

2. BACKGROUND

This chapter of the rEiAR presents information on the planning policy as it relates to the Subject Development in the context of European, National, and Local climate change and renewable energy policies and targets. This chapter also sets out relevant planning history, summarises EIA scoping and consultations undertaken, and the cumulative impact assessment process.

The Subject Development relates to a total of 25 no. deviations as outlined in Chapter 1 and Chapter 3 of this rEiAR, and forms part of the partially constructed Meenbog Windfarm (as defined in Chapter 1). All other elements of the Meenbog Windfarm are fully consented, and it is not proposed to make any alterations to the current site layout, wind turbines or associated infrastructure.

The Site (as defined in Chapter 1) is approximately 903 hectares in extent and is located approximately 8km southwest of the twin towns of Ballybofey and Stranorlar and approximately 12km northeast of Donegal Town.

Current land-use on the Site is comprised of the Permitted Development (as defined in Chapter 1), areas of commercial forestry and blanket bog. All elements of the Permitted Development were constructed in accordance with the relevant planning consent (ABP Ref: PA05E.300460). Construction of the Meenbog Windfarm commenced in November 2019, with approximately 90% of the civil engineering works, including wind farm access roads, 110kV electrical substation, turbine hardstands, turbine foundations, and ancillary works substantially completed over the following 12-month period up to November 2020 when the peat slide as defined in Chapter 1 occurred. The principle of the generation of wind energy at the location of the Meenbog Windfarm has therefore been accepted by the Board and does not form any part of this substitute consent application.

As noted in Chapter 3, the primary reason for the majority of the 25 no. deviations that comprise the Subject Development relates to the need to often make adjustments to the internal layout of a permitted road network and ancillary infrastructure, in response to actual conditions encountered on the ground during the construction of such SID wind farm developments.

The Meenbog Windfarm as constructed to-date, including the Subject Development, is consistent in terms of the nature, scale, and extent of impacts to the environment as assessed in the EiAR for the Permitted Development, and as assessed in the EIA and AA undertaken by the Board. The deviations which form the Subject Development are, for the most part **relatively small** in scale and occur in similar habitats and locations to the previously assessed and permitted plans. Therefore, the Subject Development does not significantly change the nature or scale of the Permitted Development and does not materially alter the environmental impacts associated with the Permitted Development viewed on its own and cumulatively with other relevant developments including the works carried out following the Peat Slide.

2.1 Planning Analysis

The following policy and analysis section sets out the relevant international, national, regional, and local planning policy and legislation as it relates to renewable energy, climate change and related development. It is important to note that the Subject Development relates to works which are ancillary to the Permitted Development which comprises of a vital renewable energy project. As the Board has already granted permission for the Permitted Development, the principle of the Permitted Development is not being discussed within this application.

2.1.1 Renewable Energy Resources

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

A gradual shift towards increasing our use of renewable energy is no longer viable. There is an urgency now to ensure real changes take place without delay. Renewable energy development is recognised as a vital component of Ireland’s strategy to tackle the challenges of combating climate change and ensuring a secure supply of energy. Ireland is heavily dependent on the importation of fossil fuels to meet its energy need. 70% of energy used in Ireland is imported from abroad, higher than the EU average of almost 60% (National Energy Security Framework 2022). This high dependency on energy imports is highly risky and Ireland is currently extremely vulnerable both in terms of meeting future energy needs and ensuring price stability. As such, expanding indigenous renewable energy supply is critical for climate action, energy security and price stability.

The regularisation of the planning status of the Subject Development will facilitate the timely completion of the Meenbog Windfarm and will therefore contribute to meeting Ireland’s national and EU renewable energy and carbon emission reduction goals.

2.1.2 Climate Change Policy and Targets

International and national policy consistently identifies the need to reduce greenhouse gas (GHG) emissions and stresses the importance of reducing global warming. The context of international policy has altered over the last 30-years from being of a warning nature to the current, universally accepted stance, that there is a climate change emergency occurring both within Ireland and at a broader global scale. The Intergovernmental Panel on Climate Change (IPCC)’s Sixth Assessment Report¹ published in 2021 provides a stark assessment of global climate change and presents evidence that climate changes will increase in all regions of the globe over the coming decades and that much of the damage caused by climate change up to this point is now likely irreversible, such as the rise in sea levels over the 21st century.

“*The Status of Ireland’s Climate 2020*” produced by MET Eireann², similarly reflects on clear and distinct impacts arising from climate change effects within an Irish context noting a rise in GHG emissions, an increase annually in average amounts of precipitation and rise in air temperatures, a rise in sea level temperatures and in sea levels.

According to the World Meteorological Organisation 30th November 2023 report³:

- Based on the data to October, it is virtually certain that 2023 will be the warmest year in the 174-year observational record, surpassing the previous joint warmest years, 2016 and 2020.
- June, July, August, September, and October 2023 each surpassed the previous record for the respective month by a wide margin in all datasets used by the World Meteorological Organisation (WMO) for the climate report.
- July 2023 became the all-time warmest month on record.
- Global average sea-surface temperatures (SSTs) were at a record observed high for the time of year, starting in the late Northern Hemisphere spring. For April through September 2023 (the latest month for which we have data), SSTs were all at a record warm high, and the records for July, August and September were each broken by a large margin (around 0.21 to 0.27 °C).
- In 2023, global mean sea level reached a record high in the satellite record (since 1993), reflecting continued ocean warming as well as the melting of glaciers and ice sheets. The rate of global mean sea level rise in the past ten years (2013–2022) is more than twice the rate of sea level rise in the first decade of the satellite record (1993–2002).

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

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

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

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

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 Meenbog Windfarm 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.

2.1.3 International Climate Policy

United Nations Framework Convention on Climate Change

In 1992, 154 no. 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 GHGs. The UNFCCC set no binding limits on GHG emissions for individual countries and contains no enforcement mechanisms. Instead, the UNFCCC outlines how specific international treaties (called "Protocols" or "Agreements") may be negotiated to set binding limits on GHGS.

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. Under this 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 UNFCCC in a different country, to evaluate its implementation and negotiate new commitments. COP21, held across November and December 2015, provided 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**. 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),

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

COP27 Egypt

COP27 took place in Sharm el-Sheikh from the 6th of November 2022 to the 20th of November 2022. COP 27 centred around three major topics:

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

The most significant outcomes from COP 27 are outlined below:

- **Phase down/out language:** The final agreement was delayed due to the stance of 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 and Loss and Damage:** The launch of the Global Shield Against Climate Risk (GSACR) is in effect 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.

COP 28 United Arab Emirates

The 28th session of the COP to the UNFCCC was held in Dubai from 30 November to 13 December 2023. The main objective of COP28 was to assess the progress made by all parties on the implementation of the 2015 Paris Agreement through the concluding phase of the ‘global stocktake’, which began after COP26 in 2021.

The outcomes from COP 28 are as follows:

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

European Green Deal – European Climate Law (2021)

The European Green Deal, initially introduced by the European Commission in December 2019, sets out the ‘blueprint’ for a transformational change of the 27-country bloc from a high- to a low-carbon economy, without reducing prosperity and while improving people’s quality of life, through cleaner air and water, better health, and a thriving natural world. The European 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 European Green Deal focuses on 3 no. key principles for the clean energy transition, which will help reduce GHG 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 Meenbog Windfarm)

The European Climate Law³ writes into law the objectives set out above in the European Green Deal for Europe's economy and society to become climate-neutral by 2050. Climate neutrality by 2050 means achieving net zero GHG emissions for EU countries as a whole, mainly by cutting emissions, investing in green technologies and protecting the natural environment. The European 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 NextGeneration EU Recovery Plan, and the EU's seven-year budget, will finance the European Green Deal. On 14th July 2021, the European Commission adopted a set of proposals⁴ to make the EU's climate, energy, transport, and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels.

2.1.3.2 Compliance with International Climate Policy

The principle of generating clean, renewable energy from the Permitted Development has been established by way of the granting of planning permission for same. The Meenbog Windfarm will assist in reducing reliance on fossil fuels and help achieve international goals and targets.

The regularisation of the planning status of the Subject Development will facilitate the timely completion of the Meenbog Windfarm which will ensure that development progresses and generation of renewable energy takes place at the Site, thus being wholly in line with the goals and targets outlined.

2.1.4 National Climate Policy

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 *"Ireland's 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

³ Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law') published in the Official Journal on 9 July 2021 and came into force on 29 July 2021.

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

incentive for developing, and safeguarding, Ireland’s capacity in renewable energies and renewable electricity. Since this report was published, the Climate Action and Low Carbon Development (Amendment) Act 2021 has been enacted and there have been recent progress / future scenario assessments (e.g. EirGrid’s ‘All Island Generation Capacity Statement 2022 – 2031’ (October 2022)).

Given the clear concern that the county’s future emissions targets may be missed, it is crucial that projects such as the Meenbog Windfarm 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.

Programme for Government 2020

The Programme for Government 2020 (June 2020) (“the Programme”) 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 GHG emissions by an average 7% per annum over the next decade in a push to achieve a net zero emissions by the year 2050.

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

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

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

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

- Embeds the process of setting binding and ambitious emissions-reductions targets in law;
- Provides for a national climate objective, which commits to pursue and achieve no later than 2050, the transition to a climate resilient, biodiversity-rich, environmentally sustainable and climate-neutral economy;
- Provides that the first two five-year carbon budgets proposed by the Climate Change Advisory Council should equate to a total reduction of 51% over the period to 2030, relative to a baseline of 2018;
- The role of the Climate Change Advisory Council has been strengthened;
- The government must adopt carbon budgets that are consistent with the Paris agreement and other international obligations;
- Actions for each sector will be detailed in the Climate Action Plan which must be updated annually; and
- Local Authorities must prepare individual Climate Action Plans which will include both mitigation and adaptation measures and will be updated every five years.

The regularisation of the planning status of the Subject Development will facilitate the timely completion of the Meenbog Windfarm and will therefore contribute to Ireland reaching its legally-binding net-Zero emissions by 2050, and to a 51% reduction in emissions by the end of this decade.

Carbon Budgets

In order to achieve the 51% emissions reduction target discussed above, the CALCDA requires the Climate Change Advisory Council (CCAC) to set out a proposed programme of economy-wide 5-year Carbon Budgets to the Minister for the Environment, Climate and Communications. The first programme adopted by both Houses of the Oireachtas in April 2022 comprises three successive 5-year carbon budgets⁵. The total emissions allowed under each budget are shown in **Table 2-1** below.

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 ₂ eq)	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 ₂ eq reducing to 33.5 Mt CO ₂ eq in 2030, thus allowing compliance with the 51% emissions reduction target by 2030.			

Section 6C of the CALCDA provides that the Minister shall prepare, within the limits of the carbon budget, the Sectoral Emissions Ceilings which set out the maximum amount of greenhouse gas emissions that are permitted in each sector. The approved Sectoral Emissions Ceiling for the electricity sector is 40 Mt CO₂ eq for the first budget (2021-2025) and a sectoral ceiling of 20 Mt CO₂ eq for the second budget period (2026-2030). In 2022, the electricity sector emissions were 10.1 Mt CO₂ eq.

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 “Ireland’s performance in meeting international obligations has to date been poor” (refer to ‘Emissions Projections for Ireland’ below). The Report highlights on-going concern regarding emission projections and growing evidence that Ireland is off track in meeting its 2030 targets under the relevant the EU Directives.

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

Given the clear concern that the country’s future emissions targets may be missed, it is crucial that projects such as the Meenbog Windfarm is supported. The Subject Development will facilitate the continued efficient construction and operation of the Permitted Development thereby providing a positive contribution in the context of ensuring its successful operation, contributing to increased renewable energy outputs, and consequently working towards meeting future emissions targets.

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

Climate Action Plan 2023

The Climate Action Plan 2023 ('CAP23') 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 discussed above.

At the time of publication (December 2022), the key sources of Ireland's GHG emissions include agriculture (33.3%), transport (15.7%) and energy (14.4%). 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 CAP23 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."

Under CAP23 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 CAP23. 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.

Due to the scale of the challenge in relation to renewables, there is no room for consented projects to be unduly delayed. The regularisation of the planning status of the Subject Development will facilitate the timely completion of the Meenbog Windfarm.

Climate Action Plan 2024

The Climate Action Plan 2024 ('CAP 24') builds on CAP23 by refining and updating the status of the actions required to deliver the decarbonisation required under the carbon budgets and sectoral emissions ceilings. The renewable electricity generation targets are unchanged from the CAP23 (9GW of onshore wind & 80% renewable electricity share).

CAP 24 includes the latest trends in the electricity sector:

- In 2022, renewable generation accounted for 38.6% of electricity, an increase from 35% in 2021.
- Electricity accounted for 14.4% of Ireland's greenhouse gas (GHG) emissions in 2022.
- To meet the first carbon budget the electricity sector requires a decarbonisation rate of 17.3% per annum in the period 2023-2025. For context, the decarbonisation rate between 2018 and 2022 was 1.4% per annum.

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

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

The scale of the challenge is apparent when quantified:

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

CAP 24 identifies the alignment of local and national policy as a critical to accelerate renewable energy rollout. *“greater alignment between local plans and renewable energy targets at national and regional level to support investment in and delivery of onshore wind and solar renewable energy is also critical”.*

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

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

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

- *“Accelerate the delivery of utility-scale onshore wind, offshore wind, and solar projects through a competitive framework;*
- *Target 6 GW of onshore wind and up to 5 GW of solar by 2025;*
- *Target 9 GW of onshore wind, 8 GW of solar, and at least 5 GW of offshore wind by 2030;*
- *In line with transposing the revised Renewable Energy Directive, which entered into force in November 2023, ensure that the permit-granting procedure, the planning, construction and operation of renewable energy plants, the connection of such plants to the grid, the related grid itself, and storage assets are presumed as being in the overriding public interest;”*

The regularisation of the planning status of the Subject Development, which forms part of the Meenbog Windfarm, will ensure that an important onshore renewable development is developments which will ultimately work towards supporting the targets and aims set out in both CAP23 and CAP24.

2.1.5 Climate Target Progress

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

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

The EPA Emission Projections Update notes the following key trends:

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

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

As decarbonising electricity generation will have a significant positive contribution in achieving Ireland's emissions it is clear that additional renewable energy production must be encouraged and supported if carbon saving targets are to be met. The Subject Development as part of the Meenbog Windfarm will contribute to these key objectives.

2.2 Renewable Energy Policy and Targets

This section of the rEIAR provides a breakdown of international and national renewable energy policy with regards to the Meenbog Windfarm. Under this Renewable Energy Policy and Targets section the following are discussed:

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

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

The regularisation of the planning status of the Subject Development, which forms part of the Meenbog Windfarm will contribute to fulfilling 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 by facilitating the efficient construction of the Permitted Development.

2.2.1 European Renewable Energy Policy

The 2030 Climate and Energy Framework (adopted by EU leaders in October 2014) ("the 2030 Framework") represents the current governance system underpinning EU renewable energy policy. The 2030 Framework defines EU wide renewable energy targets, which builds on the 2020 climate and energy package (Directive 2009/28/EC):

- 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 regulation 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 legislation, 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 Framework.

The revised Renewable Energy Directive (EU) 2018/2001 came into force in December 2018. It established a binding EU target of at least 32% for 2030 with a review for increasing this figure in 2023. Given the need to speed up the EU's clean energy transition, the Renewable Energy Directive EU/2018/2001 was revised in 2023. The amending Directive EU/2023/2413 entered into force on 20 November 2023. It establishes a binding EU target of at least 42.5% energy from renewable sources.

The European Green Deal was launched in December 2019 and proposes to increase the binding target of renewable sources in the EU's energy mix from 32% to 40% by 2030 via amendments to the Renewable Energy Directive (Renewable Energy Directive) as per the 'Fit for 55' package (July 2021)⁶.

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

This supports Member States in making the most of their cost-effective renewable energy potential across sectors through a combination of sectoral targets and measures. It aims at making the energy system cleaner and more efficient by fostering renewables-based electrification and, in sectors such as industry and transport where this is more difficult, it will promote the uptake of renewable fuels.

Renewable Energy Directive

The Renewable Energy Directive is the EU legal framework for the development of renewable energy across all sectors of the EU economy, supporting clean energy cooperation across EU countries. Since the introduction of the Renewable Energy Directive (RED) in 2009, it has undergone several revisions. Since its adoption in 2009, the share of renewable energy sources in energy consumption has increased from 12.5% in 2010 to 23% in 2022⁷. Of the 27 EU member states the lowest proportions of renewables were recorded in Ireland (13.1%). Crucially, the RED sets the overall target for renewable energy in the EU.

RED I - 2009

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

RED II - 2018

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

RED III - 2023

In November 2023, a revision of the Renewable Energy Directive⁸ (RED III), came into force. RED III increases the EU wide renewable energy target from 32% set under the previous revision of the directive to at 42.5%, with an ambition to reach 45% by 2030. The increase was proposed under the publication of REPowerEU plan in May 2022. RED III also introduces specific targets for Member States in the industry, transport, and building (district heating and cooling) sectors.

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

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

⁷ <https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20231222-2>

⁸ Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast)

There is an 18-month period to transpose most of the directive's provisions into national law, with a shorter deadline of July 2024 for some provisions related to permitting for renewables.

RE-Power EU

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

1. *Diversifying gas supplies, via higher Liquefied Natural Gas (LNG) and pipeline imports of biomethane and renewable hydrogen production and imports from non-Russian suppliers*
2. *Reducing faster the use of fossil fuels by boosting energy efficiency, increasing renewables and addressing infrastructure bottlenecks.*

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

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

The REPowerEU plan calls on all member states to, as a matter of urgency, fully implement the Renewable Energy Directive in order to simplify the permitting procedures.

The Subject Development comprises of ancillary works to the Permitted Development which presents an opportunity to increase the amount of indigenous renewable energy onto the national grid thereby further increasing Ireland's energy security in line with the principle aim of the REPowerEU plan.

Energy Roadmap 2050

The Energy Roadmap 2050 ("the Roadmap") 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.

The analysis found that decarbonising the energy system is technically and economically feasible. The Roadmap notes that under both scenarios presented⁹, the biggest share of energy supply technologies in 2050 comes from renewables. As such, a major prerequisite for a more sustainable and secure energy system is a higher share of renewable energy up to and beyond 2030 to 2050. Each of the scenarios assumes in the analysis that increasing the share of renewable energy and using energy more efficiently are crucial, irrespective of the particular energy mix chosen.

The Subject Development, if consented, will facilitate the construction and operation of the Meenbog Windfarm. As noted above, the crucial aspect of deployment cannot be ignored and should the Subject Development be granted planning permission, the prompt operation of the Meenbog Windfarm will follow. The Meenbog Windfarm will increase the share of renewable energy being produced onto the national grid thereby reducing the reliance on more unsustainable forms of electricity production.

⁹ Reference Scenario and Current Policy Initiatives

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 White Paper provides a complete energy update and a framework to guide policy up to 2030, building 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 2015 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 the 2015 White Paper, the DCENR acknowledges that onshore wind is one of the cheapest forms of renewable energy in Ireland, stating that:

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

With regard to the above, it is clear that the contribution of a fully operational Meenbog Windfarm will ensure the safe and secure supply of renewable electricity onto the national grid. The Subject Development will, if granted planning permission, directly aid the aim of decarbonising the electricity sector.

National Energy Security Framework (NESF)

The National Energy Security Framework (DECC, April 2022) ("the Framework") highlights clearly the impacts the Russian invasion of Ukraine and the resulting war has had on Europe's energy system. The resulting decision by the European Union to phase out the import of Russian gas, oil and coal (REPowerEU) has brought to the fore the importance of security of supply and how energy policy is designed for long-term resilience. It takes account of the need to decarbonise society and economy, to reduce Ireland's emissions by 51% over the decade to 2030 and reach net zero emissions by 2050. In response to the International Energy Agency's 10-point plan to cut oil use which calls for an acceleration in the deployment of wind (and solar) projects, Ireland has set out a response 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...*” 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.

Energy Security in Ireland to 2030 – Energy Security Package

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

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

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

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

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

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

A key finding from the technical analysis conducted as part of the energy security package is the interdependence of energy security on two essential pillars: ‘harnessing our indigenous renewable energy resources at speed and at scale and the rapid electrification of energy demand’. As such, the energy security package provides additional measures to supplement the existing measures introduced under previously published government policy documents. Those additional measures most relevant to the Subject Development are as follows:

“Action 10: To implement Planning and Consenting System Reforms and provide greater certainty to the sector.”

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

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

Having regard to the above, it is clear that the provision of additional renewable energy generation, in the form of an operational windfarm which has planning permission in place and is partially constructed is vital in helping to secure the State's energy supplies and reduce reliance on imported fossil fuels.

2.2.3

Renewable Energy Target Progress

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

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

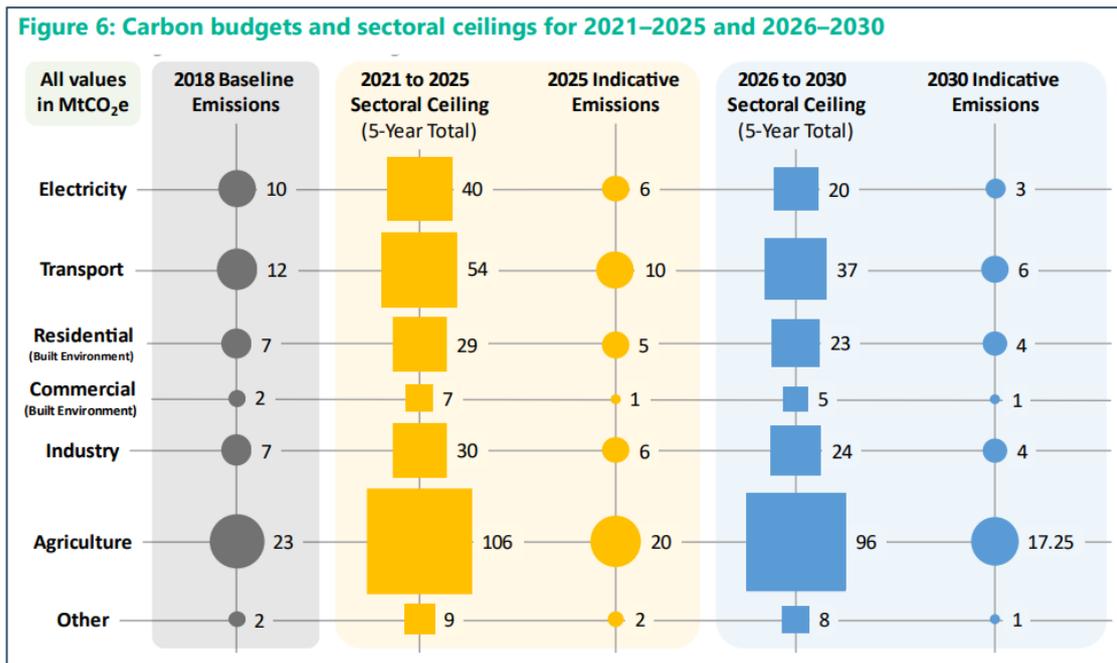


Figure 2-1: Proposed Carbon Budgets of the Climate Change Advisory Council

A guideline trajectory of the electricity sector’s emission ceiling in both carbon budgets is shown below in **Table 2-2**. 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 4,339MW 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 Ireland’s emissions there is a need to increase the renewable share of electricity, heat and transport. Up until 2020, renewable energy targets and results were set and calculated under the rules and methodologies of the first EU Renewable Energy Directive (REDI) however, from 2021 onwards, renewable results must be calculated under the REDII methodology. This updated Directive contains stricter requirements on the countability of biomass, biogas, and biofuels, as they relate to our renewable

energy share (RES) results. The second EU Renewable Energy Directive (REDII) continues to promote the growth of renewable energy and set renewable energy share (RES) targets out to 2030. The changes in criteria and caps under REDII change how the RES results in 2021 are calculated compared to 2020, even where there is little to no change in the underlying renewable energy:

Table 2-2: National Renewable Energy Targets

	2020	RES 2020 Note	2021 *	Note	New 2030 Target
Overall RES	13.6%	Ireland failed to meet its target of 16%	12.5%	Drop is almost entirely due to the shift in the REDII methodology	34.1%
RES-T (Transport energy from renewable energy sources)	10.2%	Ireland achieved its target of 10%	4.3%	Drop is almost entirely due to the shift in REDII methodology.	14%
RES-E (Electricity from renewable energy sources)	39.1%	Ireland failed to meet its target of 40%	36.4%	RES-E fell by 2.6% to 36.4% with over half this drop due to the shift in the REDII methodology and exclusion of some biomass; the remaining drop was due to reduced renewable electricity generation due to less wind in 2021.	80%
RES-H (Heat from renewable energy sources)	6.3%	Ireland failed to meet its target of 12%	5.2%	This decrease in RES-H is mainly due to the shift in REDII methodology and the introduction of new sustainability and verification criteria for biomass fuels.	24%

*calculated under the new REDII methodology

REDII introduced a binding EU-wide target for overall RES of 32% in 2030 and requires Member States to set their national contributions to the EU-wide target. The revised Renewable Energy Directive EU/2023/2413 raises the EU's binding renewable target for 2030 to a minimum of 42.5%, up from the previous 32% target, with the aspiration to reach 45%. It means almost doubling the existing share of renewable energy in the EU. As per the National Energy and Climate Plan (NECP) 2021-2030, Ireland's overall RES target is 34.1% in 2030.

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

The current RES-E target to 2030 of 80% ensures that “renewable electricity continues to form the backbone of our renewable energy use for the coming decade and beyond.”

The Climate Advisory Council (CCAC) notes within their 2022 Annual Review that urgent implementation of the measures identified in the CAP 2021¹⁰ and identification of further new measures

¹⁰ CAP23 was not yet published when the CCAC 2022 Annual Review was published.

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 homes¹¹. Accordingly, the Subject Development, as part of the Meenbog Windfarm, will serve to contribute to meeting this increasing electricity demand.

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

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

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

In relation to the scale of the challenge, the CAP23 calls for "a major acceleration and increase in onshore wind turbines across the country." To accelerate renewable electricity generation a target of 9GW by 2030 of onshore wind is set, framed in the context of ensuring that renewable energy generation projects and associated infrastructure are considered to be "in the overriding public interest."

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

Ireland faces significant challenges through efforts to meet its renewable energy targets, EU targets for renewable energy by 2030 and its commitment to transition to a low carbon economy by 2050. The Meenbog Windfarm will aid Ireland in addressing these challenges as well as addressing the country's over-dependence on imported fossil fuels.

The additional wind energy output of approximately 66.5MW from the Meenbog Windfarm will further assist Ireland's overall capability to meet its future targets. Ireland's 2030 target under the EU ESR on greenhouse gas reduction is a 30% reduction of emissions compared to 2005 levels by 2030. EPA Projections show that existing measures will achieve a reduction of 5% on 2005 levels by 2030, significantly short of the target. However, if measures with the higher ambition (with Additional Measures) scenario are implemented, the reduction target can be achieved.

¹¹ <https://www.ivea.com/about-wind/faqs>

2.3 Planning Policy Context

2.3.1 Introduction

This section of the rEIA provides the strategic planning context applicable to the Subject Development. As is examined below, the Subject 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

As a renewable energy project, the Permitted Development, inclusive of the Subject Development, are consistent with the overall national policy objectives to increase penetration and deployment of renewable energy resources and has been designed in accordance national, regional and local planning policy.

2.3.2 National Policy Context

National Planning Framework: Project Ireland 2040

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

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

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

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

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

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

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

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

An overarching objective of the NPF is to foster a transition toward a low carbon, climate-resilient society, which reflects the policy ethos established at the European level of governance (e.g. climate change and renewable energy targets - Section 2.1). In this regard, one of the key themes of the NPF is the realisation of an Ireland which has a secure and sustainable renewable energy supply and the ability to diversify and adapt to new energy technologies. The NPF references the National Climate Policy Position (superseded by the then CAP 2019) which established the fundamental objective of achieving transition to a competitive, low carbon, climate-resilient and environmentally sustainable 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 GHG 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. The Subject Development, if granted substitute consent, will aid in reaching the targets of reducing GHG emissions from the energy sector and further strengthen Ireland's energy security.

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

This shift from fossil fuels is dependent upon schemes such as the one proposed to generate renewable energy. Given the projected population increase, it is considered that if the share of renewable energy onto the grid is not increased, Ireland will fail to reach the National and International targets on emission reductions.

The Meenbog Windfarm will have an estimated electricity generation capacity of approximately 66.5MW when it comes online and will significantly contribute to Ireland's national targets and support the country in meeting its renewable energy and carbon emission reduction goals at the EU level. The regularisation of

the planning status of the Subject Development will facilitate the timely completion of the Meenbog Windfarm and will therefore contribute to meeting Ireland's national and EU renewable energy and carbon emission reduction goals.

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 will be the *'largest and greenest ever delivered in Ireland'*, and in this regard, the NDP highlights that extensive consultation was undertaken to ensure that the plan adequately supports the implementation of climate action measures. Reflecting on the recent publication of the IPCC's 6th Assessment Report, the NDP notes that the Irish Government is fully committed to 'playing its part' to ensure that the worst climate change damage can be avoided, e.g. significant reductions in CO₂ and other greenhouse gas emissions as assisted by the achievement of both European and National renewable energy targets. Specifically, the NDP states that,

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

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

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

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

The Meenbog Windfarm which includes the Subject Development is considered to be in line with National Policy objectives. The CAP24 as outlined herein was published to outline national actions required to meet EU climate targets. According to CAP24, Ireland aims to utilise its native renewable resources and has set a goal of reaching 80% renewable energy production by 2030 and produce 9GW of wind by 2030. Measures are also outlined to accelerate the delivery of onshore wind. It is therefore considered that the operation of the Meenbog Windfarm with an approximate electricity generation capacity of approximately 66.5MW and the regularisation of Subject Development, would greatly aid Ireland in achieving its national targets and will also assist in reaching the renewable energy and carbon emission reduction targets at EU level.

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

Regional Policy Context

Northern and Western Regional Spatial and Economic Strategy

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

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

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

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

RPO 4.17: To position the region to avail of the emerging global market in renewable energy by stimulating the development and deployment of the most advantageous renewable energy systems, including:

- Stimulating the development and deployment of the most advantageous renewable energy systems;
- Raising awareness and public understanding of renewable energy and encourage market opportunities for the renewable energy industry to promote the development and growth of renewable energy businesses; and
- Encourage the development of the transmission and distribution grids to facilitate the development of renewable energy projects and the effective utilisation of the energy generated from renewable sources having regard to the future potential of the region over the lifetime of the Strategy and beyond.

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

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

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

available at local and regional scale to meet future needs. Ensure that development minimises impacts on designated areas.

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

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

2.3.4 Local Policy Context

Donegal County Development Plan 2018-2024 (As Varied)

The Donegal County Development Plan 2018-2024 (As Varied) (DCDP) was formally made by the Elected Members of Donegal County Council on 9th May 2018 and had effect from 5th June 2018, with the variation to the Plan having effect from 29th January 2024. It is strongly supportive of renewable energies, more specifically wind energy, particularly in the context of climate change mitigation and adaptation. This policy document represents a crucial blueprint for steering the county towards a sustainable and resilient future. The policies outlined in this strategic document align with national and European objectives in terms of promoting renewable energy and energy projects that facilitate sustainable development. The development of the Meenbog windfarm, including the Subject Development, continues to meet the objectives of and align with key policies relating to the protection and conservation of the environment as set out below:

- **F-O-3:** To ensure that the requirements of EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk management and to comply with Articles 6 of the Habitats Directive and have regard to the relevant conservation objectives, qualifying interest and threats to the integrity of Natura 2000 site.
- **NH-O-2:** To comply with Article 6 of the Habitats Directive (92/43/EEC) and have regard to the relevant conservation objectives, management plans, qualifying interests and threats to the integrity of Natura 2000 sites.
- **EX-O-1:** To conserve and protect the environment, including in particular, the archaeological and natural heritage and conservation and protection of European designated sites and any other sites, which are prescribed.

A number of these policies highlight the role of the Council in facilitating the successful development of wind energy projects across the county, in the interest of sustainable development.

- **E-P-16:** It is a policy of the Council to support the strengthening and enhancement of the capacity of existing wind farms, within the local environmental capacity including the sustainable upgrade/replacement of older turbines with newer and more efficient models.
- **E-P-18:** It is a policy of the Council that potential impacts on natural, built and cultural heritage including impacts on archaeological monuments and watercourses are assessed as part of renewable development proposals. Where such impacts are identified, mitigation measures such as buffer zones, separation distances and access arrangements should be employed as appropriate.
- **E-P-19:** It is a policy of the Council to facilitate the development of combined wind and wave, tidal and/or hydro proposals in areas where there are no significant environmental, heritage or landscape constraints, to generate and export renewable energy and to generate local revenue subject to the proper planning and sustainable development of the area.

- **E-P-20:** It is the policy of the Council that all proposals for renewable energy development will have regard to the cumulative effect of the development on the environment when considered in conjunction with other existing and permitted developments in the area.
- **E-P-21:** It is the policy of the Council that all applications for renewable energy projects will ensure that details of the proposed grid connection and all associated infrastructure are considered in the Environmental Impact Statement (EIS) and Natura Impact Statement as may be required.

Both the Permitted Development and Subject Development fulfil the requirements of these policies in the context of demonstrating the required environmental considerations, and producing the relevant documentation and reports provided.

Draft Donegal County Development Plan 2024-2030

The Draft Donegal County Development Plan (2024-2030) (DDCDP) was published for public consultation between 4th August and 13th October 2023. The Chief Executive's Report was published in January 2024. The Council has published Proposed Material Alterations/Changes to the Draft County Donegal Development Plan 2024-2030 for public consultation from Friday 8th March to Friday 5th April 2024. It is anticipated that the Plan will be adopted within the coming months.

Similar to the extant plan, the DDCDP demonstrates an ambition to support renewable energy projects. It acknowledges the cruciality of renewable energy in the context of climate change mitigation and adaptation and notes the opportunity that County Donegal has to offer in terms of wind energy potential. This is supported by key policy objectives outlined below:

- **E-O-1:** To sustainably develop a diverse and secure renewable energy supply to meet demands and capitalize on the County's competitive locational advantage.
- **E-O-2:** To secure the maximum potential from the wind energy resources of the County commensurate with the receiving environment and local developments patterns consistent with the proper planning and sustainable development, thereby contributing to the national drive towards ensuring the security of energy supply.

The Meenbog Windfarm which includes the Subject Development will contribute to the fulfilment of these policy objectives outlined. Through this substitute consent application, proper planning and sustainable development is successfully demonstrated, ensuring that the Subject Development does not adversely impact upon the existing environment.

Policy **WE-P-1** of the DDCDP is pertinent, stating:

"The augmentation, upgrade and improvements of: existing windfarms; windfarm developments under construction; developments where permission has lapsed but substantial works have been completed, or on sites with an extant planning permission will be open to consideration where such proposals shall be generally confined to the planning unit of the existing development, or where a modestly-proportioned projection (relative to the established unit) beyond the established footprint can be demonstrated to be essential and unavoidable for the augmentation project in terms of operational efficiencies, and can demonstrate beyond reasonable doubt that all environmental issues can be adequately mitigated."

Policy **WE-P-5** is relevant to the Subject Development, having the aim "To ensure that all roads associated with the development of wind farms are maintained or repaired at the developer's expense to the satisfaction of the Council."

Policy **WE-P-9** states: "To ensure that the assessment of Wind Energy Development Proposals have regard to the following Specific Biodiversity Related Requirement:

- Loss of functionally linked habitat
- Mortality due to collision with operational wind turbines
- Disturbance displacement
- Water Quality"

Overall, it is evident that the DDCDP is supportive of the delivery of wind energy projects, in the context of climate change mitigation and adaptation. The policy analysis demonstrates that the planning deviations associated with the development, continue to align with the key policy objectives outlined within the Plan.

Donegal County Council Climate Action Plan 2024-2030

The Local Authority Climate Action Plan (LACAP) 2024 to 2029 sets out how Donegal County Council (DCC) will be responsible for enhancing climate resilience, increasing energy efficiency, and reducing greenhouse gas emissions, across its own assets, services, and infrastructure, for which it is fully accountable, whilst also demonstrating a broader role of influencing, advocating, and facilitating other sectors, to meet their own climate targets and ambitions.

The Plan notes that Climate change is increasingly understood to be the most critical, long-term global challenge of our time. This is echoed by Ireland's climate where Met Éireann stated that 2022 was 'the warmest year on record'. This would see Ireland's temperature above the long-term average for the 12th consecutive year.

Key strategies outlined to address climate change include efficient resource allocation, adaptation strategies, mitigation strategies. Specifically, the Plan sets out policy objectives that increase the use of renewable energy, by aiming to *"Support the delivery of renewable electricity generation and transmission infrastructure within the County"*. Chapter 3 outlines key actions relating to this, which are set out below:

- BE 4.3: Prepare an overall Renewable Energy Strategy for the County.
- BE 4.4: Support local community-based renewable energy projects and new micro-generation and small-scale generation renewable energy projects.
- BE 4.5: Advocate for the ongoing expansion and improvements to the electricity grid infrastructure within the County to support renewable generation and supply.
- BE 4.6: Work with key partners and stakeholders to support the development of the offshore renewable energy sector in Donegal.

The Plan states that planning policy supports *"Potential for the further integration of climate action policy and spatial planning across the policy areas of land use and transportation policy, energy efficiency, **renewable energy sources** and infrastructure, district heating, energy storage, natural environment policies, flood risk management and 'smart towns/cities' initiatives etc."* (our emphasis added).

It is therefore evident that the subject development aligns with the key policies and objectives of the Donegal County Council Climate Action Plan 2024-2030, in its aim to provide a significant source of renewable energy to support demands, as a mitigation and adaptation response to the pressing issue of climate change.

Derry City and Strabane Local Development Plan 2032: Draft Plan Strategy

It is anticipated that the Derry City and Strabane Local Development Plan 2032 will be adopted in Quarter 1 of 2025. The draft Plan Strategy (dPS) notes that the District has particularly strong potential for generation of renewable and low carbon energy, especially from wind, hydro, biomass and solar. Energy derived from these sources contributes to a sustainable supply of same to local businesses and homes and also contributes to the drive for 'green electricity' generation across the island of Ireland through the interconnected grid. As of March 2017, the Derry City and Strabane District is the single largest producing council of renewable energy, generating approximately 27% across NI, having some 44 operational single wind turbines, and 12 wind farms. This demonstrates the Council's ambition to facilitate renewable energy projects in an aim to meet Government targets of reducing carbon emissions by 80% by 2050 (from 1990 levels) and also to achieve 40% electricity consumption from renewable sources and a 10% renewable heat target, by 2020.

Relating specifically to Wind Energy Development, the dPS sets out that proposals for wind energy development, including proposals for repowering of existing developments, will also be required to meet all of the following criteria:

- the development will not have an unacceptable impact on visual amenity or landscape character through: the number, scale, size and siting of turbines
- the development has taken into consideration the cumulative impact of existing wind turbines, those which have permissions and those that are currently the subject of valid but undetermined applications;
- it is demonstrated that development will not create a significant risk of landslide or bog burst; nor will it exacerbate any existing surface water flooding;
- no part of the development will give rise to unacceptable electromagnetic interference to communications installations; radar or air traffic control systems; emergency services communications; or other telecommunication systems;
- no part of the development will have an unacceptable impact on roads, rail or aviation safety.
- turbines proximate to any public road, public right of way or railway line are set back a minimum distance of the fall over distance plus 10% from the edge of same.
- turbines proximate to any occupied or occupiable buildings are set back a minimum distance of the fall over distance plus 10% from the curtilage of same;
- the development will not cause significant harm to the safety or amenity of any sensitive receptors (including future occupants of committed developments) arising from noise; shadow flicker; ice throw; and reflected light; and
- above-ground redundant plant (including turbines), buildings and associated infrastructure shall be removed and the site restored to an agreed standard appropriate to its location. A time limit condition of 30 years will normally be attached.

The dPS also notes that *“Within designated Wind Energy Capacity Areas (WECAs), any further wind energy development proposals, including re-powering, will need to be very carefully considered so that they do not unacceptably intensify existing adverse landscape impacts in these areas.”*

These policies highlight the strict parameters for wind farm development within the region. Both the Permitted Development and the Subject Development are in compliance these policies. The Subject Development has been rigorously assessed concluding that no potential for cumulative impacts when considered in conjunction with Permitted Development were identified. There will be no impact on designated sites as a result of the Subject Development. Best practice preventative measures will be implemented to avoid effects on European Sites. There will be no adverse effects on receptors listed as QIs/SCIs of European Sites, as a result of the development.

Strabane Local Area Plan 1986-2001

The existing plan contains a rural strategy which focuses on development control for the location, siting and design for housing in rural areas. With regard to wider rural conservation and management issues, the plan identifies Areas of Outstanding Natural Beauty (AONB) and Areas of Scientific Interest (ASSI). AONB are located east of Strabane within the Sperrin area. The Subject Development is located west of Strabane and is not located near lands designated for outstanding natural beauty. An ASSI is located south of the Site. The plan does not refer to the development of wind energy due to the publication date of 1989 when renewable energy was not a common feature of the landscape.

2.3.5 Summary of Compliance

The Permitted Development was granted planning permission in 2018 and as such the principle of the wind energy development in this location is not under consideration as part of this application or within this rEiAR. Policy support for the continued deployment of renewable energy developments continues to exist at all levels of the planning policy hierarchy. The Subject Development, to which this Substitute Consent application relates, aligns with this policy support against the backdrop of a consented wind energy development.

2.4 Planning History

2.4.1 Planning History of the Site

This section of the rEIAR sets out the relevant planning history of the Meenbog Windfarm, planning applications in the vicinity of the Site, and other wind energy applications within the wider area.

The Permitted Development

Planning permission was granted under the Strategic Infrastructure Development (SID) process by the Board (ABP Ref: PA05E.300460) on 25th June 2018, for a 19 no. turbine wind farm development in Meenbog (and surrounding townlands), Co. Donegal, subject to 20 no. conditions.

The full development description of the Permitted Development, for the purposes of the SID application is set out as follows:

“In accordance with Section 37E of the Planning and Development Act 2000, as amended, Planree Limited gives notice of its intention to make an application for a ten year planning permission to An Bord Pleanála in relation to the following proposed Development in the townlands of Meenbog (ED Goland), Croaghonagh and Cashelnavean, County Donegal.

The proposed development will constitute the provision of the following:

- (i) Up to 19 no. wind turbines with a generating capacity in excess of 50MW, and maximum overall ground to blade tip heights of up to 156.5 metres;*
- (ii) 1 no. permanent Meteorological Mast up to a maximum height of 110 metres;*
- (iii) 1 no. 110kV Electrical substation with 2 no. control buildings with welfare facilities, associated electrical plant and equipment, security fencing and waste water holding tank;*
- (iv) Internal wind farm underground cabling;*
- (v) 110kV underground grid connection cabling;*
- (vi) Upgrade of access junctions;*
- (vii) Upgrade of existing tracks, roads and provision of new site access roads and hardstand areas;*
- (viii) 3 no. borrow pits;*
- (ix) 2 no. temporary construction compounds;*
- (x) Recreation and amenity works, including marked trails (upgrade of existing tracks and provision of new tracks), picnic, amenity and play areas, car parking and vehicular access;*
- (xi) Site drainage;*
- (xii) Forestry Felling;*
- (xiii) Permanent signage;*
- (xiv) All associated site development and ancillary works.*

This application is seeking a ten-year permission and 30 year operational life from the date of commissioning of the wind farm.

An Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) have been prepared in respect of the Subject Development. The proposed development is likely to have significant effects on the environment of Northern Ireland.”

This was varied on 7th June 2019, when the Board determined that in accordance with section 146B(3)(a) of the Planning and Development Act, 2000, the previously issued planning consent for the permitted wind farm development should be altered in accordance with the plans and particulars received on 14th day of February 2019. This was to allow the applicant to utilise a larger turbine rotor diameter, but which remains within the consented design envelope and parameters (i.e. tip-height of 156.5m, with no alteration to permitted layout).

2.4.2

Planning Applications in the Vicinity of the Site

This section sets out the planning applications in the vicinity of the Site, with the results of the planning history search being detailed in **Appendix 2-1**. The cumulative study area at its maximum extent as outlined in **Table 2-8** below includes:

- The catchment of the Mourne Beg River downstream as far as its confluence with the River Derg;
- The catchment of the Glendergan River downstream as far as its confluence with the River Derg; and,
- The Lowerymore River downstream as far as Lough Eske.

An additional 1.5km buffer has been included in the planning search for catchment areas, to capture any additional projects which may be relevant due to potential connectivity with the catchment areas.

Due to the remedial nature of this rEIA, applications relevant for the Subject Development (2014-present day) were included. This timespan was chosen to include any potential cumulative effects that could have occurred during the construction phase of the Subject Development. Further buffers (i.e. 10km, 20km) are not included in the below planning history search, as they are not being considered or assessed within each individual chapter and the principle of the Permitted Development is not under consideration within this rEIA.

The planning history search was compiled via a desk-based study in which the Donegal County Council (DCC) Planning Portal, the An Bord Pleanála website, and Northern Ireland Planning Portal were consulted.

2.5 Scoping and Consultation

2.5.1 Scoping

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

A scoping letter, providing details of the Subject Development, was prepared by MKO and circulated to prescribed statutory bodies and relevant NGOs on the 19th January 2024. The Scoping Consultee List for the Permitted Development informed the scoping for the Subject Development. The scoping letter provided details of the Subject Development and set out the scope of work for the rEIAR. Consultees were invited to contribute to the rEIAR by suggesting baseline data, survey techniques and potential impacts that should be considered as part of the assessment process and in the preparation of the rEIAR.

2.5.2 Scoping Responses

Table 2-3 lists the responses received from the bodies to the scoping documents circulated. Copies of all scoping responses received are included in **Appendix 2-2** of this rEIAR. If further responses are received, the comments of the consultees will be considered in the operation and decommissioning of the Subject Development in the event of substitute consent being granted. The recommendations of the consultees have informed the scope of the assessments undertaken and the contents of the rEIAR. **Table 2-3** further below presents the key points from the scoping responses and identifies where such points have been addressed in this rEIAR. In addition, on the 8th of February, Derry and Strabane District Council forwarded the Scoping Letter to a number of additional consultees. These additional consultees and their responses are listed separately in **Table 2-4**.

A detailed, 10-point scoping response was received from the Department of Housing, Local Government and Heritage (DHLGH) on 4th March 2024. **Table 2-5** presents the key points from the DHLGH scoping response and identifies where such points have been addressed in this rEIAR.

Table 2-3: Review of Scoping Responses and Relevant Sections

No.	Consultee	Response received	Response Summary	Addressed in
1	An Taisce	No response received	N/A	
2	Bat Conservation Ireland	No response received	N/A	
3	Birdwatch Ireland	No response received	N/A	
4	Commission for Regulation of Utilities, Water and Energy	No response received	N/A	
5	DAERA Direct Regional Office (includes NIEA)	Receipt of Scoping Letter Received 22/01/2024	N/A	
6	Department of Agriculture, Food and the Marine	Response received on 28/02/2024	The Department made comments in relation general aspects to be considered in felling or removal of any trees as part of the Subject Development.	Addressed in original EIAR for the Permitted Development and Section 7.5.2.1 of this rEIAR
7	Department of Defence	No response received	N/A	
8	Department of Housing, Local Government and Heritage (DHLGH)	Response Received 04/03/2024	The department recommends the inclusion of information in relation to past peatslide events, peat stability assessments and restoration works and impacts on ecological receptors and local hydrology.	Please see Table 2-5 for a detailed response to each of the Department's observations.

No.	Consultee	Response received	Response Summary	Addressed in
9	Department of the Environment, Climate and Communications	No response received	N/A	
10	Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media	No response received	N/A	
11	Department of Transport	Response Received on 24/01/2024	The department had no further comment to make at this point in time and requested to be informed of any future development in relation to the Development.	
12	Derry City and Strabane District Council	Response Received on 08/02/2024	<p>A letter was received on the 8th of February 2024 acknowledging receipt of the Scoping Letter. In addition, on the 8th of February, Derry and Strabane District Council forwarded the Scoping Letter to a number of additional consultees. These additional consultees and their responses are listed separately in Table 2-5.</p> <p>Furthermore, Derry and Strabane District Council asked for the rEIAR considers the impact of works on the areas of Special Areas of Conservation and also for considerations of the visual impact of the Development from the Derry City and Strabane District Council area.</p>	Points were addressed in Chapter 5 Biodiversity and Chapter 11 Landscape and Visual Impact.
13	EirGrid	No response received	N/A	

No.	Consultee	Response received	Response Summary	Addressed in
14	Environment section/Donegal County Council	Response Received on 25/01/2024	The Environment Department of Donegal County Council acknowledged receipt of the Scoping Letter across sections within County Council as set out in the Consultee list. The Environment Section highlighted the success in restoration and remedial efforts following the peatslide.	
15	Faite Ireland	Response Received on 07/02/2024	Issued EIAR Guidelines for the Consideration of Tourism and Related Projects	Tourism is considered in Chapter 4 Population and Human Health and Chapter 12 Material Assets.
16	Geological Survey of Ireland	Response Received on 22/02/2024	Encourages the use of and reference to GSI datasets which are attached to the response. Also notes that records show one County Geological Sites (CGSs).	Chapter 6 Land Soils and Geology, Chapter 7 Hydrology and Hydrogeology and Chapter 13 Vulnerability to Natural Disasters referenced and used GSI datasets where appropriate. Impacts on the CGS were assessed in Section 6.5.2.7
17	Geological Survey of Northern Ireland	No response received		
18	Health Service Executive	Response Received on 22/02/2024	Attached a scoping report for the Subject Development with guidance on matters that are recommended to be assessed in the rEIAR	The points relevant to the Subject Development were addressed in Chapter 3 Description, Chapter 4 Population and Human Health, Chapter 6 Land, Soils and Geology, Chapter 7 Hydrology and Hydrogeology, Chapter 8 Air and Climate, Chapter 9 Noise and Vibration, and Chapter 12 Material Assets. The rEIAR assesses the Subject Development alone and cumulatively throughout Chapters.
19	Heritage/Donegal County Council	No response received	N/A	

No.	Consultee	Response received	Response Summary	Addressed in
20	Inland Fisheries Ireland	No response received	N/A	
21	Irish Peatland Conservation Council	No response received	N/A	
22	Irish Raptor Study Group	No response received	N/A	
23	Irish Red Grouse Association - Conservation Trust	No response received	N/A	
24	Irish Wildlife Trust	No response received	N/A	
25	Loughs Agency	Response Received 04/03/2024	The Loughs Agency acknowledges receipt of the scoping letter and request that Biological Monitoring are considered in the rEIAR and that appropriate measures are in place to prevent impacts on the aquatic environment from further stability failures on site. They highlight the need to practice best environmental practice when working close to watercourses and consequently could be detrimental to fisheries interests.	Biological Water Monitoring and water-related mitigation measures are addressed in Chapter 5 Biodiversity and Chapter 7 Hydrology and Hydrogeology.
26	Local Authorities Water Programme	Response: Query Received and answered on 02/02/2024. No further response received	N/A	

No.	Consultee	Response received	Response Summary	Addressed in
27	Office of Public Works	No response received	N/A	
28	Planning/Donegal County Council	No response received	N/A	
29	Roads Department/Donegal County Council	No response received	N/A	
30	Sport Ireland	No response received	N/A	
31	Sustainable Energy Authority of Ireland	No response received	N/A	
32	The Heritage Council	No response received	N/A	
33	Transport Infrastructure Ireland	Response Received on 16/02/2024	The TII advised, with respect to EIAR scoping issues, their recommendations and general guidance for the preparation of an EIAR, which may affect the national road network. This includes concern for potential impacts any project would have on the national road network.	The points relevant to the Subject Development were addressed in Section 12.1 Traffic of the Material Assets Chapter.
34	Uisce Éireann	Response Received on 19/02/2024	Irish water does not have the capacity to advise on scoping of individual projects. A list of general aspects to be considered in the scope of an EIA was provided. Request that MKO notify himself OR planning@water.ie when once this application has	Aspects were considered in Chapter 4 Population and Human Health, Chapter 5 Biodiversity, Chapter 7 Hydrology and Hydrogeology and Chapter 12 Material Assets

No.	Consultee	Response received	Response Summary	Addressed in
			been submitted so that they can receive the referral in adequate time.	
35	Waterways Ireland	Response Received on 22/01/2024	Not within any zone of influence so no further comments will be made.	

Table 2-4 Additional Consultees and Scoping Responses following Derry and Strabane District Council Scoping Letter Distribution dated 08th February 2024

Consultee	Response Received	Response Summary	Addressed in
Shared Environmental Service (SES)	Response Received 28/02/2024	SES notes that this application is not wholly or partly in a sensitive area within the meaning of Part 1, Regulation 2 (2) (f) of The Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2017. SES further outlines planning procedures in Northern Ireland.	Relevant points of the SES scoping response related to hydrological connection of the Site with Designated Sites. This has been addressed in Chapter 5 Biodiversity and Chapter 7 Hydrology and Hydrogeology.
Northern Ireland Water	Response Received 28/02/2024	The consultee has assessed this proposal with regard to both the fixed radiolinks and ST radiolinks that NIW operate and can therefore respond 'No objection'.	N/A
City of Derry Airport	Response Received 28/02/2024	This proposal will have no adverse effect on City of Derry Airport operations.	N/A
Department of Infrastructure Northern Ireland	Response Received 28/02/2024	As the majority of infrastructure is already in place, DfI Roads' primary concern relates to the potential haul routes for the wind turbine components. If any haul routes are to include	Any turbine haul routes are consented under the Permitted Development.



Consultee	Response Received	Response Summary	Addressed in
		roads within Northern Ireland, DFI Roads will require additional information.	
DFE Energy Division	No Response received to Date		
DFI Rivers	No Response received to Date		
DFI Roads Omagh	No Response received to Date		
Environmental Health Department	No Response received to Date		
Department of Agriculture, Environment and Rural Affairs: Environment, Marine & Fisheries Group & NIEA Departments	Response Received 01/03/2024	The Department comments on the informal scoping responses with regards to drinking water, Inland fisheries, Water Management Unit, and regulation unit. The response consists of general recommendations on where to receive baseline data, standing advice, and directives and plans in place for waterbodies.	Relevant points have been addressed in Chapter 5 Biodiversity and Chapter 7 hydrology and Hydrogeology.
NIE Windfarm Developments	Response Received 19/02/2024	As noted in the scoping request and from correspondence (Appendix 2-2), this application is a substitute application for a number of deviations to the permitted wind farm and will not be seeking permission for any turbine specific infrastructure or permission for the windfarm itself, which already has planning permission, and is under construction. Derry and Strabane District Council advised NIE windfarms subsequently on the nature of this application.	This has been addressed in Chapter 3. The turbine locations of the Permitted Development remains unchanged

Consultee	Response Received	Response Summary	Addressed in
Royal Society of the Protection of Birds	Response Received 05/03/2024	Due to limited capacity and high workload, they refer back to responses submitted in relation to the original application with paying particular attention to comments relating to peat.	This has been addressed in Chapter 5 Biodiversity of the rEIAR and the permitted Development EIAR.

Table 2-5 DHLGH Scoping Response

No.	Observation	Response Summary
1	A clear summary of the Meenbog landslide, its causes, and its impacts on European sites and their Qualifying Interests and on Annex 1 habitats outside of European sites.	A summary of the November 2020 Peatslide, its causes, associated remediation measures is provided as Appendix 2-3 of this rEIAR. It should be noted that while Peat Slide occurred during the construction of the permitted Windfarm, the exact causes of the peat slide are multifactorial.
2	A detailed outline of each of the 25 deviations from the original planning consent, and an analysis of the ecological impact and what environmental damage that may have occurred from each one.	The deviations are discussed in detail in Chapter 3 Description and assessed for their individual and cumulative Ecological impact in Chapter 5 Biodiversity.
3	Detail what peatland restoration has been achieved in the damaged Annex 1 habitat and the plans for future peatland restoration.	Any excessive peat movement on Site and restoration associated is not part of the Substitute Consent Application and does not require Planning Consent. Excessive peat movement, including the peatslide in November 2020, and consequent remediation measures is assessed cumulatively in the rEIAR.
4	Impacts on otter and other qualifying interests of the European sites of the substitute consent.	A full Assessment of ecological effects can be found in Chapter 5 Biodiversity.
5	Actions and plans for peat and water management and siltation.	This is addressed Chapter 6 Land Soils and Geology and Chapter 7 Hydrology and Hydrogeology. Reference is made to peat and water management in the CEMP in Appendix 3-2. Mitigation measures are compiled in Chapter 15 Schedule of Mitigation Measures.

No.	Observation	Response Summary
6	Outline the peat stability analysis that was carried out originally and any improvements on it. Was best practice used for peat stability analysis carried out for the original consent? Was ground-penetrating radar used and at what density? Would the sampling effort have impacted the results of the analysis?	This rEIAR concerns the Subject Development and any cumulative effects that may have arisen. It is not within the scope of this substitute consent application or the Subject Development to comment on the methodology of technical reports for the Permitted Development. Any relevant technical details for this Substitute Consent Application can be found in Chapter 6 Land, Soils and Geology, Chapter 13 Vulnerability to natural Disasters and associated appendices. [Consider referencing the EPA's conclusions on peat stability here - it's a positive and is surely relevant to the approval sought to retain the deviations and add stone to protect against run off]
7	Outline all plans to ensure future mitigation measures to avoid downstream impacts.	This is addressed in Chapter 5 Biodiversity and Chapter 7 Hydrology and Hydrogeology. Reference is made to water management in the CEMP in Appendix 3-2. Mitigation measures are compiled in Chapter 15 Schedule of Mitigation Measures. [Deal with need for additional capping here.]
8	Include summary and results of all on-going ecological monitoring, including bird and bat surveys and freshwater monitoring since construction commenced.	Ecological monitoring summary and results are provided in Chapter 5 Biodiversity. Details of freshwater monitoring are provided in Chapter 5, Chapter 7 Hydrology and Hydrogeology and the relevant appendices.
9	Include detailed diagrams, illustration, maps and photographs to illustrate and clarify the text.	This observation has been addressed where appropriate in the preparation of this rEIAR.
10	An assessment of peat soils in the site as a whole should be carried out and a carbon budget should be included to assess the implications of the proposed turbines and the opportunities that may exist for restoration of peatland soils to capture carbon for climate action.	An Assessment of Peat Soils relevant to the Subject Development and cumulatively has been carried out in Chapter 6 Land, Soils and geology and results can be found in the associated appendices. Chapter 8 Air and Climate includes a carbon budget with relevance to this substitute consent application



2.5.3 **Other Consultations**

An application for Leave to Apply for Substitute Consent was lodged with An Bord Pleanála on 8th July 2022. This application was assessed by An Bord Pleanála and a decision was made on 9th October 2023 to grant this application.

Consultation was also carried out within the proposal for the Permitted Development (Pl. Ref: PA05E.300460) and can be noted in full within the particulars of that application.

2.6 Consideration of Reasonable Alternatives

2.6.1 Introduction

Article 5(1)(d) of Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (codification) as amended by Directive 2014/52/EU (the EIA Directive) requires that the Environmental Impact Assessment Report (EIAR) prepared by the developer contains *“a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment.”*

Article 5(1)(f) of the EIA Directive requires that an EIAR contains *“any additional information specified in Annex IV relevant to the specific characteristics of a particular project or type of project and to the environmental features likely to be affected.”*

Annex IV of the EIA Directive states that the information provided in an EIAR should include a *“description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.”*

This section of the rEIAR contains a description of the reasonable alternatives that were studied by the developer, which are relevant to the Subject Development and the Site and its specific characteristics, in terms of site location and other renewable energy technologies as well as design layout incorporating size and scale of the Subject Development, connection to the national grid and transport route options to the Site. It provides an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects. The consideration of alternatives is an effective means of avoiding environmental impacts. As set out in the *‘Guidelines on The Information to be Contained in Environmental Impact Assessment Reports’* (Environmental Protection Agency, 2022), the presentation and consideration of reasonable alternatives investigated is an important part of the overall EIA process.

Hierarchy

EIA is concerned with projects. The Environmental Protection Agency (EPA) guidelines (2022) state that in some instances neither the applicant nor the competent authority can be realistically expected to examine options that have already been previously determined by a higher authority, such as a national plan or regional programme for infrastructure.

Non-environmental Factors

EIA is confined to the environmental effects that influence consideration of alternatives. However, other non-environmental factors may have equal or overriding importance to the developer of a project, for example project economics, land availability, engineering feasibility or planning policy.

Site-specific Issues

The EPA guidelines state that the consideration of alternatives also needs to be set within the parameters of the availability of the land, i.e., the site may be the only suitable land available to the developer, or the need for the project to accommodate demands or opportunities that are site-specific. Such considerations should be on the basis of alternatives within a site, for example design and layout.

Since the Subject Development has already been constructed and is contiguous with the Permitted Development, the only alternative considered is the “Do Nothing” Scenario described below.

2.6.2 Do Nothing Scenario

Article IV, Part 3 of the EIA Directive states that the EIAR should include “*an outline of the likely evolution thereof without implementation of the project as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.*” This is referred to as the “do-nothing” alternative. EU guidance (EU, 2017) states that this should involve the assessment of “*an outline of what is likely to happen to the environment should the project not be implemented – the so-called ‘do-nothing’ scenario.*”

The ‘Do Nothing’ Scenario is an alternative scenario to maintaining and regularising the Subject Development.

Under the Do-Nothing scenario, should the Subject Development not secure substitute consent it will remain unauthorised. In recent proceedings Donegal County Council v Planree Limited and Mid-Cork Electrical Limited High Court Record No. 2023/96MCA, the Council acknowledged to the Court that in that event that substitute consent was not forthcoming, it would need to return to Court to obtain orders for the remediation of the site. As such, the applicant may be subject to further enforcement proceedings in which the planning authority and/or the Courts will determine the required approach. This may include measures to restore, remediate, or remove some or all of the Subject Development. For the purposes of this rEIAR we have considered a scenario where the Subject Development is required to be removed in its entirety to the greatest extent practicable, notwithstanding the fact that other options may exist or emerge to address the planning status of the Subject Development.

Under the assessed Do Nothing Scenario, the 25 deviations that comprise the Subject Development would be removed and restored to the greatest extent practicable. The Meenbog Wind Farm would then be completed in accordance with the current planning permission (ABP Ref: PA05E.300460). This approach may lead to environmental effects due to the potentially extensive groundworks required to remove and restore the existing peat cells, portions of access roads, laybys, hardstands, and peat containment berm. New access road sections and hardstands would then have to be constructed in the slightly different, and less optimal, locations shown on the plans for the Permitted Development. The borrow pits which form part of the Subject Development would be backfilled to the greatest extent possible with spoil and peat and revegetated. The peat cells which form part of the Subject Development would be dismantled and the stored peat material would be removed from the Site for disposal elsewhere.

The ‘Do-Nothing’ Alternative would have a greater environmental effect than the chosen option of regularising the Subject Development. The construction phase of the Subject Development has been successfully completed, did not cause any significant environmental effects during construction, and will not cause any significant environmental effects by leaving it in place. A comparison of the potential environmental effects of the ‘Do Nothing’ scenario when compared against the effects of allowing the Subject Development to remain at this site are presented in **Table 2-6** below.

Table 2-6 Comparison of environmental effects of the 'Do Nothing' Alternative' when compared against the Subject Development remaining.

Environmental Consideration	'Reinstatement Alternative'	Subject Development to remain
Population and Human Health	Increased potential for negative effect on health and safety due to use of unsafe horseshoe bend at site entrance.	No further impacts are expected.
Biodiversity and Ornithology	Greater potential for effect on biodiversity and ornithology due to additional noise and other disturbance impacts from construction machinery and works. Greater potential for effects on habitats due to relocation of existing roads and hardstands and removal of currently revegetated peat cells.	No further impacts are expected.
Land, Soils and Geology	Additional effects on land soils and geology due to additional groundworks to construct infrastructure in less optimal locations.	No further impacts are expected.
Geotechnical	Potential additional geotechnical risk to be managed due to additional groundworks to construct infrastructure in less optimal locations.	No further impacts are expected.
Hydrology	Greater potential for indirect effects on local surface water quality due to additional earthworks and groundworks required for the removal and reconstruction of roads and hardstand areas and the reinstatement of borrow pits.	No further impacts are expected.
Air and Climate	Potential for greater, albeit imperceptible effect on Air Quality due to additional construction works, which would lead to additional exhaust and temporary dust emissions. Potential for greater, albeit imperceptible, effect on Climate due to increased greenhouse gas emissions during construction and additional groundworks.	No further impacts are expected.
Noise and Vibration	Potential for greater effects resulting from additional construction machinery and staff transport to and from the Site under this alternative.	No further impacts are expected.
Landscape and Visual	No material difference between the two options.	No material difference between the two options.
Cultural Heritage and Archaeology	No material difference between the two options.	No material difference between the two options.

<p>Material Assets</p>	<p>Potential for additional effects on traffic due to need to export material from peat cells for disposal elsewhere and to transport any additional machinery, plant and material to Site that may be needed for the construction of new roads, hardstands, or borrow pits in the planned locations.</p>	<p>No further impacts are expected.</p>
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On the basis that the ‘Do Nothing’ Scenario would have a greater environmental effect than the proposed option of leaving in-situ and regularising the Subject Development through the substitute consent process, the ‘Do Nothing’ Scenario is therefore not the preferred option.

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 development or project (all of which are considered in the various chapters of this rEIA), 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 development or project. The factors to be considered in relation to cumulative effects include population and human health, biodiversity (including birds), land, soil & geology, water, air, climate, material assets (including traffic and transportation), landscape and visual, cultural heritage and vulnerability to natural disasters, as well as the interactions between these factors.

The potential for cumulative impacts arising from the Subject Development in combination with other projects has therefore been fully considered throughout this rEIA. This section of the rEIA provides an overview of other projects located within the wider area that have been considered within the cumulative impact assessments.

2.7.1

Methodology for the Cumulative Assessment of Projects

To gather a comprehensive view of cumulative impacts on the above environmental considerations and to inform the rEIA process being undertaken by the consenting authority, each relevant chapter within this document addresses the potential for cumulative effects to arise, where appropriate. A cumulative project search has been carried out and is available in **Appendix 2-1**.

The assessment of potential cumulative impacts with other relevant development has been carried out with the purpose of identifying what influence the Subject Development has had, or potentially could have, on the surrounding environment when considered cumulatively and in combination with relevant permitted, proposed and constructed projects and other land uses in the vicinity of the site.

The cumulative impact assessment of projects has three principle aims:

- To establish the range and nature of existing and approved projects and/or plans within the cumulative impact study area of the Proposed Project.
- To summarise the relevant projects and/or plans which have a potential to create cumulative impacts.
- To identify the projects and/or plans that hold the potential for cumulative interaction within the context of the Proposed Project and discard projects that will neither directly nor indirectly contribute to cumulative impacts.

Assessment material for this cumulative impact assessment was compiled on the relevant projects within the vicinity of the Subject Development.

The material was gathered through a search of relevant online Planning Registers, reviews of relevant EIA (or historical EIS) documents, planning application details and planning drawings, and served to identify past and future projects, their activities and their environmental impacts. These projects are summarised in **Appendix 2-1**.

2.7.2

Cumulative Study Area

The geographical boundaries of the various zones of sensitivity of and to the Subject Development from which there may be potential for cumulative impacts to arise relative to each individual EIA topic, i.e. each chapter, is presented below in **Table 2-7**. Following consultation with the EIA team on each individual topic, the maximum geographical extent and justification for this extent was established and is presented below.

Table 2-7 Cumulative Study Areas and Justification

Individual Topic	Maximum Extent	Justification
Population & Human Health	<p>The cumulative Study Area for population and Human Health is defined as the District Electoral Division of Goland, in County Donegal. Consideration for the P&HH cumulative extent is also given to Air Quality, Climate, Noise, and Landscape and Visual (i.e., Residential Visual Amenity) Cumulative study areas.</p>	<p>The Study Area for Population is identified in Section 4.3.1 in Chapter 4 as the District Electoral Division where the Subject Development is located. This Area is considered in the cumulative assessment.</p>
Biodiversity and Birds	<p>The cumulative study area includes:</p> <ul style="list-style-type: none"> ➤ The catchment of the Mourne Beg River downstream as far as its confluence with the River Derg; ➤ The catchment of the Glendergan River downstream as far as its confluence with the River Derg; and, ➤ The Lowerymore River downstream as far as Lough Eske. 	<p>Using the precautionary approach and given the nature and scale of the Subject Development, the geographical boundary for terrestrial ecological aspects, i.e. habitats, there was a potential for cumulative effects in hydrological environments downstream of the development. The existing site drainage and extent of catchments in the vicinity of the site defined this cumulative study area.</p>
Land, Soils and Geology	<p>Site boundary</p>	<p>Due to the localised nature of the construction works, which were kept within the Subject Development site boundary, there was no potential for significant cumulative effects in-combination with other local developments on the land, soils and geology environment.</p>
Hydrology and Hydrogeology	<p>The cumulative hydrological study area includes:</p> <ul style="list-style-type: none"> ➤ The catchment of the Mourne Beg River downstream as far as its confluence with the River Derg; ➤ The catchment of the Glendergan River downstream as far as its confluence with the River Derg; and, ➤ The Lowerymore River downstream as far as Lough Eske. 	<p>The HES assessment concludes that the main likelihood of cumulative effects during the construction phase is considered to have related to the hydrological environment (surface water) rather than the hydrogeological (groundwater) environment. As such, the cumulative study area was chosen to reflect the site drainage extent in the existing environment, further outlined in chapter 7.</p>

<p>Air and Climate</p>	<p>Air Quality Study Area is 1km from the Subject Development.</p> <p>The Climate assessment has been considered on a national basis and not confined to a specific study area.</p>	<p>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.</p> <p>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. The Climate assessment has considered the cumulative effects of the Subject Development with other developments on a national basis and within the context of the national Carbon Budget and relevant sectoral emissions ceiling.</p>
<p>Noise & Vibration</p>	<p>Site boundary</p>	<p>Due to the localised nature of the of the construction works, which were kept within the Subject Development Site boundary, there was no potential for significant cumulative effects in-combination with other local developments on noise and vibration.</p>
<p>Cultural Heritage</p>	<p>Cultural heritage Cumulative study area was defined based on the Cultural heritage assets involved.</p> <ul style="list-style-type: none"> ➤ UNESCO World Heritage Sites (including tentative sites) - 2km ➤ National Monuments (State Ownership and Preservation Order Sites) - 1km ➤ Sites and Monuments and Recorded Monuments, RPS, and NIAH structures - Within Site Boundary ➤ Undesignated sites, if relevant - 500m 	<p>Cumulative effects encompass the combined effects of multiple developments or activities on a range of receptors. In this case, the receptors are the archaeological monuments and architectural/cultural heritage sites in the vicinity of the Subject Development. The distances below in the assessment of effects on setting are regarded as appropriate in terms of the deviations being assessed and are based on professional judgement.</p> <p>The potential cumulative effects between and the Subject Development the Permitted Development has been considered in terms of effects on cultural heritage.</p>
<p>Landscape & Visual</p>	<p>Site boundary</p>	<p>Due to the localised nature of the Subject Development, there will be no interaction between the Subject Development and other developments outside the Site Boundary.</p>
<p>Material Assets: Traffic & Transport</p>	<p>Meenbog Windfarm</p>	<p>The Subject Development was considered cumulatively with the Permitted Development.</p>
<p>Material Assets: Utilities</p>	<p>Site Boundary</p>	<p>Due to the localised nature and extent of the Subject Development, any cumulative effects were restricted to the Site Boundary.</p>

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 rEIA addresses the potential for cumulative effects where appropriate and within the context of their identified cumulative study area. A long list of projects considered (i.e. the largest cumulative study boundary of catchments) across all disciplines in their cumulative impact assessment is included in **Appendix 2-1**. Smaller cumulative assessment studies have considered all projects within their specific boundary which fall within the long list in **Appendix 2-1**. The cumulative impact assessments carried out in each of the subsequent chapters of this rEIA consider the following:

Permitted Meenbog Windfarm

Potential cumulative effects arising from the Subject Development in combination with the consented elements of the Meenbog Windfarm have been fully considered in the subsequent chapters of this rEIA. The cumulative effect assessment considers all currently built elements of the Meenbog Windfarm as well as all elements that have yet to be constructed.

November 2020 Peatslide

The components of the Subject Development are considered cumulatively with the November 2020 Peatslide, the consequent emergency works and associated environmental remediation works. Details of the November 2020 Peatslide, emergency works, and associated remediation efforts are provided in **Appendix 2-3** of the rEIA.

Other Developments/Land uses

As discussed above, the review of the relevant County Council planning registers documented relevant general development planning applications in the vicinity of the Subject Development site (Appendix 2-1), the majority of which relate to the provision and/or alteration of one-off rural housing or are agricultural in nature. These applications have also been taken account in describing the baseline environment and in the relevant assessments.

Furthermore, the cumulative impact assessments carried out in each of the subsequent chapters of this rEIA consider potential significant cumulative effects arising from land uses in the vicinity of the Subject Development. Land use on the site is currently limited to commercial forestry plantations and pastoral agriculture.

2.7.3 Summary

The cumulative impact assessments carried out in each of the subsequent chapters of this rEIA consider all potential significant cumulative effects arising from relevant projects and/or plans and land uses within the cumulative study area and within the vicinity of the Subject Development. Assessment material for this cumulative impact assessment was compiled on the relevant project and/or plans within the defined cumulative assessment study areas. The material was gathered through a search of relevant online Planning Registers, reviews of relevant EIA (or historical EIS) documents, planning application details and planning drawings, and served to identify past and future projects, their activities and their environmental impacts. These include ongoing agricultural or forestry practices. Each relevant chapter within the rEIA 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 2-1**. Overall, the Meenbog Windfarm has been designed to mitigate impacts on the environment and particularly water, and a suite of mitigation measures is set out within the rEIA. Additional detail in relation to the potential significant cumulative effects that may have arisen, will arise and, where appropriate, the specific suite of relevant mitigation measures is set out within each of the relevant chapters of this rEIA.