2. BACKGROUND TO THE DEVELOPMENT

This section of the EIAR sets out the energy and climate change related policy and targets along with the strategic, regional, and local planning policies relevant to the Proposed Development. It also summarises EIA scoping undertaken and the cumulative impact assessment process undertaken.

2.1 Introduction

The Proposed Development comprises 9 no. wind turbines, and associated infrastructure in the townland of Umma More, and adjacent townlands, in Co. Westmeath, and a 110kV on-site substation and associated works, including underground 110kV cabling to connect to the national grid at Thornsberry 110kV substation, in the townland of Derrynagall or Ballydaly, near Tullamore, Co. Offaly. For ease, and as set out in Chapter 1 of the EIAR,

- Where the 'Wind Farm Site' is referred to, this refers to turbines and associated foundations and hard-standing areas, meteorological mast, junction accommodation works, access roads, temporary construction compound, underground cabling, spoil management, site drainage, tree felling and all ancillary works and apparatus. The planning application for the Wind Farm Site is made to An Bord Pleanála in accordance with the provisions of Section 37E of the Planning and Development Act 2000, as amended.
- Where 'Grid Connection' is referred to, this refers to the temporary construction compound and 110kV onsite substation, and associated underground 110kV cabling connecting to the existing Thornsberry 110kV substation, subject to a future planning application under Section 182A of the Planning and Development Act, 2000, as amended.

As previously outlined in Section 1.1, this EIAR, along with a Natura Impact Statement ('NIS'), accompanies this application for the proposed 9 No. wind turbines and associated infrastructure with a potential export capacity of greater than 50 megawatts (MW). The EIAR and NIS contain the information necessary for An Bord Pleanála to complete the Appropriate Assessment and Environmental Impact Assessment as required for this planning application. For clarity in this EIAR, all elements of the Proposed Development will be assessed cumulatively and in combination with other plans and projects to aid the competent authority in carrying out an EIA. The EIAR and NIS assess the Grid Connection as part of the Proposed Development however the Grid Connection works do not form part of this planning. Should this planning application submitted to the Board under Section 37E of the Planning and Development Act, 2000 as amended, receive a grant of planning permission from An Bord Pleanála, a second planning application regarding the Grid Connection will be submitted to An Bord Pleanála in accordance with Section 182A of the Planning and Development Act 2000, as amended. This approach has been confirmed following consultations with An Bord Pleanála under the provisions of Section 182A of the Act (ref: ABP-313352-22). An updated EIAR and NIS will accompany the planning application for the Grid Connection.

The provision of wind turbines will generate renewable energy and provide it for use on 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) published by the Government in 2023 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 and a target of 9GW from onshore wind. 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, threatening the health and livelihoods of people across the globe. Urgency of action is also a key focus of the CAP.

Furthermore, the Programme for Government released in June 2020 also highlights that "*the reliable supply of safe, secure and clean energy is essential in order to deliver a phase-out of fossil fuels. We*

need to facilitate the increased electrification of heat and transport. This will create rapid growth in demand for electricity which must be planned and delivered in a cost-effective way."

The primary driver behind the Proposed Development is the need to provide additional renewable energy to offset the use of fossil fuels within the electricity generating sector. Increasing electricity generation from wind power represents the most economical renewable option to reduce emissions within the power generation sector and is the most mature technology available to achieve national targets that have been established for decarbonisation. The current proposal represents the provision of a significant wind energy proposal (as acknowledged by its classification as a Strategic Infrastructure Development under the Planning and Development Act, 2000 (as amended)) 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].).

A gradual shift towards increasing our use of renewable energy is no longer viable. There is an urgency now to ensure real changes happens. Renewable energy development is recognised as a vital component of Ireland's strategy to tackle the challenges of combating climate change and ensuring a secure supply of energy. Ireland is heavily dependent on the importation of fossil fuels to meet its energy need. 70% of energy used in Ireland is imported from abroad, higher than the EU average of almost 60% (National Energy Security Framework 2022). This high dependency on energy imports is highly risky and Ireland is currently extremely vulnerable both in terms of meeting future energy needs and ensuring price stability. As such, expanding indigenous renewable energy supply is critical for 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 belief, that there is a climate change emergency occurring both within Ireland and at a broader global scale. The Intergovernmental Panel on Climate Change (IPCC)'s Sixth Assessment 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 Climate Status Report for Ireland 2020[3] similarly reflects on clear and distinct impacts arising from climate change effects within an Irish context:

- An increase in the number of warm spell days in the last 60 years with very little change in cold spell duration;
- Annual precipitation was 6% higher in the period 1989-2018, compared with the 30-year period 1961-1990, and the decade 2006-2015 has been the wettest on record;
- Satellite observations indicate that the sea level around Ireland has risen by approximately 2-3mm per year since the early 1990's; and

[1] *Source: Sustainable Energy Authority of Ireland (SEAI) website, www.seai.ie*
[2] *Climate Change 2021 'The Physical Science Basis' (Intergovernmental Panel on Climate Change, August 2021)*
[3] *Climate Status Report for Ireland 2020 (Environmental Protection Agency, Marine Institute, Met Éireann, August 2021)*

- In 2018, carbon dioxide emissions were almost 18% higher than the in 1990, primarily due to increased fossil fuel combustion in transport and energy industries.

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

2.2.1 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:** In Glasgow last year, the final agreement was delayed due to the stance if China and India, among others, who were not comfortable the 'phase out' of coal wording in the draft text. This led to the watering down of this commitment to a 'phase down' of coal use. The hope was that COP27 would work to include further language on coal and fossil fuel reduction efforts. However, the wider commitment to phase out all fossil fuels, led by India, and backed by the US and the EU, was taken out and can be marked as the biggest disappointment of COP27.
- **1.5°C Pathway:** The 1.5°C warming limit has been retained and reassurances have been made that there is no room for backsliding. It gives the key political signals that the phase down of all fossil fuels is happening. There has been the setting of a workplan for 2023 to help articulate the nature and components of a global collective goal on adaptation and resilience and how it can be formatted in a way to take into account the Global Stocktake.

- **Climate Finance & Loss and Damage:** There has been the launch of an initiative by the V20 and G7 known as the Global Shield Against Climate Risk (GSACR). The intention of this initiative has been framed almost as an insurance policy backed by the World Bank to prepare and protect those most vulnerable to climate change disasters. The initiative seeks to reform the current climate finance model currently operating in the form of loans, typically with high interest rates and repayment requirements. The beginnings of a framework to compensate for the unequal distribution of harm that has been caused by climate change and the unequal contributions of emissions has also been put in place.

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

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

The law aims to ensure that all EU policies contribute to this goal and that all sectors of the economy and society play their part. All 27 no. EU Member States have committed to turning the EU into the first climate neutral continent by 2050. One third of the 1.8 trillion-euro investments from the NextGenerationEU Recovery Plan, and the EU's seven-year budget, will finance the European Green

[4] *European Climate Law was published in the Official Journal on 9 July 2021 and came into force on 29 July 2021.*

Deal. On 14th July 2021, the European Commission adopted a set of proposals[5] to make the EU's climate, energy, transport and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels. Achieving these emission reductions in the next decade which is crucial to Europe becoming the world's first climate-neutral continent by 2050 would clearly be assisted by the Proposed Development.

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.*" The Programme for Government sets out a range of measures to achieve this target which remain relevant, including:

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

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

The Climate Action and Low Carbon Development (Amendment) Act 2021, which was signed into law on the 23rd July 2021, legally binds Ireland to achieve net-zero emissions no later than 2050, and to a **51% reduction in emissions by the end of this decade**. Under the Act the State is required ***"to pursue and achieve,*** *by no later than the end of the year 2050, the transition to a climate-resilient biodiversity rich, environmentally sustainable and climate-neutral economy."* (emphasis added) The Act provides the framework for Ireland to meet its international and EU climate commitments and to become a leader in addressing climate change. As indicated by the premise of the legislation, the reduction of emissions is a key proponent of the Climate Action and Low Carbon Development (Amendment) Act 2021 and incorporates the following key provisions:

- Embeds the process of setting binding and ambitious emissions-reductions targets in law;
- Provides for a national climate objective, which commits to pursue and achieve no later 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;

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

- Actions for each sector will be detailed in the Climate Action Plan which must be updated annually; and
- Local Authorities must prepare individual Climate Action Plans which will include both mitigation and adaptation measures and will be updated every five years.

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

Carbon Budgets

The first national carbon budget programme proposed by the Climate Change Advisory Council, approved by Government and adopted by both Houses of the Oireachtas in April 2022 comprises three successive 5-year carbon budgets[6]. The total emissions allowed under each budget are shown in Table 2-1 below.

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

	2021 – 2025 Carbon Budget 1	2026 – 2030 Carbon Budget 2	2031 – 2035 Provisional Carbon Budget 3
	All Gases		
Carbon Budget (Mt CO_2eq)	295	200	151
Annual Average Percentage Change in Emissions	-4.8%	-8.3%	-3.5%
The figures are consistent with emissions in 2018 of 68.3 Mt CO_2eq reducing to 33.5 Mt CO_2eq in 2030, thus allowing compliance with the 51% emissions reduction target by 2030.			

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

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

The report states that the transformation of Ireland's energy system will be required for the country to meet its future 2030 and 2050 GHG emission targets; specifically, in order to reach net zero emissions by 2050, Ireland will be required to fully decarbonise electricity generation. Therefore, there is a clear incentive for developing, and safeguarding, Ireland's capacity in renewable energies and renewable electricity. Since this report was published, the Climate Action and Low Carbon Development (Amendment) Act 2021 has been enacted and there have been recent progress / future scenario assessments (e.g. EirGrid's 'All Island Generation Capacity Statement 2022 – 2031' (October 2022)).

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

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

Climate Action Plan 2023

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

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

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

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

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

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

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

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

2.2.3 Climate Target Progress

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

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

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

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

- With Existing Measures
  - Emissions from the energy industries sector are projected to decrease by 37.8% from to 8.7 to 5.4 Mt CO2 eq over the period 2020 to 2030
  - In terms of the renewable energy generated, this scenario projects Ireland reaching approximately 70% of electricity consumption from renewable energy by 2030. Renewable electricity generation capacity is dominated by wind energy.

- With Additional Measures
  - Emissions from the energy industries sector are projected to decrease by 48.9% from 8.7 to 4.5 Mt CO2 eq over the period 2020 to 2030
  - Assumed that by 2030 renewable energy generation increases to approximately 80% of electricity consumption. This is mainly a result of further expansion in wind energy (comprising 5.0 GW offshore).

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

> *"These latest Projections highlight the pace and scale of action needed to reduce greenhouse emissions in time to contribute to arresting global temperature rise. Implementation has consistently lagged behind planning. The message form the IPCC is that no further delays are possible to avoid the worst climate outcomes.*
>
> *Urgent implementation of all climate plans and policies, plus further new measures are needed for Ireland to meet the 51% emissions reduction target and put Ireland on track for climate neutrality by 2050."*

While it is clear that progress is on-going, it is also apparent that there are still significant challenges which will need to be overcome if Ireland is to achieve its 2030 emission targets of 51% reduction. With

Additional Measures, if they are fully implemented, compliance can be achieved with the EU Effort Sharing Regulation target. As decarbonising electricity generation will have a significant positive contribution in achieving Ireland's emissions it is clear that additional renewable energy production such as that of the Proposed Development must be encouraged and supported if carbon saving targets are to be met.

2.3 Renewable Energy Policy and Targets

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

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

National policy has developed in line with European and International policies, targets and commitments, in that the importance and urgency of decarbonising the energy generation sector, the economy in general and reducing greenhouse gas emissions has become increasingly more apparent. The Proposed Development complies with the nationally stated need to provide a greater amount of renewable energy onto the national grid and will further reduce the national reliance on fossil fuels for electricity generation.

2.3.1 International Renewable Energy Policy

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

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

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

The proposal implements EU commitments under the Paris Agreement on climate change (COP21), discussed above in Section 2.1.1.1, and marks an important milestone in the allocation to Member States of a package of climate targets formally adopted as part of the 2030 Climate and Energy Framework.

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

The European Green Deal was launched in December 2019 and proposes to increase the binding target of renewable sources in the EU's energy mix from 32% to **40% by 2030** via amendments to the

Renewable Energy Directive (Renewable Energy Directive) as per the 'Fit for 55' package (July 2021)[7]. This supports Member States in making the most of their cost-effective renewable energy potential across sectors through a combination of sectoral targets and measures. It aims at making the energy system cleaner and more efficient by fostering renewables based electrification and, in sectors such as industry and transport where this is more difficult, it will promote the uptake of renewable fuels.

REPowerEU Plan

The European Commission has proposed an outline of a plan to make Europe independent from Russian fossil fuels, starting with gas, due to the high and volatile energy prices, and security of supply concerns following the unprecedented Russia's military attack on Ukraine. The REPowerEU Plan (2022) seeks to lessen the EU's dependence on Russian fuel imports. Currently, the EU imports 90% of its gas consumption, with Russia providing around 45% of those inputs. Russia also accounts for around 25% of oil and 45% of coal imports. Phasing out dependence on fossil fuels can be done well before 2030, increasing the resilience of the EU-wide energy system based on two pillars:

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

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

With full implementation of the measures in REPowerEU Plan, at least 155 bcm of fossil gas use could be removed, which is equivalent to the volume imported from Russia in 2021. Nearly two thirds of that reduction can be achieved within a year. A part of this plan includes *'Speeding up renewables permitting to minimise the time for roll-out of renewable projects and grid infrastructure improvements'*. This will make the sector more efficient and reach the set goals faster. As such, it is submitted that the Proposed Development is strongly supported by EU energy policy.

Energy Roadmap 2050

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

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

The analysis found that decarbonising the energy system is technically and economically feasible. The Roadmap notes that all scenarios show the biggest share of energy supply technologies in 2050 comes from renewables. In this regard, it should be noted that the Climate Change Advisory Council states within their 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

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

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.

2.3.2 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

More recently, 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 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 rate 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 additional renewable energy generation is vital in helping to secure the State's energy supplies and reduce reliance on imported fossil fuels.

2.3.3 Renewable Energy Target Progress

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

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

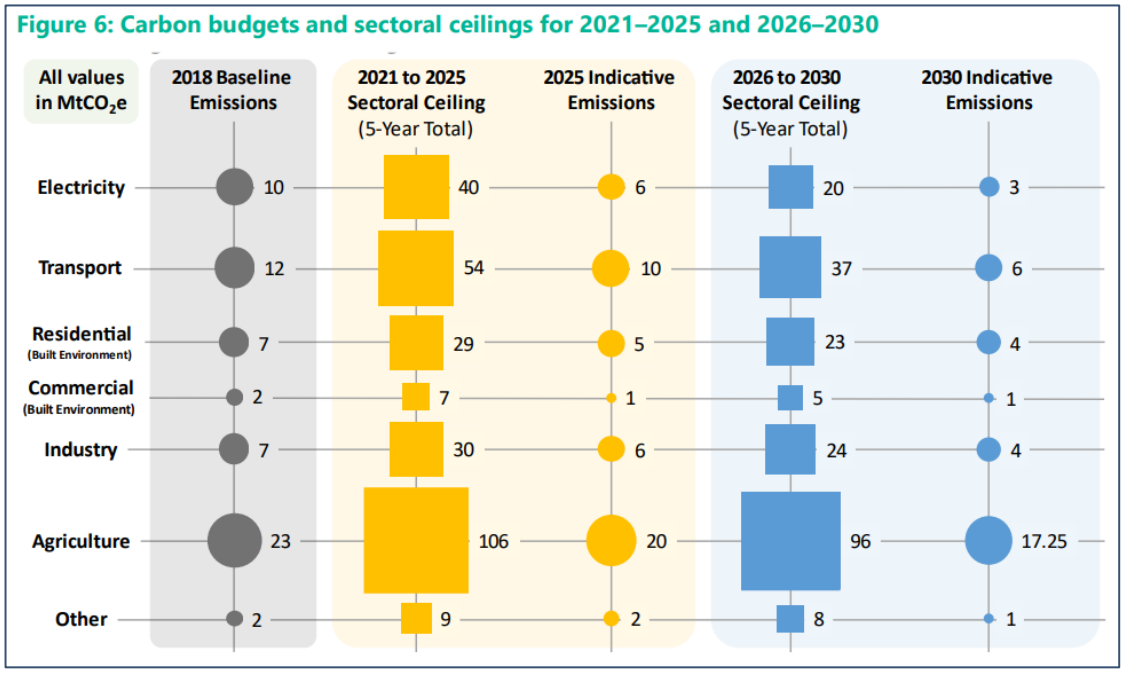

Figure 2-1: Carbon Budgets and Sectoral Ceilings for 2015-2025 and 2026-2030 (SEAI Energy in Ireland 2022)

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

renewable electricity, and the significant pace of annual reductions (-12.6% down on each previous year) needed to satisfy electricity's sectoral emission ceiling."

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

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

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

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

**calculated under the new REDI methodology*

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

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

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

The Climate Advisory Council (CCAC) notes within their *2022 Annual Review* that urgent implementation of the measures identified in the [8]CAP 2021 and identification of further new measures would be needed to reach national emission reduction targets in the electricity sector. The CACC stress the importance of reducing emissions in the electricity sector given the reliance of other sectors on the successful decarbonisation of the electricity sector.

EirGrid's recent analysis presented in *'All Island Generation Capacity Statement 2022 – 2031'* (October 2022) found that the existing generation capacity is poor. Some generation capacity, due to close in September 2023, have submitted notices that they will not be available throughout 2022 and 2023. This represents 590 MW (rated) that will be unavailable to the national grid. Furthermore, a sizable portion (364MW) of the forecasted new generation has failed to materialise, with developers terminating their capacity market contracts. These issues combined with existing social and economic growth driving electricity demand upwards means that the new generation capacity, especially renewable electricity, is urgently required. The scale of the capacity issue is clear, with significant capacity deficits forecasted across all scenarios for the remainder of the decade. In this context, the importance of wind energy becomes more apparent as it is estimated that 1 MW of wind capacity can provide enough electricity to supply approximately 650 homes[9]. Accordingly, the Proposed Development will serve to only contribute to meeting this increasing electricity demand.

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

> *"The electricity sector has a ceiling of 40 MtCO2eq. for the first budgeting period (2021-2025), equating to an average of 8 MtCO2eq. per annum. As emissions in 2021 were 9.98 MtCO2eq., electricity will need to achieve average annual emissions of circa 7.5 MtCO2eq. from 2022 to 2025.*
>
> *At a time when the energy system is under severe pressure to ensure security of supply, amid projections of rapid electricity growth over the coming decade, the electricity sector has been set one of the smallest carbon budget allocations and the steepest decline (-75%) of all sectors. The scale of the challenge to meet the carbon budget programme is immense and requires policies to be moved from an 'end of decade' target trajectory to a 'remaining carbon budget' target. "*

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

[8] *CAP23 was not yet published when the CCAC 2022 Annual Review was published*
[9] *https://www.iwea.com/about-wind/faqs*

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

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

2.4 Strategic Planning Policy Context

2.4.1 Introduction

This section of the EIAR provides the strategic planning context of the Proposed Development. As is examined below, the Proposed Development 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
- Wind Farm Site
- Grid Connection

The Proposed Development 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. The specific compliance with the County Development Plan provisions are dealt with in detail in the County Development Plan sections below.

2.4.2 National Policy Context

National Planning Framework: Project Ireland 2040

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

- Developing a new region-focused strategy for managing growth;
- Linking this to a new 10-year investment plan, the Project Ireland 2040 National Development Plan 2018-2027;
- Using state lands for certain strategic purposes;
- Supporting this with strengthened, more environmentally focused planning at local level; and
- Backing the framework up in law with an Independent Office of the Planning Regulator.

The NPF notes that the population of Ireland is projected to increase by approximately 1 million people by 2040 which will result in a population of roughly 5.7 million. This population growth will place further demand on both the built and natural environment. 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,. Ireland's national energy policy under **Objective 55** aims to '*promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050'*. The NPF aims to ensure that decisions that are made today meet our future needs in a sustainable manner.

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

An overarching objective of the NPF is to foster a transition toward a low carbon, climate-resilient society, which reflects the policy ethos established at the European level of governance (e.g. climate change and renewable energy targets – Section 2.1). In this regard, one of the key themes of the NPF is the realisation of an Ireland which has a secure and sustainable renewable energy supply and the ability to diversify and adapt to new energy technologies. The NPF references the National Climate Policy Position 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"*.

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.

National Development Plan 2021-2030

The National Development Plan 2021 – 2030 (NDP) was published on 4th October 2021 and sets out the major public investment projects identified by Government which are to play a significant role in addressing the opportunities and challenges faced by Ireland over the coming years such as Covid-19, Brexit, housing, health, population growth, and most relevant to the subject development, climate change. It is stated that the NDP 2021 – 2030 will be the *'largest and greenest ever delivered in Ireland'*, and in this regard, the NDP highlights that extensive consultation was undertaken to ensure that the plan adequately supports the implementation of climate action measures. Reflecting on the recent publication of the IPCC's 6th Assessment Report, the NDP notes that the Irish Government is fully committed to 'playing its part' to ensure that the worst climate change damage can be avoided, e.g. significant reductions in CO_2 and other greenhouse gas emissions as assisted by the achievement of both European and National renewable energy targets. Specifically, the NDP states that,

> *"The next 10 years are critical if we are to address the climate crisis and ensure a safe and bright future for the planet, and all of us on it.*
>
> *The investment priorities included in this chapter [Ch. 13] must be delivered to meet the targets set out in the current and future Climate Action Plans, and to achieve our climate objectives. The investment priorities represent a decisive shift towards the achievement of a decarbonised society, demonstrating the Government's unequivocal commitment to securing a carbon neutral future."*

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

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, if compared to the Climate Action Plan (CAP) 2023 and the objective to increase the proportion of renewable electricity to up to 80% by 2030 and a target of 8 gigawatt (GW) from onshore wind, is certainly ambitious and an explicit driver for the deployment of new renewable generators and the safeguarding / maintenance of existing assets, e.g. the subject development. It is noted that the reliability of electricity supplies will also be strengthened through investment in the electricity transmission and distribution grid. The focus of investment in regulated network infrastructure is to contribute to a long-term, sustainable and competitive energy future for Ireland.

2.4.3 Regional Policy Context

Eastern and Midland Regional Spatial Strategy

The Eastern and Midland Regional Assembly (EMRA) was established on 1st January 2015, is part of the regional tier of governance in Ireland. It is primarily focused on the preparation and implementation of Regional Spatial and Economic Strategies (RSESs), integration of Local Economic and Community Plans (LECPs), management of EU Operational Programmes, EU project participation, implementation of national economic policy, and working with the National Oversight and Audit Commission.

"The Strategy supports an increase in the amount of new renewable energy sources in the Region. This includes the use of wind energy – both onshore and offshore, biomass, and solar photovoltaics and solar thermal, both on buildings and at a larger scale on appropriate sites in accordance with National policy and the Regional Policy Objectives outlined in this Strategy."

"It is necessary to establish a consistency of approach by planning authorities, both in identifying areas suitable for renewable energy development and having regard to potential impacts, inter alia on biodiversity, landscape and heritage. It is also necessary to reflect the advancements in technology, and reflect the need to engage with, and be responsive to the needs of communities asked to host renewable energy infrastructure."

The RSES seeks to achieve balanced regional development and full implementation of Project Ireland 2040 – the National Planning Framework. It will be implemented in partnership with local authorities and state agencies to deliver on this vision and build a cohesive and sustainable region. The RSES has identified a number of key Regional Strategic Outcomes which includes to build climate resilience, to support the transition to a low carbon economy by 2050 and the protection of the healthy natural environment to ensure clean air and water for all

The RSES provides the framework through which the NPF's vision and the related Government policies and objectives will be delivered for the region. With regards to climate change the RSES notes that:

> *"The overreliance on non-indigenous supplies of energy is still a major issue for the region. Security of energy supply and climate change are important drivers of energy policy in the region. To meet our energy targets, it is important to better leverage natural resources to increase our share of renewable energy. Improving energy efficiency is vital to reduce energy consumption while maintaining or improving economic growth."*

The region has ample resources of wind, solar and ocean energy to provide a significant amount of renewable energy. Over the next ten years there is a predicted growth in energy demand of between 11% and 30%, mainly due to additional data centres. Extra generating capacity will likely be required to accommodate this demand, particularly in the region.

As noted and recognised by the RSES, Ireland and the EU are signatories to the Paris Agreement, a legally binding international agreement to restrict global temperature rises to below 2°C above pre-industrial levels, and to limit any increase to 1.5°C to significantly reduce the risks and impacts of climate change. It is further noted that *'Ireland's international commitments also extend to the UN's Sustainable Development Goal 13, to 'take action to combat climate change and its impacts."*

Chapter 7: Environment and Climate details the regions policy and objectives with regard to climate and environmental matters. Climate change is one of a number of cross-cutting principles, underpinning every policy set out in the RSES, however chapter 7 deals specifically with these issues. The RSES underlines the need for:

"A well-protected environment which supports human health and well being and which provides a natural resource for Ireland's agriculture and tourism industries."

"*Access to a clean and healthy natural environment is also shown to bring multiple associated health benefits while environmental pollution can have negative effects on human health, on animals and plants and on natural ecosystems. Most sources of environmental pollution are caused by human activities such as transportation, construction, industrial and agriculture activities and domestic waste."*

Section 7.9 of Chapter 7 addresses Climate Change specifically and acknowledges that to reduce emissions by 40% by 2030 and support a transition to a low carbon region by 2050, several key actions are required including transitioning to clean energy. The RSES cites the Environmental Protection Agency (EPA's) Greenhouse Gas Emissions Projections Report 2017-2035 which indicates an overall increase in greenhouse gas emissions from most sectors. Regional Policy Objectives to address climate change include:

- **RPO 7.30:**
  Within 1 year of the adoption of the RSES, the EMRA shall seek with other stakeholders to carry out an assessment of transport emissions in the Region to identify GHG forecasting and to analyse the emissions impacts of development in the Region.
- **RPO 7.31:**
  Within 1 year of carrying out a regional emissions assessment, EMRA shall compile and publish an emissions inventory and, in collaboration with the relevant departments and agencies, agree emissions reductions targets in accordance with agreed national sectoral plans and to support an aggregate 40% reduction in greenhouse gas emissions by 2030 in line with the EU 2030 Framework.
- **RPO 7.32**
  With the assistance and support of the Climate Action Regional Offices, local authorities shall develop, adopt and implement local climate adaptation and mitigation strategies which shall address issues including local vulnerability to climate risks and identify and prioritise actions, in accordance with the Guiding Principles of the National Adaptation Framework, National Mitigation Plan.
- **RPO 7.33:**
  Climate Action Regional Offices shall provide support to the local authorities on the development, adoption and implementation of local climate action strategies (which can address both adaptation and mitigation). Ongoing support should relate to the specific actions, and obligations and timescales for same that must be undertaken by the local authorities in accordance with local climate change adaptation strategies and compliance with national policy.
- **RPO 7.34:**
  EMRA supports the National Policy Statement on Bioeconomy (2018) and supports the exploration of opportunities in the circular resource-efficient economy including undertaking a bioeconomy feasibility study for the Region to identify the area of potential growth in the Region to inform investment in line with the national transition objective to a low carbon climate resilient economy.

The need to decarbonise the energy sector is also addressed in Chapter 7 of the RSES, calling for the region to "shift from its reliance on using fossil fuels and natural gas as its main energy source to a more diverse range of low and zero-carbon sources, including renewable energy and secondary heat sources. Decentralised energy will be critical to the Region's energy supply and will ensure that the Region can become more self-sufficient in relation to its energy needs." A focus is given to the generation of electricity supply from indigenous renewable sources which will require (inter alia):

- Facilitate the provision of appropriate renewable energy infrastructure
- Expansion and upgrading of the grid

- Onshore wind
- Ensure sufficient electricity to meet demand

Furthermore the RSES acknowledges that "*An increase in electricity demand is likely resulting not only from increased population and economic development but also resulting from a move away from the use of fossil fuels... In order to ensure security of electricity supply the Strategy must address this increased demand for electricity in such a way as to strike a balance between addressing the need for a significant shift towards renewable energy and enabling resources to be harness in a manner consistent with the principles of proper planning and sustainable development.*"

The Regional Policy Objectives for Decarbonising the Energy Sector are as follows:

- **RPO 7.35:**
  EMRA shall, in conjunction with local authorities in the Region, identify Strategic Energy Zones as areas suitable for larger energy generating projects, the role of community and micro energy production in urban and rural settings and the potential for renewable energy within industrial areas. The Strategic Energy Zones for the Region will ensure all environmental constraints are addressed in the analysis. A regional landscape strategy could be developed to support delivery of projects within the Strategic Energy Zones.
- **RPO 7.36:**
  Planning policy at local authority level shall reflect and adhere to the principles and planning guidance set out in Department of Housing, Planning and Local Government publications relating to 'Wind Energy Development' and the DCCAE Code of Practice for Wind Energy Development in Ireland on Guidelines for Community Engagement and any other relevant guidance which may be issued in relation to sustainable energy provisions.
- **RPO 7.37:**
  A bioeconomy plan for the Region should be developed that outlines the capacity of the Region to supply the range of bioenergy resources required for the fuel mix as well as the current and projected consumption requirements for growth in this market.
- **RPO 7.38:**
  Local authorities shall consider the use of heat mapping to support developments which deliver energy efficiency and the recovery of energy that would otherwise be wasted. A feasibility assessment for district heating in local authority areas shall be carried out and statutory planning documents shall identify local waste heat sources.

The resilience of critical infrastructure (CI) is also addressed in Chapter 7 of the RSES. CI includes electricity networks. It is noted that "*distributed renewable energy sources can contribute to local energy system resilience. For example, during both Storm Ophelia and Storm Emma, when the operation of many of Ireland's infrastructures was challenged, wind energy maintained output throughout the adverse conditions and contributed to maintaining local supply and post event recovery to normal operation.*"

Associated Regional Policy Objective RPO 7.43 stats:

> *"Climate Action Regional Offices and local authorities should consider the identification of critical infrastructure within their functional areas, and particularly of the interdependencies between different types of sectoral infrastructure, as a first step in 'future-proofing' services and to help to inform longerterm adaptation planning and investment priorities."*

The RSES acknowledges the importance of developing a safe, secure and reliable electricity grid network. Section 10.3, Energy of Chapter 10: Infrastructure calls for new infrastructural transmission projects to be encouraged to meet projected demand levels and to enable energy service providers to deliver their statutory function. The RSES includes '*guiding principles*' for local authority development plans to ensure that the region's electricity grid network is managed and developed sustainably. The provisions of grid infrastructure should be facilitated based on the following principles:

- *The development is required in order to facilitate the provision or retention of significant economic or social infrastructure.*
- *The route proposed has been identified with due consideration for social, environmental and cultural impacts and address issues of climate resilience, biodiversity, impact on soils and water quality.*
- *The design is such that it will achieve least environmental impact.*
- *Where impacts are inevitable mitigation features have been included.*
- *Where it can be shown that the proposed development is consistent with international best practice with regard to materials and technologies and that it will ensure a safe, secure, reliable, economic and efficient high-quality network.*
- *In considering facilities of this nature that traverse a number of counties or that traverse one county in order to serve another, planning authorities should consider the proposal in light of the criteria outlined above. It is important that planning authorities are engaged in early consultation and discussion with the relevant Transmission System Operator.*
- *Corridors for energy transmission or pipelines should avoid creating sterile lands proximate to key public transport corridors, particularly rail routes, and in built up urban areas.*
- *Regard for any National or Regional Landscape/ Seascape Character Assessment.*

The RSES sets out a number of infrastructural RPOs, relevant to the Proposed Development which indicate that the Region is open to, and ready to invest in, renewable energy generation:

- **RPO 10.19: Energy Infrastructure**
  Support roll-out of the Smart Grids and Smart Cities Action Plan enabling new connections, grid balancing, energy management and micro grid development.
- **RPO 10.20: Energy Infrastructure**
  Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. This Includes the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.
- **RPO 10.22: Energy Infrastructure**
  Support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/ distribution of a renewable energy focused generation across the major demand centres to support an island population of 8 million people, including:
- *Facilitating interconnection to Europe, particularly the 'Celtic Interconnector' to France and further interconnection to Europe/the UK in the longer term*
  - *Facilitating interconnection to Northern Ireland, particularly the 'North-South Interconnector and further co-operation with relevant departments in Northern Ireland to enhance interconnection across the island in the longer term.*
  - *Facilitating transboundary networks into and through the Region and between all adjacent Regions to ensure the RSES can be delivered in a sustainable and timely manner and that capacity is available at local, regional and national scale to meet future needs.*
  - *Facilitate the delivery of the necessary integration of transmission network requirements to allow linkages of renewable energy proposals to the electricity transmission grid in a sustainable and timely manner.*
  - *Support the safeguarding of strategic energy corridors from encroachment by other developments that could compromise the delivery of energy networks.*
- **RPO 10.24: Energy infrastructure**
  Support the sustainable development of Ireland's offshore renewable energy resources in accordance with the Department of Communications, Energy and Natural Resources

'Offshore Renewable Energy Development Plan' and any successor thereof including any associated domestic and international grid connection enhancements.

The RSES sets out the expectations for local authorities in respect to their role in in harnessing renewables-focused energy generation system.

> *"Local authorities should harness the potential of renewable energy in the Region across the technological spectrum from wind and solar to biomass ...The provision of infrastructure should be supported in order to facilitate a more distributed, renewables-focused energy generation system, harnessing both on-shore and off-shore potential from energy sources such as wind, wave and solar and connecting sites of optimal energy production to the major sources of demand."*

In relation to wind energy the RSES recognises and supports the many opportunities for onshore wind as a major source of renewable energy. It is noted that *'opportunities for both commercial and community wind energy projects should be harnessed, having regard to the requirements of DoHPLG Guidelines on Wind Energy'*. It is recognised that wind energy, with current and future developments technology, has an important role in delivering value and clean electricity for Ireland.

The Proposed Development will contribute to the achievement of a sustainable, secure and resilient energy supply in a manner consistent with the proper planning and sustainable development of the area/region.

2.4.4 Local Policy Context

The Proposed Development is located in Co. Westmeath and Co. Offaly. The wind turbines are located in Co. Westmeath, along with the new 110kV on-site substation. The Grid Connection crosses into Co. Offaly for connection to the national grid at the 110kV Thornsberry substation, located c. 2.5km northeast of Tullamore Co. Offaly.

2.4.4.1 Wind Farm Site

Westmeath County Development Plan 2021-2027

The Westmeath County Development Plan 2021-2027 (WCDP) came into effect on the 3rd May 2021. The WCDP incorporates the aims, objectives, policies and guidelines to provide for the proper planning and sustainable development of County Westmeath. The WCDP provides for the development of indigenous energy resources, with an emphasis on renewable energy supplies. The Council acknowledges the importance of renewable energy in reducing anthropogenic greenhouse gas emissions and the contribution of renewable energy in achieving national and EU target net zero greenhouse gas emissions by 2050.

It is highlighted that at the time of writing the County Development Plan 2021-2027 is the subject of a Direction by the Minister of State at the Department of Housing, Local Government and Heritage. The direction came after a submission by the Office of the Planning Regulator advising that CPO 10.143 of section 10.23.2 be deleted, *"...the Office* [of the Planning Regulator] *remains of the view that the inclusion of the policy objective CPO 10.132 (renumbered CPO 10.143) and an unchanged Wind Energy Capacity Map in the adopted Development Plan create a significant limitation or constraint on renewable energy projects which is inconsistent with the SPPR* [Specific Planning Policy Requirements] *and would also significantly restrict other policy objectives supporting wind energy development such as policies CPO 10.139, CPO 10.142 and CPO 10.144."* . The Direction, issued on the 28th of September 2022 directs the Planning Authority to delete wind energy policy objective CPO 10.143 in its entirety from section 10.23.2 of the Development Plan. For clarity, policy objective CPO 10.143 set out separation distances between wind turbines and residential dwellings.

Section 10.23 of the WCDP deals specifically with wind energy and notes the following:

> *"The Council recognises the importance of wind energy as a renewable energy source which can play a vital role in achieving national targets in relation to reductions in fossil fuel dependency and therefore greenhouse gas emissions and seeks to enable renewable and wind energy resources of County Westmeath to be harnessed in a manner that is consistent with proper planning and sustainable development of the area."*

Section 16.13.1 of the WCDP notes that:

> *"The Council will have regard to the Wind Energy Development Guidelines for Planning Authorities, prepared by the Department of Environment, Heritage and Local Government, or any update made thereto."*

Section 10.23.2 of the WCDP goes on to state:

> *"The preferred locations for large scale energy production, in the form of windfarms, is onto cutover cutaway peatlands in the County, subject to nature conservation and habitat protection requirements being fully addressed.*

The following are key objectives provisions of the WCDP in relation to renewable energy relevant to the Proposed Development. Section 10.22 of the WCDP states that it is a policy objective of Westmeath County Council to:

- ***"CPO 10.139*** *Support local, regional, national and international initiatives for limiting emissions of greenhouse gases through energy efficiency and the development of renewable energy sources which make use of the natural resources in an environmentally acceptable manner and having particular regard to the requirements of the Habitats Directive."*
- ***CPO 10.140*** *Facilitate measures which seek to reduce emissions of greenhouse gases and support the implementation of actions identified in the Westmeath County Council Climate Change Adaptation Strategy 2019-2024 and any future amendments."*

The following key objective of the Westmeath CDP in relation to wind energy relevant to the Proposed Development:

- ***CPO 10.142*** *"Have regard to the principles and planning guidance set out in Department of Housing, Planning and Local Government publications relating to 'Wind Energy Development' and the DCCAE Code of Practice for Wind Energy Development in Ireland and any other relevant guidance which may be issued in relation to sustainable energy provisions."*

Other renewable policy objectives within the WCDP state as follows:

- ***CPO 10.144*** *"Ensure the security of energy supply by supporting the potential of the wind energy resources of the County in a manner that is consistent with proper planning and sustainable development of the area."*

- ***CPO 10.146*** *"To strictly direct large-scale energy production projects, in the form of wind farms, onto cutover cutaway peatlands in the County, subject to environmental, landscape, habitats and wildlife protection requirements being addressed. In the context of this policy, industrial scale/large-scale energy production projects are defined as follows:*

  Projects that meet or exceed any of the following criteria:
  - *Height: over 100m to blade tip, or*
  - *Scale: More than five turbines, or*
  - *Output: Having a total output of greater than 5MW*

Developments sited on peatlands have the potential to increase overall carbon losses. Proposals for such development should demonstrate that the following has been considered:
- *Peatland stability; and*
- *Carbon emissions balance."*

- ***CPO 10.148*** *"With regard to wind energy developments, to ensure that the potential for visual disturbance should be mitigated by applying an appropriate setback distance, which, where relevant, complies with available Ministerial Guidelines."*

- ***CPO 10.156*** *"Support and advance the provision of renewable energy resources and programmes in line with the Government's National Renewable Energy Action Plan (NREAP), the Governments' Energy White Paper "Irelands Transition to a Low Carbon Energy Future (2015-2030) and any other relevant policy adopted during the lifetime of this plan."*

- ***CPO 10.158*** *"Support the production of sustainable energy from renewable sources such as wind, solar, bio-energy and the development of waste to energy/Combined Heat and Power Schemes at suitable locations and subject to compliance with the Habitats Directive."*

- ***CPO 10.161*** *"Prepare a Renewable Energy Strategy for the County over the lifetime of this plan and subject to the availability of resources. This strategy will support the development of renewable energy infrastructure to deliver government objectives in relation to energy efficiency and the transition to a low carbon future."*

The WMCDP acknowledges the importance of transitioning to a low carbon economy, future diversification, and adaptation to new energy technologies. It also identifies wind as a form of renewable energy which will helps in managing the transition of the local economies of such areas in gaining the economic benefits of greener energy.

Other policy objectives of note within the Plan include;

- **CPO 2.15** *-"In the assessment of development proposals, to take account of transport corridors, environmental carrying capacity, availability and/or capacity to provide waste water and water supply services, potential to conflict with Water Framework Directive objectives, potential to impact on the integrity of European sites and Annexe Habitats and species, features of biodiversity value including ecological networks, impact on landscape and visual characteristics, education and other socioeconomic objectives."*

- **CPO 12.1** *"Contribute as appropriate towards the protection of designated sites in compliance with relevant EU Directives and applicable national legislation."*

- **CPO 12.3** *"Support the implementation of the Westmeath Biodiversity Action Plan 2014-2020 and any revisions made thereto."*

- **CPO 12.13** *"Protect, manage and enhance the natural heritage, biodiversity, landscape and environment of County Westmeath, in recognition of its importance as both a non-renewable resource and a natural asset."*

- **CPO 12.24** *Protect and where possible enhance biodiversity and ecological connectivity, including woodlands, trees, hedgerows, semi-natural grasslands, rivers, streams, natural springs, wetlands, geological and geo-morphological systems, other landscape features, natural lighting conditions, and associated wildlife where these form part of the ecological network and/or may be considered as ecological corridors or stepping stones in the context of Article 10 of the Habitats Directive. Appropriate mitigation and/or compensation to conserve biodiversity, landscape character and green infrastructure networks will be required where habitats are at*

risk or lost as part of a development.

- **CPO 12.60** *"Ensure that run off from a proposed development does not result in a deterioration of downstream watercourses or habitats."*

- **CPO 13.6** *"Require that development is sensitively designed, so as to minimise its visual impact on the landscape, nature conservation, archaeology and groundwater quality."*

- **CPO 14.6** *"Seek to ensure the protection of archaeological sites and monuments and their settings and archaeological objects that are listed in the Record of Monuments and Places, in the ownership/guardianship of the State, or that are the subject of Preservation Orders or have been registered in the Register of Historic Monuments. Seek to ensure the protection and preservation of archaeological sites, which have been identified subsequent to the publication of the Record of Monuments and Places."*

- **CPO 10.62** *"Require all applications for significant development proposals affecting Regional or Local Roads to be accompanied by a Traffic and Transport Assessment (TTA) and Road Safety Audit (RSA), carried out by suitably competent persons, in accordance with the TII's Traffic and Transport Assessment Guidelines."*

- **CPO 10.83** *"Support the implementation of the relevant recommendations and measures as outlined in the relevant River Basin Management Plan 2018-2021, and associated Programme of Measures, or any such plan that may supersede same during the lifetime of the plan. Development proposals shall not have an unacceptable impact on the water environment, including surface waters, groundwater quality and quantity, river corridors and associated woodlands."*

- **CPO 10.88** *"Ensure that in assessing applications for developments, that consideration is had to the impact on the quality of surface waters having regard to targets and measures set out in the River Basin Management Plan for Ireland 2018-2021 and any subsequent local or regional plans."*

- **CPO 10.89** *"Ensure that development would not have an unacceptable impact on water quality and quantity including surface water, ground water, designated source protection areas, river corridors and associated wetlands."*

- **CPO 10.104** *"Implement and comply fully with the recommendations of the Strategic Flood Risk Assessment prepared as part of the Westmeath County Development Plan 2021- 2027."*

- **CPO 10.105** *"Have regard to the "Guidelines for Planning Authorities on the Planning System and Flood Risk Management" (DoEHLG/OPW 2009) and Circular PL2/2014, through the use of the sequential approach and application of the Justification Tests in Development Management."*

- **CPO 10.106** *"Ensure that a flood risk assessment is carried out for any development proposal within 200m of a watercourse and at risk of flooding, in accordance with the "Guidelines for Planning Authorities on the Planning System and Flood Risk Management" (DoEHLG/OPW 2009). This assessment shall be appropriate to the scale and nature of risk to the potential development."*

- **CPO 10.112** *"Protect the integrity of any formal (OPW or Westmeath County Council) flood risk management infrastructure, thereby ensuring that any new development does not negatively impact any existing defense infrastructure or compromise any proposed new infrastructure."*

- **CPO 10.132** *"Support the implementation of the Noise Directive 2002/49/EC and associated Environmental Noise Regulations 2006."*
- **CPO 10.133** *"Support the Implementation of the Westmeath Noise Action Plan 2013-2018 (and any revision made thereto)."*
- **CPO 10.134** *"Require all developments to be designed and operated in a manner that will minimise and contain noise levels, having regard to relevant national guidelines and in the absence of national guidelines, to relevant international standards, where appropriate."*

Landscape Policy for County Westmeath

A Landscape Character Assessment of Westmeath was carried out as part of the 2008 - 2014 County Development Plan and was adopted for the 2014-2020 County Development Plan also. The aim of the assessment is to provide an understanding of the value and sensitivity of the county's landscapes and its future management needs. The Landscape Character Assessment for Westmeath divides the county into 11 Landscape Character Areas (LCAs); specific to the Proposed Development, the subject site is located within the LCA 7 - Western Lowlands.

The Western Lowlands LCA 7 (in which the Proposed Development is located) was designated as 'Medium Capacity' for wind energy development in the Westmeath County Development Plan (2014-2020) that was adopted on the 18th February 2014. This designation was subsequently changed to 'Low Capacity' by way of variation no. 1 to the Development Plan (2014-2020) on 23rd September 2016. The Wind Energy Capacity designations remain unchanged in the recently adopted Westmeath County Development Plan (2021-2027).

Compliance with the Westmeath County Development Plan

In summary the County Development Plan for Westmeath fully recognises the importance of obtaining more energy from renewable sources. Westmeath County Council seeks to support and facilitate the sustainable provision of a reliable energy supply in the County, with emphasis on increasing energy supplies derived from renewable resources. Furthermore, there is a range of policy in place which supports the development of renewable energy. Accordingly, the Proposed Development is compliant with the relevant provisions of the Westmeath County Development Plan 2021-2027.

2.4.4.2 Grid Connection

Westmeath County Development Plan 2021-2027

In relation to electricity, the Plan notes that EirGrid expect the demand for electricity in the midlands region to increase by over 40% by 2025. As such, the Council have stated their support of EirGrid's *Implementation Plan 2017-2022* and *Transmission Development Plan 2016* and note a balanced and progressive approach to the development of electricity networks to meet the county's needs whilst minimising impacts on the environment. In that vein the Plan states:

"The sustainable provision of energy networks is therefore encouraged provided that it can be demonstrated that:

- *The development is required in order to facilitate the provision or retention of significant economic or social infrastructure.*
- *The route proposed has been identified with due consideration for social, economic, environmental and cultural impacts.*
- *Where impacts are inevitable mitigation features have been included.*

- *Where it can be shown the proposed development is consistent with international best practice."*

In addition to the policy objectives set out overleaf which are not wind energy-specific and can be considered relevant in relation to the Grid Connection, specific relevant policies of the Plan in relation to the Grid Connection include:

- **CPO 10.169** *Support and promote the sustainable improvement and expansion of the electricity transmission and distribution network that supply the County, subject to landscape, residential, amenity and environmental considerations.*

- **CPO 10.172** *Co-operate and liaise with statutory and other energy providers in relation to power generation, in order to ensure adequate power capacity for the existing and future needs of the County.*

- **CPO 10.174** *Support and facilitate the development of enhanced electricity and gas supplies, which do not negatively impact on environmental quality, landscape, wildlife, habitats or residential amenity and which are critical to the economic development of the County.*

- **CPO 10.176** *Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy including the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.*

Offaly County Development Plan 2021-2027

The Offaly County Development Plan 2021-2027 was adopted on 10th September 2021 and came in to effect 20th October 2021. The Offaly County Development Plan 2021-2027 (OCDP) (2021) outlines the overall strategy for the proper planning and sustainable development of County Offaly. The CDP and accompanying documents (including the Wind Energy Strategy) set out the key policy context for the development of Offaly County. While the Wind Farm Site element of the Proposed Development is not located within the administrative area of Offaly County Council, a portion of the Grid Connection is. As the Grid Connection proposed supports the wind farm, it is worth noting that **Policy CAEP-37** recognises the importance of wind energy in the county and that it can play "*a vital role in achieving national targets in relation to reductions in fossil fuel dependency and therefore greenhouse gas emissions."*

The CDP is supportive of the transition from fossil fuel-based energy to renewable energy and acknowledges that this transition will need to be underpinned by a strong electricity transmission network. The CDP states that the council *"recognises that essential future upgrades are required to the electricity grid in the midlands as outlined in EirGrids Tomorrow's Energy Scenarios 2019 System Needs Assessment and will support Eirgrid in future Programmes identifying grid solutions, in both infrastructural and technological terms, in order to facilitate the electricity targets, set out in the Government's Climate Action Plan 2019 and the National Energy and Climate Plan 2021-2030"*

Chapter 3: Climate Action and Energy strongly supports the move to a low-carbon society and includes numerous policies to support this transition, including, inter alia:

- **Policy CAEP-10:** *"It is Council policy to support local, regional, national and international initiatives for climate adaptation and mitigation and to limit emissions of greenhouse gases through energy efficiency and the development of renewable energy sources which make use of all natural resources, including publicly owned lands, in an environmentally acceptable manner."*

- **Policy CAEP-11***: "It is Council policy to support the transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050, by way of reducing greenhouse gases, increasing renewable energy, and improving energy efficiency."*
- **Policy CAEP-25***: "It is Council policy to encourage and facilitate the production of energy from renewable sources, such as from bioenergy, waste material, solar, hydro, geothermal and wind energy, subject to proper planning and environmental considerations."*
- **Policy CAEP-37***: "It is Council policy to recognise the importance of wind energy as a renewable energy source which can play a vital role in achieving national targets in relation to reductions in fossil fuel dependency and therefore greenhouse gas emissions."*
- **Objective CAEO-03:** *"It is an objective of the Council to achieve a reasonable balance between responding to government policy on renewable energy and in enabling the wind energy resources of the county to be harnessed in an environmentally sustainable manner."*
- **Objective CAEO-04***: "It is an objective of the Council to ensure the security of energy supply by supporting the potential of the wind energy (and other renewable) resources of the County in a manner that is consistent with proper planning and sustainable development of the area."*

With regards policies for electricity transmission and distribution **Policy CAEP-01** states "*It is Council policy to support and facilitate the development, reinforcement, renewal and expansion of the electricity transmission and distribution grid, including the development of new lines, pylons and substations as required to provide for the future physical and economic development of Offaly.*".

In addition, the following polices are relevant:

- **Policy CAEP-04**: "*It is Council policy to support EirGrid's Implementation Plan 2017 – 2022 and Transmission Development Plan 2019 and any subsequent plans prepared during the plan period that facilitate the timely delivery of major investment projects subject to appropriate environmental assessment and the outcome of the planning process."*
- **Policy CAEP-05** *: "It is Council policy to support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/ distribution of a renewable energy focused generation across the major demand centres. This includes:*
    - *Facilitating trans-boundary networks into and through the County and Region to ensure the Regional Spatial and Economic Strategy can be delivered in a sustainable and timely manner;*
    - *Facilitate the delivery of the necessary integration of transmission network requirements to allow linkages of renewable energy proposals to the electricity transmission grid in a sustainable and timely manner; and*
    - *Support the safeguarding of strategic energy corridors from encroachment by other developments that could compromise the delivery of energy networks."*
- **Policy CAEP-11** "*It is Council policy to support the transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050, by way of reducing greenhouse gases, increasing renewable energy, and improving energy efficiency."*
- **Policy DMS-107** *"Undergrounding of Services: All services, including ESB, telephone and television cables shall be placed underground, where possible. Service buildings or structures shall be sited as unobtrusively as possible and must be screened. Proposals should demonstrate that environmental impacts including the following are minimised:*
    - *Habitat loss as a result of removal of field boundaries and hedgerows (right of way preparation) followed by topsoil stripping (to ensure machinery does not destroy soil structure and drainage properties);*
    - *Short to medium-term impacts on the landscape where, for example, hedgerows are encountered;*
    - *Impacts on underground and underwater archaeology;*
    - *Impacts on soil structure and drainage; and*

- *Impacts on surface waters as a result of sedimentation."*

Offaly Wind Energy Strategy 2021-2027

The Offaly Wind Energy Strategy (WES) was prepared with the overall aim to facilitate the development of wind farms to contribute towards International, European, National and Regional climate targets. The WES acknowledges that wind energy developments are large infrastructure projects, which often have effects across county boundaries. As such, the county development plans and wind energy policies of adjoining counties are considered within the Offaly WES. While the Proposed Development's wind turbines are entirely located in Co. Westmeath, the Grid Connection infrastructure, required to electrify the wind turbines, is located in Co. Offaly. It is therefore important to consider the Offaly WES in the context of grid infrastructure and the facilitation of wind energy developments across county boundaries.

The strategy, in relation to electricity grid infrastructure in the county, states the following:

> *"Offaly has an excellent electricity transmission network with no area in the county being over 15 km of an electricity transmission line.... in order to facilitate the expansion in electricity generation installation from wind farms and other sources, the grid in the midlands may itself require development and expansion. It is therefore prudent for the future development and electricity and wind farms in County Offaly that these strategic pieces of infrastructure are protected from inappropriate development in their immediate environs and that their scope for development is maintained."*

The WES also refers to the National Planning Framework (NPF) 2018 in the context of National strategy Outcome (NSO) 8, which relates to ensuring "*Transition to a Low Carbon and Climate Resilient Society'. National Policy Objective 55 seeks 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 Proposed Development will support the aims of these policies in achieving a low carbon economy by 20250.

Compliance with the Offaly County Development Plan

Having regard to the above, it is clear there is strong policy support for wind energy development at a local level and a commitment to shift to a low carbon economy using non-fossil fuels. Consequently, the Proposed Development will further contribute to decarbonisation of energy and will further contribute to the national, regional and local renewable energy and emissions reduction targets. Furthermore, it is the policy of the Offaly County Council to support the transmission and distribution of renewable electricity. Therefore, the Proposed Development is compliant with the relevant provisions of the Offaly County Development Plan 2021-2027.

2.4.5 Other Relevant Material Considerations

DoEHLG Wind Energy Guidelines 2006

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

Each wind project has its own characteristics and defining features, and it is therefore impossible to write specifications for universal use. Guidelines should be applied practically and do not replace existing national energy, environmental and planning policy. While the 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 Guidelines) in December 2019. The draft 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 draft Guidelines pending the Department publishing a final version of any revised guidance.

The draft 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 Guidelines note that potential impacts of wind energy development proposals on the landscape, including the natural and built environment, must be considered along with the legitimate concerns of local communities. With this in mind, and in line with the previously stated "*preferred draft approach*", the draft Guidelines primarily focus on addressing a number of key aspects including, but not limited to:

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

The design of the Proposed Development has taken account of the *"preferred draft approach"* and accordingly, has been developed with the provisions of the draft Guidelines in mind (for example in relation to 4 times turbine tip height set back distance from third party sensitive receptors).

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

At time of writing the draft Guidelines are not yet finalised and have not been adopted. The relevant Wind Energy Guidelines for the purposes of section 28 of the Planning and Development Act 2000, as amended, remain those published in 2006. Notwithstanding this, however, due to the timelines

associated with the planning process for renewable energy projects it is possible that an updated version of the draft Guidelines may be finalised during the consideration period for the current Proposed Development. To this end on the basis of the details available from the draft Guidelines it is anticipated that the Proposed Development will be capable of adhering to the relevant noise and shadow flicker standards, albeit without sight of the final, adopted Guidelines the processes by which the Proposed Development will comply with the same cannot be confirmed at this stage. While the final Guidelines have not yet been published it should be noted that the Proposed Development maintains a four times tip height set back between turbines and identified sensitive receptors and furthermore detailed community consultations have been carried out.

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

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

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

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

Department Circular PL5/2017

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

The Circular also sets out the four key aspects of the *preferred draft approach* being developed to address the key aspects of the review of the Guidelines as follows:

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

IWEA Best Practice Guidelines for the Irish Wind Energy Industry 2012

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

IWEA Best Practice Principles in Community Engagement and Community Commitments 2013

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

Further details on the community engagement that has been undertaken as part of the Proposed Development 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 2023 is the Government's plan to give Irish people a cleaner, safer and more sustainable future to halve emissions by 2030 and reach net zero no later than 2050. The Plan sets out actions across every sector which will ensure we meet our future climate commitments. A key part of the Plan is to increase the proportion of renewable electricity to up to 80% by 2030 and a target of 9GW from onshore wind. These measures will be driven by introduction of the Renewable Electricity Support Scheme ('RESS') which aims to promote the generation of electricity from renewable sources.

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 third onshore RESS auction, 'RESS 3', was opened for public submissions on the design and implementation from the 28th of October 2022 until the 16th December 2022. The Programme for Government commits to holding RESS auctions at frequent intervals throughout the lifetime of the scheme. This will allow Ireland to take advantage of falling technology costs and avoid 'locking in' higher costs for consumers. The aim of the targeted consultation is to receive stakeholder feedback on these proposed aspects of the Terms and Conditions which may impede the efficient and cost-effective delivery of renewable electricity projects under RESS 3.

The third onshore RESS Auction Scheme, 'RESS 3' will be a major step in meeting the ambition of achieving up to 80% renewables by 2030, up to 8GW of onshore wind capacity and the updated ambition of up to 5.5GW of solar capacity under the revised Sectoral Emissions Ceilings.

The RESS ensures that we are on a pathway to meet our ambitious climate targets and lays the foundations of a thriving and cost-effective renewable electricity market. This will support the growth of the green economy, create sustainable work opportunities, and ultimately benefit the consumer as renewables become more cost effective and increase Ireland's energy security.

2.5 Planning History

This Section of the EIAR sets out the relevant planning history of the Proposed Development site, including all planning applications which overlap or are within the planning application boundary of the current Proposed Development made within the period 2017- end February 2023.

A planning search was carried out online through Westmeath County Council's planning portal for this period, however no applications were identified within this time range. Only two historic valid planning applications were identified:

Table 2-2: Valid Planning Applications

Pl. Ref:	Description	Decision
83/238	Outline planning permission for a house	Conditional Grant WCC, 05.10.1983
10/4088	Planning permission for a dry shed extension to existing agricultural shed and all associated ancillary site works	Conditional Grant WCC, 07.01.2011

2.6 Scoping and Consultation

2.6.1 Scoping

Scoping is the process of determining the content, depth and extent of topics to be covered in the environmental information to be submitted to a competent authority for projects that are subject to Environmental Impact Assessment (EIA). This process is conducted by contacting the relevant authorities and Non-Governmental Organisations (NGOs) with interest in the specific aspects of the environment with the potential to be affected by the proposal. These organisations are invited to submit comments on the scope of the EIAR and the specific standards of information they require. Comprehensive and timely scoping helps ensure that the EIAR refers to all relevant aspects of the Proposed Development 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 Development, was prepared by MKO and circulated in August 2021. In February 2022, another letter was sent informing the relevant bodies of a revision to the EIA Scoping Document for the Proposed Development, with particular attention to the amendments to the Grid Connection. 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 3.5.1 of Chapter 3 of this EIAR, telecommunications operators were contacted between May 2021 in order to determine the presence of telecommunications links either traversing or in close proximity to the Wind Farm Site.

2.6.2 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 received as of February 2023 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 2-3.

Table 2-3: Scoping consultees and responses

Ref	Consultee	Date of Response
1	An Taisce	No Response
2	Broadcasting Authority of Ireland	14/02/2022
3	Bat Conservation Ireland	14/02/2022
4	Birdwatch Ireland	No Response
5	Butterfly Conservation Ireland	No Response

Ref	Consultee	Date of Response
6	Commission for Regulation of Utilities, Water and Energy	No Response
7	Department of Agriculture, Food and the Marine	No Response
8	Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media	09/08/2021
9	Department of the Environment, Climate and Communications	No Response
10	Department of Defence	No Response
11	Transport infrastructure Ireland	17/02/2022
12	Department of Housing, Local Government and Heritage	21/09/2021
13	Department of Culture, Heritage and the Gaeltacht	No Response
14	Eastern and Midland Regional Assembly	No Response
15	EirGrid	No Response
16	Failte Ireland	20/08/2021
17	Geological Survey of Ireland	16/02/2022
18	Health Service Executive	13/09/2021
19	Iarnród Éireann	18/08/2021
20	Inland Fisheries Ireland	No Response
21	Irish Aviation Authority	08/02/2022
22	Irish Red Grouse Association	No Response
23	Irish Raptor Study Group	No Response
24	Sports Ireland (formerly Irish Sports Council)	No Response
25	Irish Water	No Response
26	Irish Wildlife Trust	14/02/2022
27	Midlands and Eastern River Basin District	No Response
28	NPWS	No Response
29	Office of Public Works	No Response
30	Westmeath County Council (Planning Department)	No Response
31	Westmeath County Council Environmental Department)	No Response
32	Westmeath County Council (Roads Department)	No Response
33	Westmeath County Council (Heritage Officer)	No Response
34	Roscommon County Council (Roads & Transportation)	No Response
35	Roscommon County Council (Water Services)	No Response
36	Roscommon County Council (Environmental Department)	No Response
37	Roscommon County Council (Heritage Officer)	No Response
38	Sustainable Energy Authority of Ireland	No Response
39	Offaly County Council (Engineering Department)	No response
40	Offaly County Council (Heritage Officer)	No response
41	Offaly County Council (Planning Department)	No response
42	Offaly County Council (Roads Department)	No response
43	The Arts Council	No Response
44	The Heritage Council	No Response
45	Department of Transport	No Response
46	Waterways Ireland	No Response
47	Department of Agriculture, Food & Marine	08/02/2022

Table 2-4 sets out the detail of Telecoms 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 2-4: Telecoms Consultee Responses

Ref	Consultee	Date of Response
1	Ajisko Ltd	Received 8th May 2021
2	Broadcasting Authority of Ireland	Received 5th May 2021

3	BT Communications Ireland	Received 4th May 2021
4	ComReg (Commission for Communications Regulation)	Received 5th May 2021
5	Eir	Received 7th May 2021
6	Enet	Received 4th May 2021
7	ESB Telecoms	Received 14th May 2021
8	Irish Aviation Authority (IAA)	Received 16th August 2021
9	Imagine Group	Received 7th May 2021
10	RTE Transmission Network	Received 5th May 2021
11	Three Ireland Ltd	Received 10th May 2021
12	Viatel	Received 4th May 2021
13	Virgin Media	Received 4th May 2021
14	Vodafone Ireland	Received 7th May 2021

2.6.3 Other Consultations

2.6.4 Community Engagement

The Applicant has engaged with the wider communities with regards the Wind Farm Site and Grid Connection. Appendix 2-2 of this EIAR contains a full and detailed community report. In summary, the report was prepared to record the consultation carried out with the local community in respect of the Proposed Development. The applicant has carried out consultation in relation to the Proposed Development with local residents and interested parties in the wider community. The objective of the consultations was to ensure that the views and concerns of all were considered as part of the Proposed Development design and Environmental Impact Assessment (EIA) process.

The Proposed Development 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 Umma More Ltd. has been at the forefront of developing, is its Community Benefit Package. The concept of directing benefits from wind farms to the local community is promoted by the National Economic and Social Council (NESC) and the Wind Energy Ireland (WEI) among others. While it may be simpler and easier to put a total fund aside for a wider community area, the applicant. is endeavouring to develop new ways to direct increased gain towards the local community with particular focus on those living closest to the Proposed Development.

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

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

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

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

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

> *"In order to promote the observance of best practice, planning authorities should require applicants to prepare and submit a Community Report with their planning application and a*

condition on any subsequent planning permission should require developers to carry out the development in accordance with the approved Community Report".

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 Development will be of enduring economic benefit to the communities concerned.

The Proposed Development will provide an enduring economic benefit to the communities surrounding the Proposed Development as outlined in Chapter 2 of the EIAR, through the community benefit package for residents and community groups, employment during the construction and operation of the Proposed Development and through the annual rates payable to the local authority.

2.6.5 Pre-Planning Meetings

2.6.5.1 An Bord Pleanála

The prospective Applicant engaged with An Bord Pleanála under the provisions Section 37B and 182E of the Planning and Development Act 2000 (as amended), as to whether the proposed Wind Farm Site element of the Proposed Development and, separately, the Grid Connection element of the Proposed Development would be considered Strategic Infrastructure Development (SID).

As two separate requests were issued to ABP under the provisions of both Section 37B and 182E of the Act, the Board issued two separate meeting requests under references ABP 313351-22 and 313352-22. However, as agreed with the prospective Applicant, a single meeting was held to discuss both cases, acknowledging the interrelationship that exists.

The opening SID meeting was held with the Board on the 21st of June 2022. Those in attendance were:

- Ciara Kellett, Assistant Director of Planning (Chair).
- Paul Caprani, Senior Planning Inspector.
- Niamh Thornton, Executive Officer.
- William O' Connor, Umma More Ltd.
- Niall Galvin, Umma More Ltd.
- Ellen Costello, MKO
- Meabhann Crowe, MKO

The design team gave an overview of the Proposed Development - both Wind Farm Site and Grid Connection – in the form of a PowerPoint presentation. The presentation included:

- Site selection and location
- Planning policy context
- Site constraints
- Proposed Development detail
- Scoping, pre-application and public consultation
- Environmental Impact Assessment Report
- Landscape and photomontages

The prospective Applicant stated its opinion that the proposed Wind Farm Site and Grid Connection would comprise Strategic Infrastructure Development in the meaning of the Act. Discussion followed the PowerPoint presentation and included:

- Grid Connection underground electrical cabling route and rationale
- Location of Grid Connection underground electrical cabling route in the public road corridor and on private lands
- A single EIAR would be prepared to cover both planning applications

- Dual application approach versus a single submission under Section 37E of the Act
- Stage 2 Appropriate Assessment
- Timelines to submission planning applications

The prospective Applicant closed both consultations with An Bord Pleanála under Section 37E and 182E of the Planning and Development Act 2000, as amended on the 22nd of July 2022. On the 16th of August 2022 the Board wrote to the prospective Applicant and confirmed that both consultations were closed and that the Wind Farm Site and Grid Connection were both considered to be strategic infrastructure within the meaning of Section 37A and 182A of the Act, and such any application for approval of the Wind Farm Site and Grid Connection should be made directly to An Bord Pleanála.

2.6.5.2 Westmeath County Council

Members of the team and the prospective Applicant met with representatives from Westmeath County Council on the 16th of June 2022. Those in attendance were:

- Paula Hanlon – Senior Executive Planner
- Karen Dunleavy – Assistant Planner
- Patrick Nally – District Engineer
- Jonathan Deane – Senior Executive Engineer
- William O'Connor – Umma More Ltd
- Niall Galvin – Umma More Ltd
- Ellen Costello – MKO
- Meabhann Crowe - MKO

The team gave an overview of the Proposed Development in the form of a PowerPoint presentation which discussed:

- Site selection and location
- Policy context
- Site constraints
- Scoping, pre-application consultation and public consultation
- EIAR contents
- Landscape and photomontages

Following the presentation further discussion included the following items:

- The requirements of Policy 10.146 of the County Development Plan regarding separation distances between turbines and dwellings.
- Locations of large-scale wind energy developments
- Ministerial direction regarding Policy 10.146
- Strategic Infrastructure Development status of the Proposed Development
- Historic and cultural impacts on the Hill of Uisneach
- Grid Connection underground electrical cabling route and options
- Substation
- Transportation of components

2.6.5.3 Offaly County Council

MKO wrote to Offaly County Council on the 14th of April 2022 seeking a pre-application meeting with regards the Grid Connection underground electrical cabling route which runs through the county. The Planning Section of Offaly County Council wrote to MKO on the 6th of July 2022 stating:

> *"OCC notes the proposed cabling through County Offaly.*

The cable route is extensive on local, regional and national routs through Offaly. OCC would have concerns regarding ensuring that the fabric of the road and any structures on the route are preserved and that the Council is compensated for the underground space. In this regard you may wish to discuss your proposal with Tullamore MD Area Office.

Please note that this pre planning advise only.

It should be noted that any advice is given in good faith and without prejudice to the formal consideration of any subsequent planning application. Article 247 (3) of the Local Government (Planning and Development) Act, 2000 (as amended) states that "the carrying out of consultations shall not prejudice the performance by a Planning Authority of any other of its functions under this Act, or any regulations made under this Act and cannot be relied upon in the formal planning process or in legal proceedings." Formal consideration of a planning application is necessarily more extensive than consideration at the pre-application stage because of consideration of any internal technical reports e.g. environment section or submissions from third parties or prescribed bodies.

Please also note that no site visit has been undertaken."

No other feedback was received from the County Council.

2.7 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.

2.7.1 Methodology for Cumulative Assessment of Projects

The potential cumulative impact of the Proposed Development and combined with the potential impact of other projects or plans has been carried out with the purpose of identifying what influence the Proposed Development 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 Development 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 Development.
- To summarise the relevant projects which have a potential to create cumulative impacts.

- To identify the projects that hold the potential for cumulative interaction within the context of the Proposed Development 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 Development. 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.

2.7.2 Cumulative Study Area

The geographical boundaries of the various zones of sensitivity of and to the Proposed Development 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 2-5. 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 2-5 Cumulative Study Area

Individual Topic	Maximum Extent	Justification
Population & Human Health (including shadow flicker)	**Wind Farm Site:** Wind Farm Site Study Area for Population (Drumraney DED, Ballymore DED and Umma DED) Shadow Flicker Study Area (10xRD buffer from proposed turbines) **Grid Connection:** Grid Connection 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	For the assessment of cumulative shadow flicker, any other existing, permitted or proposed wind farms are considered where their ten times rotor diameter shadow flicker study area are located within the Shadow Flicker Study Area of 1.62km (ten times the rotor diameter from proposed turbines) for the Proposed Development. As the nearest proposed, permitted or existing wind farms is 16.3km from the proposed turbines, there is no potential for cumulative shadow flicker effects. The Study Area for Population is identified in Section 5.1.2 in Chapter 5 as the District Electoral Divisions where the Wind Farm Site is located. For the Grid Connection, the Study Area for Population is identified as 100m from the proposed underground electrical cabling route. Both the Wind Farm Site and Grid Connection Study Areas for Population identified are considered for cumulative effects on Population.
Biodiversity	1km from Wind Farm Site Boundary. 200m from Grid Connection underground electrical cabling route.	Using the precautionary approach and given the nature and scale of the Proposed Development, the geographical boundary for terrestrial ecological aspects, i.e. habitats, is 1km for cumulative assessment for the Wind Farm Site and 200m from Grid Connection underground electrical cabling route.

	Consideration for the Biodiversity cumulative extent is also given to the Birds and Water Cumulative geographical boundaries.	
Birds	25km buffer from proposed turbines	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 Development turbines was considered a reasonable approximation of the size of a county and a 5km radius of the Proposed Development turbines was considered a reasonable approximation for the local level.
Land, Soils and Geology	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	**Wind Farm Site:** Upper 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). **Grid Connection:** Within a 200m buffer zone of the proposed underground electrical cabling connection route.	Regional surface water catchments are used for cumulative impact assessment with regard large infrastructural developments such as wind farms, energy and public transport developments. The potential for cumulative effects for these developments likely exists on a regional catchment scale (i.e. significant works likely existing in several sub-basins). Therefore, other wind-farm developments are considered within the Shannon Catchment for cumulative effects. River Sub Basins are used for smaller developments (i.e. private & commercial type developments). These developments are not likely to present a significant cumulative impact risk on a regional

		catchment scale as any effects would likely be imperceptible as a result of the setback distances and localised nature of the associated works. Given the nature and scale of the proposed works and the lack of hydrological cumulative impact potential beyond the river sub basin scale, the Water cumulative study area is defined by river sub basins in which the Wind Farm Site is located. Due to the narrow nature of the underground electrical cabling route trench (~0.6m wide), a 200m buffer zone is an appropriate scale when considering potential cumulative effects on the water environment.
Air & Climate	Air Quality Study Area is 1km from Wind Farm Site. 200m from Grid Connection underground electrical cabling route. The Climate assessment has been considered on a national basis and not confined to a specific study area.	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. 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 of air quality. The Climate assessment has considered the cumulative effects of the Proposed Developments with other developments on a national basis.
Noise & Vibration	The list of wind farms which were initially considered in cumulative assessment extended to 25 km. 200m from Grid Connection underground electrical cabling route.	The geographical boundary for the cumulative noise assessment is the area within which noise levels from the proposed, consented and existing wind turbine(s) may exceed 35 dB LA90 at up to 10 m/s wind speed (Institute of Acoustics document *Good Practice Guide To The Application Of Etsu-R-97 For The Assessment And Rating Of Wind Turbine Noise*). As the nearest proposed, permitted or existing wind farm is 16.3km

		from the proposed turbines, there is no potential for cumulative noise effects. Due to the narrow nature of the underground electrical cabling route trench (~0.6m wide), a 200m buffer zone is an appropriate scale when considering potential cumulative noise effects.
Cultural Heritage	25km buffer from proposed turbines Site Boundary	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 Development is considered in the context of other developments, in particular other permitted and proposed wind farms within 25km of the Proposed Development. Direct effects for the Proposed Development are considered to be confined to within the EIAR Site Boundary and relate to construction effects.
Landscape & Visual	25km from proposed turbines for visual and landscape effects. 15km from proposed turbines for effects on landscape character.	The Wind Energy Development Guidelines (DoEHLG, 2006) ('the Gudielines') require that *"in areas where landscapes of national or international renown are located within 25 km of a proposed wind energy development, the Zone of Theoretical Visibility should be extended as far (and in the direction of) that landscape".* The archaeological complex at Clonmacnoise (approx. 23.5 km from the proposed turbines) is a World Heritage Site and is deemed to be a landscape of national and international renown. Consequently, the LVIA Study Area has been established as 25km from the proposed turbines to account for the landscape and visual effects of the Proposed Development from the heritage landscape at Clonmacnoise. The LVIA study area has been chosen as 15 kilometres for effects on landscape character. Through experience conducting LVIA for other wind energy development projects, the assessment team determined that no significant effects on landscape character are likely to arise beyond distances of 15km from the proposed turbines. Therefore, a 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.
Material Assets: Traffic & Transport	The list of wind farms and other projects which were initially considered in cumulative assessment extended to 25 km. 200m from Grid Connection underground electrical cabling route.	Informed by traffic modelling scenario and the area of influence the Proposed Development has on changing traffic volumes. The potential cumulative traffic effects with the Proposed Development are assessed on the following criteria; › Project status (proposed to operational) › Degree of overlap with the Proposed Development 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 Development delivery highway network, and so a 25km buffer from turbines and 200m buffer from the proposed underground electrical cabling route is deemed appropriate to capture other plans and projects with the potential for cumulative effects with the Proposed Development. Please refer to Chapter 14 Material Assets for further details on the cumulative assessment methodology.
Material Assets: Telecoms & Aviation	The list of wind farms and other projects which were initially considered in cumulative assessment extended to 25 km. 200m from Grid Connection underground electrical cabling route.	The geographical boundary for the telecoms cumulative assessment is defined by the potential for other wind farm projects to interfere with broadcast signals that interact with the Proposed Development. As the nearest proposed, permitted or existing wind farms is 16.3km from the proposed turbines, there is no potential for cumulative effects.

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 all applications considered by each of the different disciplines in their cumulative impact assessment are included in Appendix 2-3.

2.7.2.2 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 land uses within the cumulative study area and within the vicinity of the Proposed Development. These include ongoing agricultural practices.

Overall, the Proposed Development has been designed to mitigate impacts on the environment and particularly water, and a suite of mitigation measures is set out within the EIAR. Additional detail in relation to the potential significant cumulative effects arising and, where appropriate, the specific suite of relevant mitigation measures proposed are set out within each of the relevant chapters of this EIAR.