed and at scale and the rapid electrification of energy demand'. As such, the

[11] *https://www.gov.ie/pdf/?file=https://assets.gov.ie/276441/eb496e01-5c01-4594-af09-74342b4ac971.pdf#page=null*

energy security package provides additional measures to supplement the existing measures introduced under previously published government policy documents. Those additional measures most relevant to the Proposed Project are as follows:

> *"Action 10: To implement Planning and Consenting System Reforms and provide greater certainty to the sector."*

The energy security package aims to ensure that the planning system is fully aligned and resourced to fully support accelerated renewable energy development. It also aims to ensure renewable energy projects are prioritised in line with the recast Renewable Energy Directive and RePowerEU.

The Proposed Project will significantly support the government's objectives in ensuring the State's energy security. The Proposed Project serves as a domestic renewable energy generator capable of providing clean electricity to the national electricity grid, contributing to a renewables-led system.

2.3.2.2 Project Compliance with the National Renewable Energy Policy

The National Energy Security Framework outlines several steps to accelerate Ireland's shift to renewable energy initiatives. It's evident that the Proposed Project aligns with this framework by increasing the proportion of renewable energy on the national grid, thus expediting Ireland's transition to a low-carbon energy future.

2.4 Climate and Renewable Energy Target Progress

At a European level, the latest data shows that, as of 2022, 23% of energy came from renewable energy sources[12]. This represents an increase of 1.1% compared to 2021 levels. While progress is being made to increase the share of renewable energy, it is clear that all EU member states need to intensify their efforts to collectively comply with the target of 42.5% set in the latest revision of the renewable energy directive.

Of the 27 EU member states, Ireland has the lowest proportion of renewable energy at 13.1%. It is evident that Ireland is not performing well when compared against our European counterparts and that urgent action is required to increase the overall share of renewable energy in our gross final energy consumption. When it comes to the share of renewable energy in electricity, Ireland does perform better generating 36.8% in 2022, but still below the EU average of 41.1%[13].

[12] https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20231222-2
[13] https://ec.europa.eu/eurostat/databrowser/view/nrg_ind_ren__custom_9264705/default/bar?lang=en

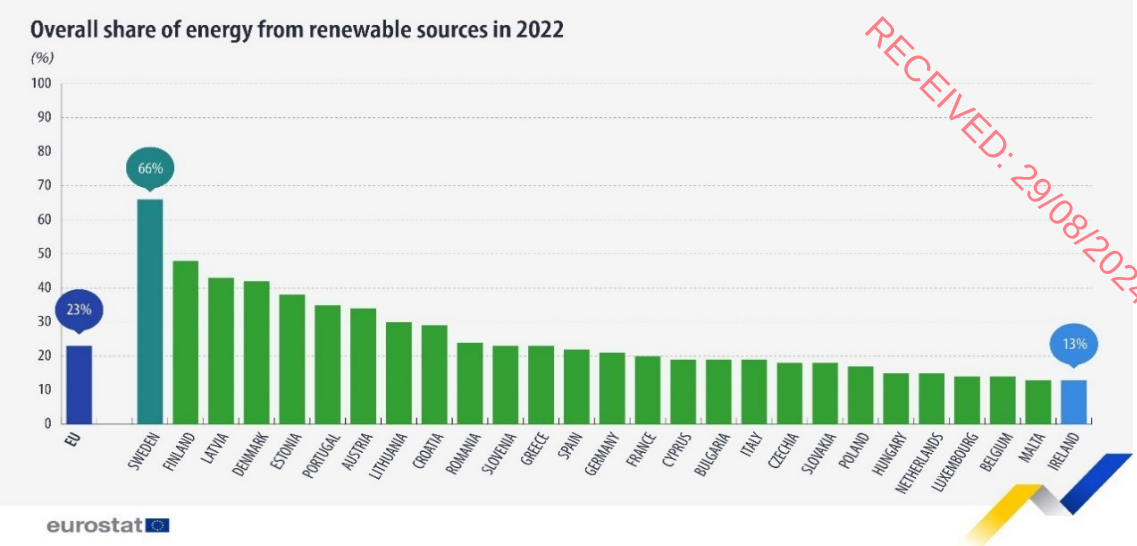

Figure 2-1: Overall share of energy from renewable sources (source: Eurostat)

Ireland's Greenhouse Gas Emissions Projections 2022 – 2040 (June 2023)

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 2023–2050' was published in May 2024. The report includes an assessment of Ireland's progress towards achieving its emission reduction targets out to 2030 set under the EU 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 2022. 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 the latest government policies and measures (at the time the Projections are compiled) to reduce emissions such as those in Ireland's Climate Action Plan 2024.

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 2024 Climate Action Plan measures.
- 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 17 and 27 per cent.
- Ireland will not meet its non-Emissions Trading Scheme (ETS) EU targets of a 42 per cent emissions reduction by 2030 in WAM even with both the ETS and Land use, Land use Change and Forestry (LULUCF) flexibilities.
- Sectoral emissions ceilings for 2025 and 2030 are projected to be exceeded in almost all cases, including Agriculture, Electricity, Industry, and Transport.
- Emissions from the Energy Industries sector are projected to decrease by between 57 and 62 per cent over the period 2022 to 2030. Renewable energy generation at the end of the decade is projected to range from 69 to 80 per cent of electricity generation as a result of projected further and rapid expansion in wind energy and other renewables

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.

National Energy Projections (November 2023)

The National Energy Projections report was published by the SEAI in November 2023 sets outs the most recent updates to Ireland's progress towards its binding European and National renewable energy targets. Based on the EPA projections outlined above published in June 2023, the report presents the findings of the 2023 national energy and climate modelling cycle.

The existing EU wide target set in REDII is 32% RES by 2030. Irelands current national EU binding target for 2030 RES is 34.1%. There are also interim targets for 2022, 2025 and 2027, as shown in Table 2-2 below. Since the publication of the *National Energy Projections* report, the European Parliament and Council have introduced REDIII, increasing this target to a minimum of 42.5% RES by 2030. It is likely that Ireland's national target will increase in line with the increase at EU level.

Table 2-2: Overall renewable energy share projections under EPA scenarios

Current REDII target for overall renewable energy share (RES) for Ireland		WEM	WAM - CAP 21	WAM – CAP23
2025	Projected overall RES	19%	20%	22%
	REDII overall RES target for Ireland	24%	24%	24%
	Gap to target	-4%	-3%	-2%
2027	Projected overall RES	22%	26%	27%
	REDII overall RES target for Ireland	28%	28%	28%
	Gap to target	-5%	-2%	-1%
2030	Projected overall RES	31%	40%	45%
	REDII overall RES target for Ireland	34%	34%	34%
	Gap to target	-3%	6%	11%

In the interim years of 2025 and 2027, the WAM-CAP23 scenario indicates a failure to meet the interim overall RES targets. This is attributed to the revised profile of renewable generation capacity additions, which now assumes that more of the planned capacity will arrive later in the decade. If Ireland's target aligns with the increased EU-level goal under RED III, it would widen the gap to the target during the interim years.

The decarbonisation of the electricity generation is critical considering the need to electrify other sectors such as heating and transport in order to achieve the sectoral decarbonisation targets. By 2030, renewable energy sources are anticipated to dominate electricity generation, particularly experiencing a significant surge later in the decade attributed to the integration of substantial offshore wind projects. In the CAP23 scenario, there is an expedited deployment of onshore renewable generation capacity in the earlier years of the decade compared to the CAP21 scenario. However, both scenarios aim to achieve a similar overall percentage of electricity derived from renewable sources (RES-E) by the year 2030.

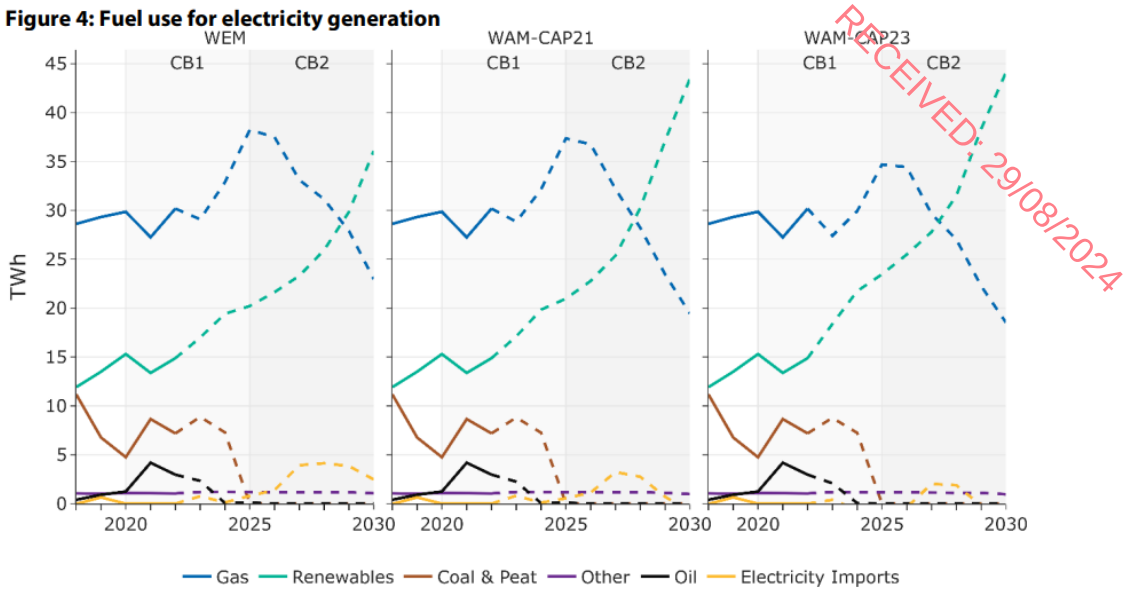

Figure 2-2: Electricity generation by fuel source (source: SEAI)

The report projects greenhouse gas emissions under the WEM and WAM scenarios. It is projected that in both the WEM and WAM scenarios, the carbon budget for the electricity sector will be exceeded. This is largely due to the cumulative nature of the carbon budgets, where exceedances in the early years results in steeper emissions reductions in the latter years to compensate. In the WEM scenario, emissions are projected to reach the first sectoral ceiling in 2024. This results in a significant overspend of 7.4 $MtCO_2eq$ (19%) within the final 2 years of the first carbon budget period 2020–2025. This would have a knock-on effect on the second carbon budget period 2025-2030, which would likely be unattainable from the outset.

Under the WAM CAP23 scenario, cumulative emissions reach the first sectoral ceiling in the 2024, leading to an overspend of the first budget period by 5.6 $MtCO_2eq$ 2024-2026. Despite the improvement on the WEM scenario, the WAM CAP23 scenario exceeds the second budget period (2025 – 2030) ceiling by 2027. By the end of the decade, the WAM CAP23 scenario projects an exceedance of 13.8 $MtCO_2eq$ (23%).

It is clear from the projections outlined above that unprecedented action is required as soon as possible. Unless carbon emissions are reduced sharply before 2025, it will be impossible to stay within the second budgeting period as required to by law under the Climate Act.

The Climate Change Advisory Council Annual Review 2023

The Climate Change Advisory Council (CCAC) concluded within their '*2023 Annual Review'* that at the current rate of policy implementation, *"Ireland will not meet the targets set in the first and second carbon budget periods unless urgent action is taken immediately and emissions begin to fall much more rapidly"*.

In relation to the rollout of renewable energy, the CCAC note that the current rate of renewable energy connections to the national grid needs to increase substantially in order to meet CAP23 targets. The CCAC state:

> *"The current rate of connecting renewables will need to more than double to meet NCAP 2023 targets for 9GW of onshore wind and 8GW of solar power connected to the electricity system by 2030, which for context equates to a further approximately 1,500MW of onshore renewables connected to the electricity system on average each year."*

The CCAC reiterates the importance of EU Regulation 2022/2577 and its objective to ensure "*the planning, construction and operation of plants and installations for the production of renewable energy is presumed to be in the overriding public interest*". The CCAC acknowledge the quantity of planning applications necessary to achieve the CAP 23 target of 9GW of onshore wind energy and advise that further resources are put in place to ensure that the consenting authorities are well resourced to assess these applications.

Ireland's Climate Change Assessment (January 2024)

In January 2024, the EPA published Irelands Climate Change Assessment (ICCA). This assessment provides a comprehensive overview and breakdown of the state of knowledge around key aspects of climate change with a focus on Ireland. The ICCA report is presented in four volumes.

- Volume 1: Climate Science – Ireland in a Changing World
- Volume 2: Achieving Climate Neutrality in 2050
- Volume 3: Being Prepared for Irelands Future
- Volume 3: Realising the Benefits of Transition and Transformation

The ICCA Synthesis Report states that having peaked in 2001, Irelands greenhouse gas emissions have reduced in all sectors except agriculture. However, Ireland currently emits more greenhouse gases per person than the EU average. The report goes on to state that there has been an identified gap in policy that indicates that Ireland will not meet its statutory greenhouse gas emission targets. Achieving net zero carbon dioxide emissions by 2050 requires significant and unprecedented changes to Ireland's energy system. Policies tailored to suit different stages of technology development are critical for achieving a net zero energy system. Established technologies, such as wind energy, solar photovoltaics and bioenergy will be key in meeting short-term emission reduction targets (i.e. 2030), whereas offshore wind infrastructure is expected to be the backbone of future energy systems. This can only be achieved with appropriate support schemes, regulation and investments for synergistic growth of offshore wind and other renewable technologies.

There are well-established 'no-regret options' that need to happen now, which can get Ireland most of the way to net zero carbon dioxide emissions. Beyond that, there are 'future energy choices' relating to the scale and magnitude of technologies that will assist in achieving Ireland statutory climate targets. Ireland's no-regret options are demand reduction (e.g. through energy efficiency and reduced consumption), electrification (e.g. electric vehicles and heat pumps), deployment of market-ready renewables (e.g. wind energy and solar photovoltaics) and low-carbon heating options (e.g. district heating); Irelands future choices include hydrogen, carbon capture and storage, nuclear energy and electro-fuels. Renewable energy can increasingly provide our future energy needs but will need to be complemented with carbon dioxide removals to achieve a net zero energy system in hard-to-abate sectors.'

The Climate Change Advisory Council Electricity Sectoral Review 2024

The Climate Advisory Council published its annual review in May 2024, it outlines detailed observations and recommendations for the Electricity sector in Ireland. This review emphasises the urgent need for Ireland to accelerate its transition to renewable energy to meet its 2030 electricity capacity targes and adhere to sectoral emissions ceilings.

The Climate Change Advisory Council states:

> *"Ireland needs to reduce and ultimately prevent emissions of greenhouse gases, to stay within the agreed carbon budget, the Electricity sector needs to achieve the largest reduction in sectoral emissions of all sectors: a 75% decrease by 2030 compared with 2018."*

Key observations in relation to Renewable Electricity are outlined below:

- Renewables accounted for 41% of electricity demand in 2023, up from 39% in 2022.
- By the end of 2023, the total renewable grid capacity in Ireland was 5.7 GW, with the majority (4.7 GW) from onshore wind turbine installations.
- In 2023, only onshore wind (0.2 GW) generation was connected. This is significantly below the annual average increase of 1.6 GW of onshore renewables required to meet 2030 capacity targets.
- In 2023, 0.5 GW of wind projects received planning permission; however, no onshore wind projects were awarded permission before September. Appeals and judicial reviews, including for all of An Bord Pleanála's approved projects, continue to delay the development of projects.

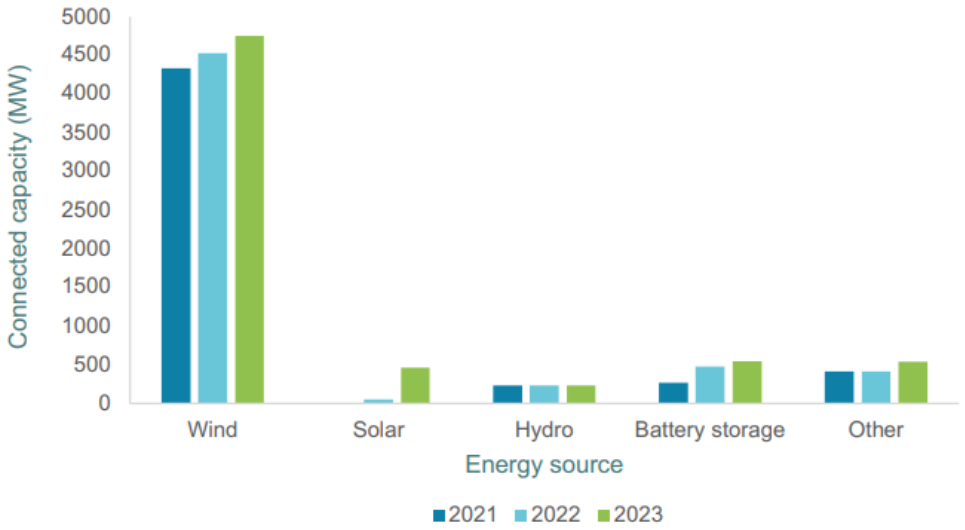

Figure 2-3 Renewable energy capacity and storage connected to the grid in Ireland, 2021-2023

2.5 Planning Policy Context

This section of the EIAR provides the strategic planning context of 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 is consistent with the overall national policy objectives to increase penetration and deployment of renewable energy resources and has been designed in the context of the relevant wind energy and other guidelines. Compliance with the Clare County Development Plan policies are dealt with in detail in the Local Policy section below. The Proposed Wind Farm is assessed in further detail against the provisions of the Clare County Development Plan in the Planning Report included within the planning application to Clare County Council.

2.5.1 National Policy Context

National Policy 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. To strengthen and facilitate more environmentally focused planning at the local level, the NPF states that future planning and development will need to:

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

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

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

Relevant to the subject development, the **National Strategic Outcome 8** (*Transition to Sustainable Energy*), notes that in creating Ireland's future energy landscape, new energy systems and transmission grids will be necessary to enable a more distributed energy generation which connects established and emerging energy sources, i.e. renewables, to major sources of demand. The successful transition to a low-carbon power system will depend on the pillars of 1) *Sustainability*, 2) *Security of supply* and 3) *Competitiveness*. A common theme underpinning these pillars is the need for a fit-for-purpose transmission and distribution energy network. Specifically, the NPF states that reinforcement of the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres, e.g. the functional purpose of the extant grid connection.

Ireland's national energy policy under **Objective 55** aims to '*promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050'*. The NPF aims to ensure that decisions that are made today meet our future needs in a sustainable manner.

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

An overarching objective of the NPF is to foster a transition toward a low carbon, climate-resilient society, which reflects the policy ethos established at the European level of governance (e.g. climate change and renewable energy targets – Section 2.2 & 2.3). In this regard, one of the key themes of the NPF is the realisation of an Ireland which has a secure and sustainable renewable energy supply and the ability to diversify and adapt to new energy technologies. The NPF references the National Climate Policy Position (superseded by the then CAP 2019) which established the fundamental objective of achieving transition to a competitive, low carbon, climate-resilient and environmentally sustainable 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"*.

The Proposed Project represents a multi-million euro investment in a rural area, in the renewable energy industry which is essential for diversifying the energy sector, contributing to innovation in the rural economy and delivering on climate and energy targets. National Planning **Objective 21** of the NPF aims to *'Enhance the competitiveness of rural areas by supporting innovation in rural economic development and enterprise through the diversification of the rural economy into new sectors and services, including ICT-based industries and those addressing climate change and sustainability'*. The Proposed Project is directly supporting economic growth in rural Co. Clare through investment, employment and the community benefit fund, while also contributing to national, regional and local climate and renewable energy targets.

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.

Draft Revised National Planning Framework

The Government has agreed to the publication of a draft revision of the National Planning Framework (NPF) for public consultation. The Draft Revision of the NPF focuses on the need to update the Framework published in 2018 in order to appropriately reflect changes to Government policy that have taken place since the initial publication six years ago, such as climate transition.

There is an increased emphasis on the importance of the renewable energy development and infrastructure needed to support this. Chapter 9 acknowledges that the *"accelerated delivery of the*

additional renewable energy generation is... essential for Ireland to meet its climate targets." A number of new or amended National Policy Objectives (NPOs) have been proposed in order to achieve this objective.

Table 9.1 sets regional renewable energy capacity allocations for wind and solar energy. This was one of the key actions for 2024 under the Climate Action Plan 2024. The Southern Region, in which the Proposed Project is located, is allocated an additional 978MW of wind energy. Under NPO 75, the Southern Regional Assembly will be required to plan how and where to deliver the required capacity by identifying capacity allocations for each Local Authority in its area. Clare County Council will then be required to plan for the delivery of the energy capacity target that they have been allocated, under NPO 76.

The introduction of renewable energy targets represents a more active and prescriptive approach to land use planning for renewable energy development. If adopted in the final version of the Revised NPF, it will align the national target of 9GW of onshore wind energy with the policies and objectives of Local Authorities.

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 Proposed Project, 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.

One of the NDP's strategic climate priorities in 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 Project. The focus of investment in renewable energy infrastructure is to contribute to a long-term, sustainable and competitive energy future for Ireland.

Project Compliance with the National Planning Policy

With regard to the above, it is considered that the Proposed Project is in line with and supported by the National Planning Framework and the National Development Plan.

The National Planning Framework projects a population increase of 1 million people by 2040 and therefore recognises the strain and demand this will put on Irelands energy system. In order to ensure Ireland delivers on our renewable energy and carbon emission reduction targets, the NPF recognises the need for increased renewable energy onto the national grid. This shift from fossil fuels is dependant upon schemes such as the one proposed to generate renewable energy. Given the projected population increase, it is considered that if the share of renewable energy onto the grid is not increased, Ireland will fail to reach the National and International targets on emission reductions. The addition of 7 no. wind turbines, with an estimated electricity generation capacity of approximately 46.2MW, 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. The Proposed Project is directly supported by National Planning Objective 21, 54, and 55.

The National Development Plan 2021 - 2030 is clear in its priority to reach a low-carbon, climate resilient society over the lifetime of the plan. The Proposed Project, if permitted, will provide clean, renewable electricity to the national grid, furthering development objectives of the NDP, namely the target to increase the share of renewable electricity up to 80% by 2030.

2.5.2 Regional Policy Context

Regional Spatial & Economic Strategy for the Southern Region

The Southern Regional Assembly ('SRA') was established in 2015, the Regional Spatial and Economic Strategy ('RSES') for the Southern Region (Carlow, Clare, Cork, Kerry, Kilkenny, Limerick, Tipperary, Waterford and Wexford) came into effect on 31st January 2020. The RSES provides a long-term, strategic development framework for the future physical, economic and social development of the Southern Region. The RSES seeks to achieve balanced regional development and full implementation of Project Ireland 2040 – the National Planning Framework.

Adopted on the 31st of January 2020, the principal statutory purpose of the RSES is to support the implementation of the Project Ireland 2040 National Planning Framework ('NPF') / National Development Plan ('NDP') and the economic policies and objectives of the Government. The RSES aims to build on the region's strengths and potential to become a more prosperous, sustainable, climate resilient and attractive region for the benefit of all its people. up to 2040 and beyond.

The RSES notes that planning policy and objectives must incorporate resilience and adaptability to ensure that the Region are agile and responsive to change. At present, Irish per capita GHG emissions are among the highest in Europe and Government has identified '*Climate Change as the most important long-term challenge facing Ireland' with a stated commitment to 'the transformation required to achieve a low carbon resilient future'*. Transition to a low carbon energy future will require a wide range of policy responses across industry and public sectors, including electricity.

To achieve national and EU targets in the context of the electricity sector, the RSES notes that further investment is required to develop alternative renewable energy sources with greater interconnection to energy resources. This key enabling action is captured under **Strategic Aim 8** which sets out the need to "*safeguard and enhance the environment through sustainable development, prioritising action on climate change across the region, driving the transition to a low carbon and climate resilient society.*" Both the NPF and RSES emphasise, however, that the planning process is well placed to implement and integrate climate change objectives.

- **RPO 9 (Holistic Approach to Delivering Infrastructure)**: *It is an objective to ensure investment and delivery of comprehensive infrastructure packages to meet growth targets that prioritise the delivery of compact growth and sustainable mobility as per the NPF objectives including for renewable energy and climate change adaption.*

The RSES sets out a number of Regional Policy Objectives ('RPOs') designed to facilitate greater integration of renewables into the National Grid. The RSES notes that there is significant potential to use renewable energy across the Region to achieve climate change emission reduction targets. As such, the RSES supports renewable energy projects such as the Proposed Project.

- **RPO 87** (Low Carbon Energy Future): The RSES is committed to the implementation of the Government's policy under Ireland's Transition to a Low Carbon Energy Future 2015-30 and Climate Action Plan 2019. It is an objective to promote change across business, public and residential sectors to achieve reduced GHG emissions in accordance with current and future national targets, improve energy efficiency and increase the use of renewable energy sources across the key sectors of electricity supply, heating, transport and agriculture.
- **RPO 95** (Sustainable Renewable Energy Generation): It is an objective to support implementation of the National Renewable Energy Action Plan (NREAP), and the Offshore Renewable Energy Plan and the implementation of mitigation measures outlined in their respective SEA and AA and leverage the Region as a leader and innovator in sustainable renewable energy generation.
- **RPO 96** (Integrating Renewable Energy Sources): It is an objective to support the sustainable development, maintenance and upgrading of electricity and gas network grid infrastructure to integrate renewable energy sources and ensure our national and regional energy system remains safe, secure and ready to meet increased demand as the regional economy grows.
- **RPO 99** (Renewable Wind Energy): It is an objective to support the sustainable development of renewable wind energy (on shore and offshore) at appropriate locations and related grid infrastructure in the Region in compliance with national Wind Energy Guidelines.
- **RPO 100** (Indigenous Renewable Energy Production and Grid Injection): It is an objective to support the integration of indigenous renewable energy production and grid injection.

The RSES also acknowledges the need to develop a strong grid to support the integration of renewable energy on to the national electricity grid. The RSES sets out a number of infrastructural RPOs, relevant to the Proposed Project which indicate that the Region is open to, and ready to invest in, renewable energy generation:

- ***RPO 219 New Energy Infrastructure:*** *New Energy Infrastructure It is an objective to support the sustainable reinforcement and provision of new energy infrastructure by infrastructure providers (subject to appropriate environmental assessment and the planning process) 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.*
- ***RPO 221 Renewable Energy Generation and Transmission Network:***
  a) Local Authority City and County Development Plans shall support the sustainable development of renewable energy generation and demand centres such as data centres which can be serviced with a renewable energy source (subject to appropriate environmental assessment and the planning process) to spatially suitable locations to ensure efficient use of the existing transmission network;
  b) The RSES supports strengthened and sustainable local/community renewable energy networks, micro renewable generation, climate smart countryside projects and connections from such initiatives to the grid. The potential for sustainable local/community energy projects and micro generation to both mitigate climate change and to reduce fuel poverty is also supported;
  c) The RSES supports the Southern Region as a Carbon Neutral Energy Region.
- ***RPO 222 Electricity Infrastructure:*** *It is an objective to support the development of a safe, secure and reliable supply of electricity and to support and facilitate the*

development of enhanced electricity networks and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this plan under EirGrid's (2017) Grid Development Strategy (subject to appropriate environmental assessment and the planning process) to serve the existing and future needs of the Region and strengthen all-island energy infrastructure and interconnection capacity.

Project Compliance with Regional Policy

The RSES supports the Southern Region as a Carbon Neutral Energy Region. At present, the RSES notes that the Region has more renewable energy generation than demand which indicates a strategic role for the region's energy assets in national energy generation and transmission with projected increases in population and economic growth, the demand for energy is set to increase in the coming years. It is considered that the provision of the Proposed Project would facilitate this just transition and is particularly in line with the RPO objectives as outlined above. In the region, a noticeable trend has emerged to recognise and take advantage of emerging opportunities related to the shift towards a decarbonised economy, particularly in the realm of renewable energy generation and therefore the Proposed Project is considered to be in line with Regional Policy.

2.5.3 Local Policy Context

The Proposed Project is situated in east County Clare, specifically in Lackareagh and adjacent townlands. It encompasses the Proposed Wind Farm, comprising 7 no. turbines, proposed onsite 38kV substation and battery energy storage facility, new site roads, upgrades to existing site roads, a borrow pit, new site entrances, a temporary construction compound and all other associated infrastructure. , and the Proposed Grid Connection Route which connects the Proposed Wind Farm to the existing Ardnacrusha 110kV substation, also located in Co. Clare. As such, the relevant policies as set out in the Clare Development Plan are considered below, these objectives will be assessed against the Proposed Project in more detail in the planning report.

2.5.3.1 Clare County Development Plan 2023-2029

The Clare County Development Plan 2023 – 2029 (CDP) was formally adopted by Elected Members of Clare County Council on March 9th, 2023. The CDP officially came into effect on April 20th, 2023, 6 weeks later. The CDP provides overall guidance for the proper planning and development of County Clare through the use of supporting policies and objectives.

The CDP recognises its position in supporting the delivery of meaningful action on climate change. Climate action is thus an important strategic objective of the CDP, with aims to achieve decarbonisation and climate resilience as a county. This has been reflected in Chapter 2 - Climate Action, in addition to other climate action and renewable energy related objectives introduced throughout the Plan.

The significance of climate change and the need for continued support / investment within renewable energy generation as part of the county's adaption strategy is captured within the CDP's Climate Action Chapter:

> ***Goal II:*** *A county that is resilient to climate change, plans for and adapts to climate change and flood risk, is the national leader in renewable energy generation, facilitates a low carbon future, supports energy efficiency and conservation and enables the decarbonisation of our lifestyles and economy.*

CDP2.1 Climate Action

It is an objective of Clare County Council:

1. *To support the implementation of the National Climate Action Plan 2023 and the National Climate Change Adaptation Framework (and any subsequent versions thereof), and to work with the Regional Climate Action Offices to enable County Clare to transition to a low carbon and climate resilient county;*
2. *To adopt sustainable planning strategies through integrating land use and transportation and by facilitating mixed use developments as a means of supporting national targets of climate policy mitigation and adaptation objectives, and reducing our carbon footprint and greenhouse gas emissions; and;*
3. *To raise awareness and understanding of the impacts of climate change on both the local economy and communities in the county, and the ways communities can increase their response and grow their resilience to these impacts.*

CDP2.2 Climate Change Mitigation, Adaption and resilience

It is an objective of the Clare County Council:

1. *To support the implementation of the Clare Climate Change Adaptation Strategy 2019-2024 (and any subsequent versions);*
2. *To promote measures that build resilience to climate change to address impact reduction, adaptive capacity, awareness raising, providing for nature-based solutions and emergency planning;*
3. *To raise awareness of issues relating to climate change and climate change adaptation during the lifetime of this plan;*
4. *To liaise, collaborate and work in partnership with the relevant government approved sectors in relation to initiatives and activities across the county;*
5. *To support the Ennis 2040 Spatial and Economic Strategy and its aspiration for Ennis to become Irelands first climate adaptive town; and*
6. *To facilitate and support the relevant stakeholders and enterprises in the progression of advancements in climate adaptation solutions and renewable energy generation and technologies.*

The Proposed Project supports the implementation of the Clare *Climate Change Adaptation Strategy 2019-2024* in promoting measures that build resilience to climate change and to address impact reduction, through the delivery of renewable energy, and reducing greenhouse gas emissions associated with the electricity sector. More detail of how the Proposed Project supports the delivery of climate action can be found in the Planning Report.

The CDP recognises the significant potential to increase the production of electricity from renewable energy sources (e.g. wind) stating that *'the county has one of the best wind resources in the world'*. The key goal is supported by objectives, the most relevant of which are included below.

> ***Objective CDP6.17*** *(Energy Supply): To contribute to the economic development and enhanced employment opportunities in the County by:*
>
> i. *Enabling the development of a self-sustaining, secure, reliable and efficient renewable energy supply and storage for the County in line with CDP Objective 3.3;*
> ii. *Facilitating the county to become a leader in the production of sustainable and renewable energy for national and international consumption through research, technology development and innovation; and*
> iii. *Supporting on-land and off-shore renewable energy production by a range of appropriate technologies in line with CDP Objective 3.3*
>
> ***Objective CDP6.18*** *(Green Technology): To support the development of low carbon and green tech businesses and industries throughout the County.*

Objective CDP11.44 *(Energy Security): To promote and facilitate the sustainable development, maintenance and upgrading of electricity and gas network grid infrastructure, to integrate renewable energy sources, thereby creating a secure and efficient energy supply and storage system for County Clare which is ready to meet increased demand as the regional economy grows.*

Objective CDP18.3 *(Development of a Low Carbon Economy):*

i. *A) To promote County Clare as a Low Carbon County as a means of attracting inward investment to the County and the Mid-West region;*
ii. *B) To facilitate measures to establish a low carbon economy and society by 2020;*
iii. *C) To facilitate the development of energy sources which will achieve low carbon outputs.*

Objective CDP6.17 (iii) above directly supports the development of renewable energy production.

With regard to the above policies, the CDP states that Clare County Council will promote the implementation of the Clare County Renewable Energy Strategy and will facilitate the development of a range of sustainable forms of energy creation within the County in order to ensure a secure and effective supply of energy. Through the successful delivery of the Renewable Energy Strategy, the CDP states that Co. Clare can make significant advancements in energy security, reduced reliance on traditional fossil fuels, enabling future energy exports and meeting assigned targets.

Objective CDP8.12 Renewable Energy:

To support the implementation of the National Renewable Energy Action Plan (NREAP), the Clare Wind Energy Strategy and the Clare Renewable Energy Strategy to facilitate the development of renewable energy developments in rural areas to meet national objectives towards achieving a low carbon economy by 2050 subject to the requirement of the RES SEA Environmental Report and the mitigation measures arising from the CDP Appropriate Assessment as contained in Volume 10(a).

CDP11.47 Renewable Energy:

"It is an objective of the Development Plan:

a) *To encourage and to favourably consider proposals for renewable energy developments, including community owned developments, and ancillary facilities in order to meet National, Regional and County renewable energy targets, and to facilitate a reduction in CO2 emissions and the promotion of a low carbon economy;*
b) *To assess future renewable energy-related development proposals having regard to the Clare Renewable Energy Strategy 2023-2030 in Volume 5 of this plan and associated SEA and AA;*
c) *To support the sustainable development of renewable wind energy (on-shore and offshore) at appropriate locations and of its related grid infrastructure in County Clare, in accordance with all relevant policies, guidance and guidelines pertaining to the protection of the environment and protected habitats and species, and to assess proposals having regard to the Clare Wind Energy Strategy in Volume 6 of this plan and the associated SEA and AA, or any subsequent updated adopted Strategy and to national Wind Energy Guidelines;*
d) *To prepare a new and updated Wind Energy Strategy for County Clare during the lifetime of this plan, subject to the publication of the update to the Wind Energy Development Guidelines for Planning Authorities 2006;*
e) *To strike an appropriate balance between facilitating renewable and wind energy-related development and protecting the residential amenities of neighbouring properties;*

f) *To support and facilitate the development of new options and technological advances in relation to renewable energy production and storage, that may emerge over the lifetime of this Plan;*
g) *To support the integration of indigenous renewable energy production and grid injection;*
h) *To ensure that all proposals for renewable energy developments and ancillary facilities in the County are in full compliance with the requirements of the SEA and Habitats Directives and Objective CDP3.3 of this plan; and*
i) *To promote and market the County as a leader of renewable energy provision."*

The CDP recognises the importance of strengthening the grid network in the county. The CDP includes the following objective in relation the electricity networks, of particular relevance to the project are objective CDP11.45 (b) & (e):

Objective CDP11.45:

"It is an objective of Clare County Council:

a) *To facilitate improvements in energy infrastructure and encourage the expansion of the infrastructure within the County.*
b) *To facilitate future alternative renewable energy developments and associated utility infrastructure throughout the County;*
c) *To support the Integrated Single Electricity Market (I-SEM) as a key priority for the Southern Region and the sustainable development and reinforcement of the energy grid including grid connections, transboundary networks into and through County Clare subject to appropriate environmental assessment and planning processes;*
d) *To collaborate with EirGrid to facilitate the development of a safe, secure and reliable supply of electricity, enhanced electricity networks and new transmission infrastructure projects that might be brought forward in the lifetime of this Plan under EirGrid's (2017) Grid Development Strategy (subject to appropriate environmental assessment and the planning process);*
e) *To collaborate with EirGrid over the lifetime of the plan to ensure that the County's minimum target of 1,167MW of renewable energy generation is achieved and can be accommodated on the electricity network in County Clare; and*
f) *To have regard to environmental and visual considerations in the assessment of developments of this nature and ensure compliance with the environmental requirements of Objective CDP3.3 of this plan."*

This objective is relevant to the Proposed Grid Connection as part of the Proposed Project. This development will facilitate improvements in energy infrastructure in County Clare. The Proposed Project is collaborating with EirGird to facilitate the development of enhanced electricity to ensure that the County's Renewable Energy Target is reached.

Landscape and Visual Amenity

The CDP contains a number of policies and objectives relating to landscape and visual amenity, including landscape character designations, protected views and scenic routes.

The County is divided into 21 Landscape Character Areas (LCAs). The site of the Proposed Project is located within LCA 8, in the Sliabh Bernagh Uplands. This area is described as rolling upland hills with core areas above 200 metres, rising to 526 metres at the highest point, with occasional small lakes and small streams draining these slopes. It also notes that the land cover is blanket bog but has been modified over time by coniferous planting, resulting in a mosaic with open areas of heather, gorse, blanket bog, rough grasses, and forestry. It notes that the upland hills are often open and reflect commonage, some with enclosures. These areas have little settlement and roads, apart from forestry access roads.

The CDP objectives associated with the LCAs are as follows:

It is an objective of Clare County Council:

- *To encourage the utilisation of the Landscape Character Assessment of County Clare, the forthcoming Regional Landscape Strategy and other relevant landscape policy and guidelines and to have regard to them in the facilitation, protection and management of appropriate landscape change in County Clare.*
- *To review and update the County Clare Landscape Strategy as soon as is practicable following the publication of the National Landscape Character Assessment and taking any associated guidelines.*

Chapter 14 Landscape and Visual Assessment of the CDP outlines that landscapes are categorised into areas which have similar characteristics for which similar planning policies are applicable. The Plan notes that the approach builds on the Landscape Character Assessment of County Clare. The 'Living Landscapes' approach sets out three main categories, recognising that the different parts of the County have different potential. The Plan also notes that the landscapes are not constant but seen as alive and continually changing. The three categories are listed below.

- **Settled Landscape** – areas where people live and work.
- **Working Landscapes** – intensively settled and developed areas within Settled Landscapes or areas with a unique natural resource.
- **Heritage Landscapes** – areas where natural and cultural heritage are given priority and where development is not precluded but happened more slowly and carefully.

The Proposed Wind Farm is located in a Settled Landscape, the Plan notes that Settled landscapes accommodate roads, power-lines, quarries and piped services that service settlements and industry. Uses which area envisaged include **energy,** along with agriculture, forestry, extraction, transportation, industry, commerce, tourism, recreation and leisure, education, healthcare and social infrastructure.

Policies associated with Settled Landscapes are as follows:

Objective CDP 14.2

It is an objective of the Development Plan:

To permit development in areas designated as 'settled landscapes' that sustain and enhance quality of life and residential amenity and promote economic activity subject to:

I. *Conformity with all other relevant provisions of the Plan and the availability and protection of resources;*
II. *Selection of appropriate sites in the first instance within this landscape, together with consideration of the details of siting and design which are directed towards minimising visual impacts;*
III. *Regard being given to avoiding intrusions on scenic routes and on ridges or shorelines.*

Developments in these areas will be required to demonstrate:

a) *That the site has been selected to avoid visually prominent locations;*
b) *That the site layouts avail of existing topography and vegetation to reduce visibility from scenic routes, walking trails, water bodies, public amenities and roads;*
c) *That design for buildings and structures reduce visual impact through careful choice of forms, finishes and colours, and that any site works seek to reduce visual impact.*

Section 13.5 of the CDP contains a number of objectives in relation to scenic routes. The Plan notes that there is a need to protect and conserve views adjoining public roads throughout the county where views are of high amenity value, however it notes that it is not proposed that this should give rise to the

prohibition of development along these routes but that development, where permitted, should not seriously hinder or obstruct these views and should be designed to minimise visual impact. A list of scenic routes in included in Appendix 5 of the CDP. The scenic routes views within the vicinity of the Proposed Project site are as follows:

- R466 between Broadford and O'Briensbridge
- R463 from O'Briensbridge through Killaloe to outside Ogonnelloe
- Views in and out of Doon Lough
- Road from Church at Ballylaghan crossroads as far as the crossroads at Caherhurly (part of the East Clare Way)

The CDP contains the following objective in relation to scenic routes:

Objective 14.7: It is an objective of Clare County Council:

a) *To protect sensitive areas from inappropriate development while providing for development and change that will benefit the rural community;*
b) *To ensure that proposed developments take into consideration their effects on views from the public road towards scenic features or areas and are designed and located to minimise their impact;*
c) *To ensure that appropriate standards of location, siting, design, finishing and landscaping are achieved.*

A Landscape and Visual assessment of the Proposed Wind Farm has been submitted with this application to inform the design of the turbine envelopes with regard to overall blade tip height. Zone of Theoretical Visibility (ZTV) mapping has been prepared for the project using a number of tip heights to assess the variation in visual spread caused by the changes in turbine height. As set out in Chapter 13 of the EIAR. The visual receptors considered as part of this particular assessment include:

- Designated scenic routes
- Settlements
- Recreational and tourist destinations
- Recreational routes
- Transport Routes

The area covered by the ZTV maps has a radius of 20 kilometres from the outer-most proposed turbines. ZTV maps assume a 'bare ground' scenario, i.e. no land-cover, representing visibility of the Proposed Wind Farm in the absence of all natural and manmade features from the landscape, including vegetation, houses and other buildings. In reality, such features will restrict or limit visibility of the wind turbines, due to the screening effects of vegetation, for example forestry and road-side hedgerows and trees, and buildings, particularly within towns and villages.

This objective is assessed against the Proposed Project in the Landscape and Visual Impact Assessment in Chapter 13 of the EIAR.

2.5.3.2 Clare Renewable Energy Strategy

As reflected within the key goals of the CDP, Clare County Council wants to ensure that Co. Clare has the necessary land use and strategy framework in place to maximise the harnessing and use of its renewable energy resources and inform and guide the planning process for future renewable energy development. The Clare Renewable Energy Strategy 2023-2029 (RES) was adopted as part of the CDP 2023 – 2029, includes the following vision of the RES:

> *"A County Clare that is the national leader in renewable energy generation which supports energy efficiency and conservation, and which achieves balanced social and economic*

development throughout the County and assists in achieving national climate change mitigation targets."

This Vision is underpinned by several strategic aims of which the following are considered to be of particular relevance to the Proposed Project

- A) To support the attainment of and to exceed in County Clare, where possible, the National targets and commitments to renewable energy;
- B) To identify/highlight the opportunities for various renewable energy technologies and resources and identify broad areas suitable for their development in full compliance with the requirements of all environmental legislation including the requirements of the Strategic Environmental Assessment Directive, Habitats Directive and Water Framework Directive;
- D) To maximise the opportunities for renewable energy development whilst safeguarding the environment and existing residential amenities; and
- E) To safeguard, where appropriate, areas with potential for renewable energy projects and to guide renewable energy development to preferred locations.

The RES acknowledges that Co. Clare has the natural resources needed to maximise energy generation by renewable means: geographical location on the Shannon Estuary and its Atlantic coastline, strong wind resource, undulating topography and a significant grid network. These attributes present opportunities for both on-shore and off-shore wind, wave and tidal energy, and pumped freshwater hydro energy storage. The RES notes that "*energy needs in County Clare are expected to rise by 2020...*" which is balanced against a recognition that "*the County has considerable capacity to produce energy from renewable and indigenous resources*". In this regard, **Policy RES 2.1** states that "*it is an objective of Clare County Council to meet the County's energy needs from 100% indigenous renewable energy sources.*"

The RES sets out a sustainable balance of renewable energy resources up to 2023 which ensures that there is no over reliance or over concentration on any single technology. With regard to wind energy, a target of ***550MW*** has been identified. It should be noted, however, that this target is not a 'cap' and will not limit the potential for greater generation of renewable energy if exceeded.

- **Objective RES 3.1** (Renewable Energy Targets): To facilitate the achievement of (or to exceed where possible) the renewable energy targets set out in Table 3.2 by 2030, ensuring that County Clare is the national leader in sustainable renewable energy generation, supporting energy efficiency, security and conservation, achieving balanced social, environmental and economic development throughout the County and assisting in the achievement of Ireland's Green Energy target.

2.5.3.3 Clare Wind Energy Strategy

The Interim Wind Energy Strategy (WES) for County Clare 2023-2029 was published in April 2023 and is incorporated into the CDP as Volume 6. The WES has been developed as a planning framework to support the implementation of wind developments in the county.

Within the preface of the WES it states:

"The Clare Wind Energy Strategy forms part of the Clare County Development Plan 2023-2029. In accordance with the requirements of the Department of Environment, Community and Local Government as set out in Circular PL20-13, the previous "Clare Wind Energy Strategy 2017-2023" has not been reviewed as part of the preparation of this draft plan Circular PL20-13, dated 20th December 2013, in the cyclical review of a Development Plan it is advised that, until the national policy review processes have concluded in relation to the Wind Energy Development Guidelines and the Renewable energy Export Policy and Development Framework, local authorities should defer amending their existing Development Plan policies

and should instead operate their existing Development Plan policies and objectives until the completion of these processes and further advice is issued."

The WES highlights 11 Strategic objectives that outline the overall rationale behind the strategy, with the aim of contributing to national legally binding targets while also capitalising on those opportunities associated with the generation and harnessing of wind energy in a sustainable manner. A key objective being:

"To promote economic development through wind energy and other renewables in the County, underpinning the need for energy security, the promotion and establishment of a low carbon economy and the development of green business within the County."

The WES also includes wind energy planning policy and development management standards to manage wind energy development.

Table 2-3 Strategic policy objectives for the development of wind energy- Clare Wind Energy Strategy

General Objectives	Description	Proposed Project Compliance
WES One: Development of Renewable Energy Generation	*It is the objective of the Council to support, in principle and in appropriate scales and locations, the development of wind energy resources in County Clare. It is an objective of the Council to ensure the security of energy supply by accommodating the development of wind energy resources in appropriate areas and at appropriate scales within the County.*	The Proposed Wind Farm turbines are wholly located within an area designated as *'Open to Consideration'*. The area is considered suitable for wind energy development as outlined in the WES. The Proposed Project will support the Council in achieving its objective to ensure the security of energy supply by accommodating the development of wind energy resources.
WES Two: Development of Low Carbon Economy	*County Clare will seek to promote itself as moving towards becoming a low carbon County as a means of attracting inward investment to the County and the wider Mid-West region.*	The Proposed Project will support County Clare in towards becoming a low carbon County as it will contribute over 46.2MW of renewable wind energy generation to County Clare's Wind Energy targets.
WES Three: County Partnership Approach	*Clare County Council will seek to promote wind energy in appropriate sites in the County and will work with agencies such as the Clare County Development Board, Clare Enterprise Board, Limerick Clare Energy Agency, Shannon Development, I.D.A and Enterprise Ireland to encourage investment in research and technology associated with wind farms and other renewable energy technology.*	Projects such as the Proposed Project support Co. Clare in encouraging investment in research and technology associated with wind farms and other renewable energy technology. By generating renewable energy, wind farms such as the Proposed Wind Farm contribute to achieving the long-term goal of replacing fossil fuels with sustainable energy sources.
WES Four: Response to National Policy	*The White Paper on Energy has set a target of 40% of electricity to be generated from renewable sources by 2020. In the Mid-West Regional Climate*	The Proposed Project will contribute over 46.2MW of renewable wind energy generation to Clare's County Clare's Wind Energy targets.

General Objectives	Description	Proposed Project Compliance
	Change Strategy, County Clare is identified as having a potential 600MW energy produced from renewables by 2020. Clare County Council will aim to achieve a minimum target of 550MW from wind energy by the conclusion of this Strategy.	
WES Five: Promotion of Community Involvement	*Clare County Council will seek to promote community involvement and require community benefit where possible in Wind farm developments.*	A Community Liaison Officer (CLO) was appointed as the point of contact for the Proposed Project and have been engaging with the local community. The purpose of the CLO was to introduce the Proposed Project to the local community, engage and establish a line of dialogue with the local community and facilitate one-to-one consultation meetings, or group meetings where requested. Please see Section 2.8.1 below for further detail on the Community Consultation process.
WES Six: Infrastructure Development Proposals	*Proposals for the development of infrastructure for the production, storage, and distribution of electricity through the harnessing of wind energy will be considered in appropriate sites and locations, subject to relevant policy, legislation and environmental considerations.*	The design and layout of the Proposed Project follows the recommendations and guidelines set out in the '*Wind Energy Development Guidelines'* (Department of the Environment, Heritage, and Local Government, 2006), and the '*Best Practice Guidelines for the Irish Wind Energy Industry*' (Irish Wind Energy Association, 2008). The design and layout of the Proposed Wind Farm also has regard to the '*Draft Wind Energy Guidelines'* (Department of the Environment, Heritage and Local Government). It is noted in the WES that "during the scoping stage of the SEA it was recognised that the Wind Energy Strategy may have the potential to significantly impact upon Natura 2000 sites. The potential for likely significant effects to occur initiated the need for a HDA. The SEA and

General Objectives	Description	Proposed Project Compliance
		HDA helped to define areas for wind energy development and ensured that highly sensitive environmental resources were avoided or potential negative impacts highlighted and addressed through mitigation measures." In this regard, the SEA (table 2a of the WES) highlighted several areas for exclusion from wind energy development, however the Proposed Project is not located in any of these areas. The RES does provide further guidance in relation to the requirements for wind energy development applications with to the recommendations of the SEA, and details of how the Proposed Project complies with these requirements are set out in the Planning Report prepared by MKO, provided with this application. 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
WES Seven: Natura 2000 Sites	*Having regard to the provisions of the Habitats Directive 92/43/EEC, where a proposed development will give rise to significant adverse direct, indirect or secondary impacts on Natura 2000 sites, (either individually or in combination with other plans or projects), permission will only be granted where there is no alternative solution and where there are imperative reasons of overriding public interest in favour of granting*	The impact of the Proposed Project on designated sites is considered in full in the EIAR and the NIS. Chapter 6 of the EIAR and NIS conclude that the Proposed Project will not give rise to any significant negative impacts on designated sites.

General Objectives	Description	Proposed Project Compliance
	permission, including those of a social or economic nature.	

Lands classified under the WES have been developed for wind farm developments based on specific objectives. The Proposed Wind Farm site is located in an area classified as 'Open to Consideration', which is outlined below:

- **WES 10: 'Open to Consideration'**
  Wind energy applications in these areas will be evaluated on a case-by-case basis subject to:
  - Viable wind speeds, environmental resources; and
  - Constraints and cumulative impacts.

The Proposed Wind Farm site has been selected because it has favourable characteristics for wind energy development. The Proposed Wind Farm site has a sufficient quantum of unconstrainted land with good wind resources and limited environmental constraints. The cumulative impact of the Proposed Project is robustly assessed throughout this EIAR.

2.5.3.4 Summary Conclusion on Local Policy for County Clare

Having regard to the above, it is clear that there is strong policy support for wind energy development and associated infrastructure at a local level and a commitment to shift a low carbon economy and away from using fossil fuels.

Having regard to the County Clare's significant available renewable resources, it is imperative that the County delivers on its renewable energy targets. Clare County Council in the CDP has set out its intention to take a leading role in respect of renewable energy technology to assist in meeting national, regional and county targets in energy consumption and CO_2 reduction. In this regard, the Council have set the County a minimum target of 1,167MW of renewable energy generation over the lifetime of the plan, with a target of 550MW from wind energy generation.

The Proposed Project, which is appropriately located for wind energy development having regard to the WES, will make a meaningful contribution towards the renewable energy targets for the County.

Therefore, the Proposed Project is considered compliant with the relevant provisions of the Clare County Development Plan 2023-2029. The Proposed Project should be considered on its merits, with regard for supportive local policies and objectives. The Proposed Project will be assessed against the objectives provided in the Development Plan in more detail in the planning report.

2.5.4 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 'DoEHLG 2006 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 DoEHLG 2006 Guidelines highlight general considerations in the assessment of all planning applications for wind energy. They set out advice to planning authorities on planning for wind energy through the development plan process and in determining applications for planning permission. They contain guidelines to ensure consistency of approach throughout the country in the identification of suitable locations for wind energy development.

Each wind project has its own characteristics and defining features, and it is therefore impossible to write specifications for universal use. Guidelines should be applied practically and do not replace existing national energy, environmental and planning policy. While the DoEHLG 2006 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 Guidelines* (referred to as the 'Draft 2019 Guidelines') in December 2019. The Draft 2019 Guidelines were open to public submissions up until the 19th of February 2020. These submissions are now being considered by the Department. At time of writing, the guidelines in place remain the DoEHLG 2006 Guidelines pending the Department publishing a final version of any revised guidance.

The Draft 2019 Guidelines clearly sets out the recognition 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 2019 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 2019 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 Route 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 2019 Guidelines in mind (for example in relation to 4 times turbine tip height set back distance from third party sensitive receptors).

The submission period for the Draft 2019 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 2019 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 2019 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 2019 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 2019 Guidelines may be finalised during the consideration period for the current Proposed Project. Towards this end, on the basis of the details available from both the DoEHLG 2006 Guidelines and Draft 2019 Guidelines, it is anticipated that the Proposed Project will be capable of adhering to the

relevant standards. Towards this end the design and layout of the Proposed Project has been developed having regard to the Draft 2019 Regulations. While the final guidelines have not yet been published it should be noted that the Proposed Wind Farm maintains a four times tip height set back between turbines and residential properties and furthermore detailed community consultations have been carried out.

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 DoEHLG 2006 Guidelines.

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.

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.

Commission for Regulation of Utilities: Grid Connection Policy

The Commission for Regulation of Utilities (CRU) (previously the Commission for Energy Regulation (CER)) launched a new grid connection policy in March 2018 for renewable and other generators, known as Enduring Connection Policy Stage 1 (ECP-1), which seeks to allow *"shovel ready"* projects that already have a valid planning permission, connect to the electricity networks. The principal objective which guides this decision is to allow those projects to have an opportunity to connect to the network, along with laying the foundations for future, more regular batches for connection. Applicants for new connection capacity under ECP-1 was published in August 2019 and under ECP-2 published in September 2020. The ECP-2 framework established a batch application window of the month of September for three years. The final application window under ECP-2 in September 2022 is the most recent grid connection window.

The enduring connection policy regime replaces the previous 'Gate' system of grid connection applications. The grid connection application window under ECP-1 was the first time since 2007 that certain renewable energy projects including wind farms had an opportunity to secure a new grid connection offer.

Renewable Energy Support Scheme

The Climate Action Plan 2019 (CAP 2019) is the Government's plan to give Irish people a cleaner, safer and more sustainable future. CAP 2019 set out actions across every sector which will ensure we meet our future climate commitments. A key part of CAP 2019 was a move to 70% renewable electricity by 2030, a measure which will be driven by the introduction of the Renewable Electricity Support Scheme ('RESS'). RESS also plays a pivotal role in the ambitions of the Programme for Government, along with the most recent Climate Action Plan 2024 in which Ireland's renewable energy target is at least 80% renewable electricity by 2030.

The RESS is an auction-based scheme which invites renewable electricity projects to bid for capacity and receive a guaranteed price for the electricity they generate.

The Auction Scheme and the ECP framework has now been established and is operational and will facilitate and provide a pathway to realise renewable electricity (RES-E) ambition of up to 80% by 2030, that has been established.

2.6 Planning History

This Section of the EIAR sets out the relevant planning history of the Proposed Wind Farm application site, and also identifies other wind energy developments within the wider area (25km from the EIAR Site Boundary).

2.6.1 Planning Applications within the application site boundary

A planning search was carried out through Clare's County Council's and An Bord Pleanála's online planning portal in August 2024 for relevant planning applications within the red line planning application site boundary. 1 no. extant permission was identified within the planning application boundary. The planning application within the red line boundaries in County Clare are outlined in Table 2-3 below.

Table 2-3 Planning Applications within the red line boundary in Co. Clare

Pl. Ref.	Planning Authority	Description	Decision
CCC Ref: 2360441 ABP Ref: 318846	Clare County Council	For development which will consist of: 1. The erection of a temporary 100m high lattice type meteorological mast for a period of 5 years which will be fixed to ground anchors by stay wires and will include instruments for measuring local climate conditions and services. 2. The proposed works also include a hardstanding area and all ancillary works	Granted by CCC Appealed to ABP
CCC Ref: 12230	Clare County Council	for a two storey dwelling house and garage with septic tank and percolation area and associated site works with bored well	Granted by CCC

2.6.2 Wind Energy Developments within 25km

A planning search was carried out to establish permitted and operational wind farms within 25km of the Proposed Wind Farm turbines. The search was carried out using the relevant local authority planning portals and An Bord Pleanála's portal in August 2024 for relevant planning applications. In total, 8 wind energy developments within 25km were identified:

Table 2-4 Wind farm developments within 25km of Proposed Wind Farm turbines

Pl. Ref.	Applicant	County	Wind Farm	Description	Decision	Status	No. of Turbines
Pl. Ref: 10/453 (EOD 15/812), 22254, ABP-314887-22	Seamus Madden	Clare	Parteen Turbine	Permission for a revised site boundary and revised position of a single 800kw wind turbine, 73 metres to hub height as granted under P10/453 and P15/812.	Granted by ABP on 12/10/2023	Operational	1
Pl. Ref: 13/746	Johnson & Johnson Vision Care Ireland	Limerick	Vistakon Wind Turbine	Wind turbine of up to 3mw, Hub height of up to 80m and rotor radius of up to 40m and associated infrastructure, construction of internal site track and all other associated works (An Environmental Impact Statement (EIS) will be submitted to the Planning Authority with the application.	Granted by Limerick County Council on 27/03/2014	Operational	1
PI. Ref: 09/742	Philip O'Sullivan	Clare	Single Domestic Turbine	For the construction of 6 kw wind turbine on a 15m high (monopole) mast with a rotor diameter of 5.5m giving a total height of 17.25m approx along with associated site works.	Granted by Clare County Council on 05.10/2009	Operational	1

Pl. Ref.	Applicant	County	Wind Farm	Description	Decision	Status	No. of Turbines
ABP.308799	Coillte	Clare	Carrownagowan Wind Farm	19 wind turbines, one meteorological mast, 110kV substation and all associated site development works.	Granted by ABP on 29/09/2022 subject to conditions	Existing	19
Pl Ref:23148 **ABP.317227**	RWE Renewables Ireland Limited	Clare	Fahybeg Wind Farm	Development of a wind farm together with the development of an underground grid connection cable to the national grid. The development will consist of 8 wind turbines, a permanent meteorological mast, an onsite 38kV electrical substation, and all associated site works.	Granted by ABP on 06/03/2024 subject to conditions	Permitted	8
ABP.318782	Ørsted Onshore Ireland Midco Limited	Clare	Oatfield Wind Farm	Proposed 11 no. turbine wind farm.	Decision due from ABP on 24/06/2024	In Planning - Lodged with ABP on 22/12/2023	11
ABP.318943	Ballycar Green Energy Ltd	Clare	Ballycar Wind Farm	Proposed 12 turbine windfarm, located on a 140-hectare site	Decision due from ABP on 25/07/2024	In Planning- Lodged with ABP on 26/01/2024	12
ABP.315797	FuturEnergy, Ireland	Clare	Knockshanvo Wind Farm	Proposed 7 no. turbine c. 50MW MEC wind farm.	Pre-Planning	In Planning- Pre-held with ABP	9

2.7 Scoping and Consultation

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 December 2022.

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 Section 3.2.6.1 of Chapter 3 of this EIAR, telecommunications operators were contacted in May 2022 in order to determine the presence of telecommunications links either traversing or in close proximity to the Proposed Wind Farm site.

2.7.1 Scoping Reponses

Table 2-5 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 are included in Appendix 2-1 of this EIAR. The recommendations of the consultees have informed the scope of the assessments undertaken and the contents of the EIAR. Those bodies engaged with at scoping stage are set out below in Table 2-5.

Table 2-5 Scoping List and Responses

Ref	Consultee	Date of Response
1	An Taisce	06/12/2022
2	Bat Conservation Ireland	No Response
3	BirdWatch Ireland	No Response
4	Broadcasting Authority of Ireland	06/12/2022
5	Commission for Regulation of Utilities	No Response
6	Clare County Council- Environment Section	06/12/2022
7	Clare County Council- Heritage Department	06/12/2022
8	Clare County Council- Roads Department	No Response
9	Department of Agriculture, Food and the Marine	22/12/2022
10	Department of the Environment, Climate and Communications	No Response
11	Department of Defence	No Response
12	Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media	22/12/2022
13	Department of Housing, Local Government and Heritage	06/12/2022 19/01/2023
14	Department of Transport, Tourism and Sport	22/12/2023
15	Eirgrid	No Response
16	Failte Ireland	15/12/2022
17	Forest Service	22/12/2022
18	Geological Survey of Ireland	15/12/2022
19	Health Service Executive	16/01/2023
20	Iarnrod Eireann	19/12/2022
21	Inland Fisheries Ireland	05/01/2023

Ref	Consultee	Date of Response
22	Irish Aviation Authority	08/12/2023
23	Irish Peatland Conservation Council	No Response
24	Irish Red Grouse Association	No Response
25	Irish Raptor Study Group	No Response
26	Irish Sports Council	No Response
27	Irish Water	No Response
28	Irish Wildlife Trust	22/12/2022
29	Office of Public Works	No Response
30	Shannon Airport	No Response
31	Sustainable Energy Authority of Ireland	No Response
32	Southwest Local Authority Waters Programme	06/12/2022
33	The Heritage Council	No Response
34	Transport Infrastructure Ireland	23/12/2022
35	Waterways Ireland	No Response

Table 2-6 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 2-6 Telecommunications Scoping and Responses

Ref	Consultee	Date of Response
1	ComReg	11/05/2022
3	Eircom Ltd	No Response
4	Imagine Networks Services Ltd	27/05/2022
5	Eir	16/05/2022
6	Ripple Communications Ltd	No Response
7	Viatel Ireland Ltd	No Response
8	Virgin Media Ireland Ltd.	29/08/2022
9	RTE Transmission Network Ltd	06/05/2022
10	Vodafone Ireland Ltd	No Response
11	Enet	06/05/2022
12	BT Communications Ireland	06/05/2022
13	ESB Telecoms	No Response
14	2rn (RTE Transmission Network) RTE/Saorview	06/05/2022
15	Tetra Ireland Communications Ltd	18/05/2022
16	Towercom	12/05/2022
17	BAI	06/05/2022
18	Ajisko Ltd	06/05/2022
19	AirWire	No Response
20	Lighthouse Networks Limited	06/05/2022
21	(Air Corps)	No Response
22	Three Ireland (Hutchison) Ltd	19/05/2022
23	Treaty Radio Ltd	No Response

Table 2-7 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 2-8 Consultee responses and relevant chapters

Consultee	Points raised by consultee	Addressed in Chapter
Broadcasting Authority of Ireland	No impact expected on any BAI infrastructure due to the Proposed Project	Chapter 15, Section 15.2
Department of Agriculture, Food and the Marine and Forest Service (Joint Response)	The Felling division responded with information regarding obtaining a felling licence before any trees are felled or removed from the Proposed Project site	Chapter 4
Department of Housing, Local Government and Heritage	NPWS responded with a number of points falling under the following headings: › Bird Survey Methodology › Damage/disturbance to bat roost › Assessment of hydrological impacts and wetlands › Identification of any flood plains in the EIAR › Peat Stability › Ballygareen Wood pNHA › Maintenance of hedgerows and scrub where possible › Invasive species › Turbine dimensions and infrastructure locations › Potential cumulative effects › Inclusion of a CEMP › Consideration of ecological enhancement measures onsite, no net loss of biodiversity › Marsh Fritillary surveys › Information on EU and Nationally Designated sites	Chapter 6, NIS, Appendix 6-2 Bat Report, Appendix 6-4 Biodiversity Enhancement and Management Plan, Chapter 7, Chapter 8, Chapter 9, Appendix 8-1 Geotechnical and Peat Stability Report, CEMP *Note – cumulative effects assessed in EIAR chapters 5-16.
Department of Transport, Tourism and Sport	The response covered topics under the following headings: › The presence of grid connection cables in the public road system has the potential to add to the cost of maintenance works to be carried out in the future › Installation of cables in the public road could effect the stability of the road › The necessity to have cables switched off when the road authority considers necessary due to maintenance works › Road Opening Licence › Exact location of cables within the road should be lodged with ESB	Chapter 4, Chapter 15
Fáilte Ireland	Responded with a copy of the Fáilte Ireland EIAR Guidelines	Chapter 5
GSI	Response fell under the following headings: › Geoheritage › Groundwater	Chapter 8, Chapter 9

Consultee	Points raised by consultee	Addressed in Chapter
	› Geological Mapping › Natural Resources	
Health Service Executive	Provided documents for reference within the EIAR. Response topics fell under the following headings: › Application should consider the findings of the Derryadd judgement › EIAR should examine the following matters: ○ Public Consultation ○ Decommissioning phase of the Proposed Wind Farm ○ Siting and location of turbines ○ Noise and vibration ○ Shadow flicker ○ Air Quality ○ Surface and groundwater quality ○ Geological impacts ○ Ancillary infrastructure ○ Cumulative impacts	Chapter 1, Chapter 3, Chapter 4, Appendix 4-7 Decommissioning Plan, Chapter 5, Chapter 8, chapter 9, Chapter 10 *Note: Unconfirmed details regarding turbine dimensions assessed in each chapter as needed **Note: Cumulative impacts are assessed in EIAR Chapters 5-16 as appropriate
Iarnród Éireann	Confirmed that the Proposed Project would not interfere with any of their infrastructure	N/A
Inland Fisheries Ireland	Response fell under the following headings: › Prevention of discharges of polluting matter such as cement › Prevention of silt deposition in streams › Stream crossings › Hardcore areas › Storage of fuels/oils etc	Chapter 4, Appendix 4-2 CEMP, Chapter 6, Chapter 9
Irish Aviation Authority	A number of issues raised relating to the proximity of the Proposed Wind Farm site to Shannon Airport and Woodcock Hill Radar Station. Engagement with IAA and AirNav Ireland encouraged	Chapter 15, Appendix 15-6 Aviation Review Statement
Transport Infrastructure Ireland	A general response was received which related to the following points: › Regard should be had to guidance documents as listed on www.TII.ie › Developer shall have regard to the following: ○ Consultations should be had with the relevant local authority ○ Focus on potential impacts to the National Road Network ○ Assess visual impacts from nearby public roads	Chapter 15, Section 15.1

Consultee	Points raised by consultee	Addressed in Chapter
	○ Have regard to any conditions relating to permitted similar schemes in the area ○ Have regard to any relevant TII publications ○ EIAR should consider the Noise Regulations 2006 ○ Assess how the development could effect future action plans by the competent authority	

2.8 Other Consultations

2.8.1 Community Engagement

The Applicant has engaged with the wider communities with regards to the Proposed Project. Public Consultation began in February 2022, through engagement with near neighbours, local representatives, and local community groups. This included door-to-door engagement with near neighbours within 2km of the Proposed Wind Farm turbines, and a project website was launched. A Community Liaison Officer was also appointed to the Proposed Project. A project website and dedicated email address were also created as an online point of contact and information.

Public Information Event

A public exhibition was held in the Lakeside Hotel, Killaloe on the 21st November 2023.

Matters discussed included:

- Project Overview
- About EDF Renewables
- About MKO
- Benefits of Wind Energy
- Design Development and Environmental Impact Assessment Report (EIAR)
- Transport and Site Access
- Proposed Grid Connection Route
- Community
- Other Considerations
- Project Timeline
- Site Selection process
- Noise
- Landscape and visual
- Shadow Flicker

Biodiversity Brochure

A biodiversity brochure was printed and displayed at the public information event and copies were available for locals to bring home with them.

Matters addressed in this brochure included:

- Proposed Wind Farm Biodiversity Study Area

- What is Biodiversity?
- Overview of Habitats
- Overview of Mammals
- Overview of Birds
- Overview Invertebrates

Online Virtual Consultation Room

An Online Virtual Consultation Room was also created which included:

- Project Overview
- Introductory informational video
- Overview of EDF Renewables Ireland and MKO
- Benefits of Wind Energy
- Design Development and Environmental Impact Assessment Report (EIAR)
- Photomontage Viewer
- Next Steps of the Development Phase
- Feedback Form

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 2-2 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 EDF Renewables Ireland Ltd. is passionate about 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 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 Wind Farm.

The Wind Energy Development Guidelines (2006) (the DoEHLG 2006 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 2019 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".*

This report 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, how the final proposal reflects community consultation and the steps taken to ensure that the Proposed Project will be of enduring economic benefit to the communities concerned.

2.8.2 Pre-Planning Meetings

2.8.2.1 Clare County Council

The prospective Applicant and members of the design team met with Clare County Council in relation to the Proposed Project prior to the submission of this planning application. The pre-planning meeting took place on 16th November 2023 via Microsoft Teams and included representatives from Clare County Council, EDF and MKO. The team gave a PowerPoint presentation as an introduction to the site and development proposals.

Those in attendance were as follows:

- Aoife Sedgwick - EDF
- John Conaghan - EDF
- Kevin McKeown– EDF
- Damian Byrne - EDF
- Caroline Balfe– CCC – Area Planner
- Declan Flanagan- SEE Roads - CCC
- Gareth Ruane - SEP - CCC
- Michael O'Grady – Roads - CCC
- John Willoughby -MKO
- Jack Workman - MKO
- Niamh McHugh - MKO
- Ronan Dunne - MKO
- Brandon Taylor- MKO

Matters Discussed included:

- Site selection and location
- Policy context
- Site constraints
- Site justification
- Upgrade works to the L7080 (the Gap Road)
- The East Clare Way
- Proposed Grid Connection Route
- Blackwater Bridge
- Turbine Delivery Route
- EIAR contents
- Scoping and public consultation
- Nearby Scenic Routes
- Other proposed and permitted wind energy projects in the area, and their potential cumulative impacts with the Proposed Wind Farm

2.8.2.2 Clare County Council- Design Flexibility Consultation Meeting

The prospective applicant and members of the design team met with Clare County Council in relation to the inclusion of unconfirmed details in the planning application for the Proposed Wind Farm. This meeting was held under the provisions of section 32H of the Act. The design flexibility meeting took place on the 28th March 2024 via Microsoft Teams and included representatives from Clare County Council, EDF and MKO. The discussion centred around the elements of the Proposed Wind Farm that

cannot be confirmed prior to lodgement of the planning application (the turbine dimensions) and how these elements will be adequately assessed in the EIAR.

Those in attendance were as follows:

- Gareth Ruane – CCC
- Caroline Balfe – CCC
- John Conaghan – EDF
- Aoife Sedgwick – EDF
- John Willoughby – MKO
- Ronan Dunne – MKO
- Niamh McHugh – MKO
- Emily Lynch – MKO

Matters discussed included:

- Proposed Project Overview
- Background to Design Flexibility
- Design Flexibility Process
- Unconfirmed Details
- Rationale for Design Flexibility
- Assessment of Unconfirmed Details
- Application Timeline

2.8.2.3 Engagement with Clare County Council in relation to the Proposed Grid Connection Route Crossing over the Blackwater Bridge

At the pre-planning consultation meeting held with Clare County Council as detailed above in Section 2.8.2.1, queries were raised regarding the method proposed for Proposed Grid Connection Route underground cable crossing over the Blackwater Bridge, located near Ardnacrusha, Co. Clare. The preferred option of traversing the Blackwater Bridge with the electrical cabling a 'Bridge Strapping Solution' by which the cable ducting would be strapped to the parapet of the Blackwater Bridge.

It was decided that, in the interest of clarity, an on-site meeting would be held between MKO, EDF, TLI, Tobar Archaeology and members of the Clare County Council Roads Department to discuss the application of this strapping solution. Three site meetings were subsequently held to accommodate all interested attendees. Those in attendance at these site visits included:

- John Conaghan – EDF
- Kevin McKeown - EDF
- Niamh McHugh – MKO
- Catherine Johnson - MKO
- Damian Browne – TLI
- Miriam Carroll – Tobar Archaeology
- Anne Marie Cusack – Clare CoCo Heritage Dept.
- John Mulconroy – Clare CoCo
- John Strand – Clare County Council, Shannon MD
- Anne O'Sullivan – Clare CoCo

The matters discussed at this meeting included the following:

- Environmental considerations of HDD in this location
- Presence of invasive species along the Blackwater River bank
- Presence of protected aquatic species in the River Blackwater at this location

- Difficulty of HDD at this location from a construction point of view
- Construction process of bridge strapping
- Precedent for bridge strapping
- Potential enhancement measures for the Blackwater Bridge as a Protected Structure
- Project Archaeologist supervision of all construction works, including a pre-commencement survey
- Qualification requirements for contractor carrying out the works
- Concerns regarding the constructability of bridge strapping at the specific location
- Concerns regarding the operational health and safety procedure of the cable in the case of disturbance (due to a road traffic accident for instance)
- Maintenance responsibility of the infrastructure during the operational period

The queries and concerns raised by members of Clare County Council in both virtual and in-person meetings have been fully addressed and robustly assessed within the relevant sections of this EIAR.

2.9 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, land, soil, water, air, climate, material assets, landscape, and cultural heritage as well as the interactions between these factors.

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

2.9.1 Methodology for Cumulative Assessment of Projects

The EIA Directive includes a requirement to consider '*a cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources*.' The methodology for the cumulative assessment has been informed by the relevant Guidance documents and by the nature and scale of the Proposed Project.

The potential cumulative impact of the Proposed Project and combined with the potential impact of other projects or plans has been carried out with the purpose of identifying what influence the Proposed Project will have on the surrounding environment when considered collectively with approved and existing projects, projects pending a decision from the planning authority, projects in the public domain such as those Strategic Infrastructure Development (SID) at pre-consultation with An Bord Pleanála, and land-uses in the vicinity of the Proposed Project site location.

The cumulative impact assessment of projects has three principle aims:

- To establish the range and nature of existing and approved projects within the cumulative impact study area of the Proposed Project.

- To summarise the relevant projects which have a potential to create cumulative impacts.
- To identify the projects that hold the potential for cumulative interaction within the context of the Proposed Project and discard projects that will neither directly or indirectly contribute to cumulative impacts.

Assessment material for this cumulative impact assessment was compiled on the relevant developments within the vicinity of the Proposed Project site. The material was gathered through a search of relevant online Planning Registers, 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.

2.9.2 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 2-9. 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 2-9: Cumulative Study Areas and Justification

Individual Topic	Maximum Extent	Justification
Population & Human Health (including shadow flicker)	**Proposed Wind Farm:** Proposed Wind Farm site Study Area for Population (Killokennedy, Lackareagh, Fahymore, Cloghera and Ballyglass DEDs) Shadow Flicker Study Area (10xRD buffer from proposed turbines) **Proposed Grid Connection Route:** Proposed Grid Connection Route Study Area for Population (100 from underground electrical cabling route) Consideration for the Population & Human Health cumulative extent is also given to the Air & Climate, Noise and Landscape & Visual (i.e Residential Visual Amenity) Cumulative Study areas	The Study Area for Population is identified in Section 5.3.1 in Chapter 5 as the District Electoral Divisions where the Proposed Wind Farm site is located. For the Proposed Grid Connection Route, 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 Route Study Areas for Population identified are considered for cumulative effects on Population. 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 max 1.55km (ten times the rotor diameter from proposed turbines) for the Proposed Wind Farm. As the nearest proposed, permitted or existing wind farm is 1.3km south of the proposed turbines at their closest points, the potential for cumulative shadow flicker impacts has been assessed.
Biodiversity (including Bats)	**Proposed Wind Farm:** 1km from Proposed Wind Farm site.	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 Proposed Wind Farm site and 200m from Proposed Grid Connection Route.

Individual Topic	Maximum Extent	Justification
	Proposed Grid Connection Route: 200m from the grid underground electrical cabling route. Consideration for the Biodiversity cumulative extent is also given to the Birds and Water Cumulative geographical boundaries.	
Birds	25km buffer from 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 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 site turbines was considered a reasonable approximation of the size of a county and a 5km radius of the Proposed Wind Farm site 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:** The cumulative study area is delineated by the Shannon Estuary North Catchment and Lower Shannon Catchment for proposed, permitted or existing wind-farm developments River Sub Basins for all smaller proposed, permitted or existing plans or projects (i.e. private and commercial type developments).	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-

Individual Topic	Maximum Extent	Justification
	Proposed Grid Connection Route: Within a 200m buffer zone of the proposed underground electrical cabling connection route.	basins). Therefore, other wind-farm developments are considered within the catchment of the Shannon Estuary North and Lower Shannon Catchment for cumulative 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 effects on the water environment.
Air Quality	**Proposed Wind Farm:** Air Quality Study Area is 1km from Proposed Wind Farm. **Proposed Grid Connection Route:** 500m from Proposed Grid Connection 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 10 km. **Proposed Grid Connection Route:** 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 10m/s wind speed (Institute of Acoustics document *Good Practice Guide To The*

Individual Topic	Maximum Extent	Justification
		Application Of Etsu-R-97 For The Assessment and Rating of Wind Turbine Noise). 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.
Cultural Heritage	20km buffer from proposed turbines	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 turbine locations is considered in the context of other developments, in particular other permitted and proposed wind farms within 20km of the Proposed Wind Farm site. Direct effects for the Proposed Project are considered to be confined to within the EIAR Site Boundary and relate to construction effects.
Landscape & Visual	20km from proposed turbines for visual and landscape effects. 15km from proposed turbines for effects on landscape character.	The LVIA Study Area was chosen as 20 kilometres for landscape and visual effects as is suggested by guidance: *'For blade tips in excess of 100m, a Zone of Theoretical Visibility radius of 20km would be adequate'* (WEDGs Page 94, DoEHLG, 2006; Page 152, DoHPLG, 2019) 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 LVIA Study Area of 15km is deemed appropriate for effects on landscape character in relation to the assessment of effects upon designated Landscape Character Areas.

Individual Topic	Maximum Extent	Justification
Material Assets: Traffic & Transport	**Proposed Wind Farm:** The list of wind farms and other large scale projects which were initially considered in cumulative assessment extended to 10 km. **Proposed Grid Connection Route:** 200m from the grid 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 Wind Farm delivery highway network, and so a 10km 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 15 Material Assets for further details on the cumulative assessment methodology.
Material Assets: Telecoms, Aviation and Other Utilities	The list of wind farms and other projects which were initially considered in cumulative assessment extended to 25 km. 200m from the grid 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 Project.

To gather a comprehensive view of cumulative impacts within the cumulative study area 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. Smaller cumulative assessment studies have considered all projects within their specific boundary which fall within the long list in Appendix 2-3.

2.9.2.2 Other Developments/Land uses

The review of the relevant County Council planning registers documented relevant general development planning applications in the vicinity of the site. These applications and land uses have also been taken account in describing the baseline environment and in the relevant assessments.

Furthermore, the cumulative impact assessments carried out in each of the subsequent chapters of this EIAR consider all potential significant cumulative effects arising from all land uses in the vicinity of the Proposed Project. These include permitted and existing wind farms in the area, solar farms, ongoing agricultural practices/forestry practices, quarries and extractive industries, intensive production/ processing industries, large infrastructure projects and other EIAR projects. The OPW (www.floodinfo.ie) does not record the presence of any Arterial Drainage Schemes or Benefited Lands within the Proposed Wind Farm site.

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

2.9.3 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 and/or plans and land uses within the cumulative study area and within the vicinity of the Proposed Project. Assessment material for this cumulative impact assessment was compiled on the relevant project and/or plans within the defined cumulative assessment study areas. The material was gathered through a search of relevant online Planning Registers, 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. These include ongoing agricultural and forestry practices. 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 all applications considered by each of the different disciplines in their cumulative impact assessment are included in **Appendix 2-3.**

Overall, the Proposed Project has been designed to mitigate impacts on the environment and 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.

APPENDIX 1

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APPENDIX 2

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