2. BACKGROUND TO THE PROPOSED DEVELOPMENT

This section of the EIAR presents information on renewable energy and climate change policy and targets, the strategic planning context for the Proposed Development, the site selection and design process, a description of the Proposed Development site and planning history, scoping and consultation, and the cumulative impact assessment process.

2.1 Renewable Energy Policy and Targets

2.1.1 Renewable Energy Resources

Renewable energy resources include solar, wind, water (hydropower, wave and tidal), heat (geothermal) and biomass (wood, waste) energy. These sources are constantly replenished through the cycles of nature, unlike fossil fuels, which are finite resources that are becoming increasingly scarce and expensive to extract.

Renewable energy resources offer sustainable alternatives to our dependency on fossil fuels as well as a means of reducing greenhouse gas emissions and opportunities to reduce our reliance on imported fuels. These resources are abundantly available in Ireland, yet only a fraction has been tapped so far (Source: Sustainable Energy Authority of Ireland (SEAI) website, www.seai.ie).

A gradual shift towards increasing our use of renewable energy resources would result in:

- Reduced carbon dioxide emissions;
- Secure and stable energy for the long-term;
- Reduced reliance on fuel imports;
- Investment and employment in our indigenous renewable energy projects; often in rural and underdeveloped areas.

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 needs, with imported fossil fuels accounting for 87% of all energy consumed in Ireland in 2019 ('Renewable Energy in Ireland 2020 Report(SEAI, December 2020). 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 . The "Energy in Ireland 2019 Report", Sustainable Energy Authority of Ireland', (December 2019) has noted that final energy demand fell by 0.6%, resulting in a primary energy demand decrease of 1.2%. Overall demand for fossil fuels decreased by 3% in 2019. Furthermore the share of electricity generated from renewable sources increased by 3.1 percentage points in 2019, to 36.5%. The 2020 target was 40%. The key targets for 2030 have been set out as follows:

- At least 40% cuts in greenhouse gas emissions (from 1990 levels)
- At least 32% share for renewable energy
- At least 32.5% improvement in energy efficiency

2.1.2 EU Legislation

The European Union (EU) Directive on the Promotion of the Use of Energy from Renewable Sources (Directive 2009/28/EC) was adopted on 23rd April 2009. This Directive establishes a binding target of a

minimum 20% reduction in greenhouse gas emissions based on 1990 levels, 20% of overall EU energy consumption to come from renewable sources by 2020, as well as a binding 10% minimum target for energy from renewable resources in the share of transportation fuels and 20% reduction in primary energy use compared with projected levels by improving energy efficiency.

Directive 2009/28/EC legally obliges each Member State to:

- Ensure that its 2020 target is met.
- Introduce *"appropriate measures"* and outline them in a National Renewable Energy Action Plan (NREAP). The *"appropriate measures"* include ensuring that grid-related measures and administrative and planning procedures are sufficient to achieve the 2020 target. The NREAP for Ireland was published in June 2010.

Under Directive 2009/28/EC Ireland's mandatory target was for renewable resources to account for 16% of total energy consumption by 2020. With regards to the progress towards the various renewable energy targets the SEAI Energy in Ireland 2020 Report sets out that Ireland is not on track to meet its 2020 target. As a result of this Ireland has paid €50 million to Estonia and Denmark for "statistical transfers" to make up for failing to meet renewable energy targets for 2020.

The 2030 Climate and Energy Framework was adopted by EU leaders in October 2014 and marks a further development of EU renewable energy policy. The framework defines further EU wide targets and builds on the 2020 climate and energy package.

The Framework sets three key targets for the year 2030:

- 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 July 2016. The proposal implements EU commitments under the Paris agreement on climate change (COP21) and marks an important milestone in the allocation to Member States of a package of climate targets that were formally adopted as part of the 2030 Climate and Energy Framework.

On the 27th of June 2018 EU ambassadors endorsed the provisional agreement reached by the Bulgarian Presidency on the revision of the renewable energy directive. The new regulatory framework is expected to pave the way for Europe's transition towards clean energy sources such as wind, solar, hydro, tidal, geothermal, and biomass energy. The agreement sets a headline target of 32% energy from renewable sources at EU level for 2030. Other key elements of the agreement include:

- The design of support schemes will provide for a possibility of technology specific support, aligned with state aid guidelines. The opening of renewable support towards neighbouring member states will be voluntary, at an aspirational pace of at least 5% between 2023 and 2026 and 10% between 2027 and 2030. Except for certain cases, member states will be obliged to issue guarantees of origin.
- Permit granting procedures will be simplified and streamlined with a maximum of two years for regular projects and one year in case of repowering, both extendable for an additional year in case of specific circumstances and notwithstanding environmental and judicial procedures. For small-scale projects below 10.8kW simple notification procedures will apply. Each member state may choose to apply simple notification procedures also to projects up to 50kW.

- The annual increase of energy from renewable sources in heating and cooling will be 1.3 percentage points indicatively, or 1.1 percentage points if waste heat is not taken into account.
- Via obligations on fuel suppliers, renewables will reach a level of at least 14% in transport by 2030, supplemented by a set of facilitative multipliers to boost renewables in different sectors.

2.1.3 Climate Action Plan 2019

The Climate Action Plan 2019 (CAP) was published on the 1st of August 2019 by the Department of Communications, Climate Action and Environment. The CAP sets out an ambitious course of action over the coming years to address the impacts which climate may have on Irelands environment, society, economic and natural resources. This Plan clearly recognises that Ireland must significantly step up its commitments to tackle climate disruption.

Chapter 1 of the CAP sets out the nature of the challenge which Ireland faces over the coming years. The CAP notes that the evidence for warming of our climate system is beyond dispute with observations showing that global average temperatures having increased by more than 1 °C since pre-industrial times. These changes will cause extensive direct and indirect harm to Ireland and its people, as well as to other countries more exposed and less able than we are to withstand the associated impacts, which are predicted to include:

- Rising sea-levels threatening habitable land and particularly coastal infrastructure,
- Extreme weather, including more intense storms and rainfall affecting our land, coastline and seas,
- Further pressure on our water resources and food production systems with associated impacts on fluvial and coastal ecosystems,
- Increased chance and scale of river and coastal flooding,
- Greater political and security instability,
- Displacement of population and climate refugees,
- Heightened risk of the arrival of new pests and diseases,
- Poorer water quality,
- Changes in the distribution and time of lifecycle events of plant and animal species on land and in the oceans.

It is also recognised within the Plan that in addition to the above many of the pollutants associated with climate change are also damaging to human health.

It is the ambition of the CAP to deliver a step-change in our emissions performance over the coming decade, so that we will not only meet our EU targets for 2030 but will also be well placed to meet our mid-century decarbonisation objectives.

Chapter 7 of the CAP details the plans and views surrounding electricity. Within Ireland, electricity accounting for 19.3% of Irelands greenhouse gases in 2017, the following is noted:

> *"It is important that we decarbonise the electricity that we consume by harnessing our significant renewable energy resources by doing this we will also become less dependent on imported fossil fuels."*

In 2019 within Ireland a total of 36.5% of electricity produced came from renewable sources, the target to be achieved by 2020 was set at 40%. The CAP notes that 'given our 40% target is based on a percentage of total energy demand, this rising demand makes meeting our 2020 target even more challenging and latest forecasts indicate we may miss this target by 3 to 4 percentage points'. Further to this while decarbonising electricity is a key aspect of the strategy it is noted that this is against the

background of rapid projected growth in electricity demand. It is expected that demand for electricity is forecast to increase by 50% above existing capacity in the next decade. Generation electricity builds of a renewable nature rather than fossil fuels has been marked as essential.

The CAP goes on to note that with regards to policy measures to date that they will not achieve the level of decarbonisation required in the electricity sector to meet the 2030 emissions reduction targets, as such it is listed that '*we must 'reduce our electricity sector emissions to 4-5 Mt in 2030'*. In relation to emissions the following is noted:

> *"In 2017, emissions from electricity were 12 Mt and in 2030, despite implementation of Project Ireland 2040 measures, emissions are projected to be 8 Mt. This clearly demonstrates the need for a significant step-up in ambition over existing policy, not only to meet our 2030 targets, but to set us on course to deliver substantive decarbonisation of our economy and society by 2050."*

In the electricity sector, reaching a 70% share of renewable electricity would require 50-55% emissions reduction by 2030. Under section 7.2 the following targets have been set out:

- Reduce CO_2 eq. emissions from the sector by 50–55% relative to 2030 Pre-NDP projections
- Deliver an early and complete phase-out of coal- and peat-fired electricity generation
- Increase electricity generated from renewable sources to 70%, indicatively comprised of:
  - at least 3.5 GW of offshore renewable energy
  - up to 1.5 GW of grid-scale solar energy
  - up to 8.2 GW total of increased onshore wind capacity
- Meet 15% of electricity demand by renewable sources contracted under Corporate PPAs

Achieving 70% renewable electricity by 2030 will involve phasing out coal- and peat-fired electricity generation plants, increasing our renewable electricity, reinforcing our grid (including greater interconnection to allow electricity to flow between Ireland and other countries), and putting systems in place to manage intermittent sources of power, especially from wind.

Section 7.2 of the CAP notes the 'Measures to deliver targets' in which efforts to meet the 2030 ambitions includes increased harnessing of renewable energy. The CAP identifies a need for 8.2GW of onshore wind generation and states that in 2017 there was 3.3GW in place, therefore Ireland needs to more than double its installed capacity of wind generation. Accordingly, the CAP presents clear and unequivocal support for the provision of additional renewable energy generation and presents yet further policy support for increased wind energy.

2.1.3.1 Progress on Targets

The overall share of renewables in primary energy stood at 11.2% in 2019 which is up from the 2018 figure of 10% and 9.3% in 2017. As per the EU Renewable Energy Directive, the target for Ireland set at 16% share of renewable energy in gross final consumption (GFC) by 2020. As per the SEAI's Renewable Energy in Ireland 2020 Update (discussed further below), the contribution from renewables in 2019, has risen to 12% of the GFC. According to the SEAI's report the share of electricity from renewable energy has increased fivefold between 2005 and 2019 – from 7.2% to 36.5% – an increase of 29 percentage points over 14 years. In absolute terms, there has been a sixfold increase in the volume of renewable electricity generated from 1,873 GWh in 2005 to 11,780 GWh in 2019. Of this, it was noted that Wind energy accounted for 85% of the renewable electricity in 2019.

The Climate Change Advisory Council notes within their 2019 Annual Review that while the share of renewable electricity generation, (particularly wind), is increasing in Ireland, the overall pace of the decarbonisation of the electricity generation sector is not compatible with a low-carbon transition to

2050. As such, Ireland can continue to 'comply' with EU targets by purchasing emission allowances; however, the expenditure of public funds to do so would not result in any domestic benefit, and furthermore, would result in a more difficult and expensive challenge for the county to meet its future 2030 targets and beyond. The Review concludes that continued and additional investment in capacity and technologies in the renewable energy sector is required to reach these said targets.

Plate 2-1 below shows the latest data available for the share of renewable energies in gross final energy consumption according to the Eurostat online data and the targets that have been set for 2020. The share of renewables in gross final energy consumption stood at 19.7 % in the EU-27 in 2019. The data shows that eighteen member states have reached a share equal to or above their 2020 target. This is not the case with Ireland who, as evident in Plate 2-1, are still considerably below meeting its 2020 target. Per the 2019 data Ireland was at 11.9% of its 16% target.

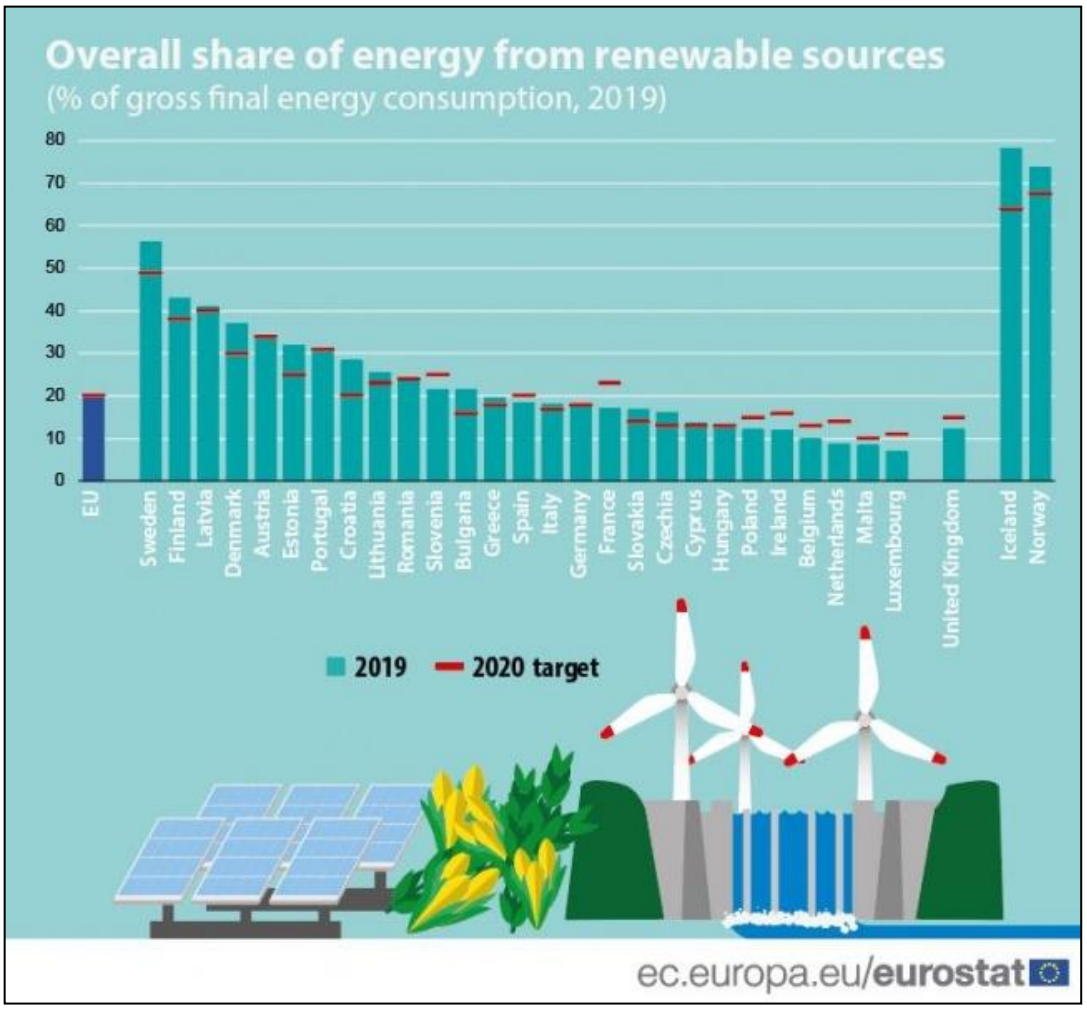


Plate 2-1: Share of renewables in gross final energy consumption, 2019 Source:http://ec.europa.eu/eurostat/statistics-explained/index.php/Renewable_energy_statistics)

EirGrid in their Generation Capacity Statement 2020– 2029 published in August 2020 it is assumed that renewable targets will be achieved largely through the deployment of additional wind powered generation in Ireland. New wind farms commissioned in Ireland in 2019 brought the total wind capacity to over 4127 MW, contributing to the increase in overall RES-E percentage to 35.7%. Renewables generation performance across 2020 will determine if Ireland achieves its Electricity (RES-E) target of 40%. The Statement notes that the percentage achieved across 2020 will be dependent upon a number of factors including renewable and conventional generation performance, and system demand.

The SEAI monthly electricity generation figures for December 2020 indicate that Ireland hit it's 40% renewable energy target for 2020 with a share of renewable electricity recorded at 40.2%. Reporting on these figures and official confirmation on Ireland's target status for 2020 is due for publication by the SEAI in the coming months, along with further insight into energy demand trends and usage over the year 2020 in light of Covid-19. As published by the SEAI in May 2020, the impact of Covid-19 on energy demand reduction became evident in energy demand trends from the period January 2020 to May 2020 and so electricity demand and subsequent generation figures for the year 2020 will need to be analysed relative to the impact of Covid-19.

There are just under 400 operational wind farms on the island of Ireland, with over 300 of these located in the Republic[1]. County Westmeath is one of only three counties that currently produces no wind energy.

2.1.3.2 SEAI Energy in Ireland 2020 Report

In December 2020 SEAI produced the Energy in Ireland 2020 report, which provides the most up to date figures available (from 2019) in relation to energy production and consumption in Ireland. The report found that total final energy consumption fell in 2019, by 0.6% (0.5% increase weather corrected). This was the first fall since 2014. Energy used for heat reduced, but this was largely due to 2019 being a warmer year than 2018. Transport and electricity final energy use continued to increase in 2019. In relation to renewable energy targets, the 2019 report found that:

- The share of electricity generated from renewable sources increased by 3.3 percentage points in 2019, to 36.5%. The 2020 target being 40%.
- The share of energy used for transport from renewable energy resources increased from 7.2% in 2018 to 8.9% 2019. The 2020 target is 10%.
- The share of energy used for heat from renewable resources remained flat at 6.3% in 2019. The 2020 reduction target is 12%.

Furthermore the 2020 report also found that wind generation accounted for 31.3% (normalised) of all electricity generated. It was the second largest source of electricity generation in 2019 after natural gas. Wind energy accounted for 85% of the renewable energy generated in 2019. At the end of 2019 the installed capacity of wind generation reached 4,137MW, and during 2019 461MW of wind capacity was installed. The SEAI 2020 report also makes the following statements:

> *"EirGrid and ESB Networks note that as of 2020 there is 1,754 MW of additional wind generation planned, either with connection contracts in place or applications for connection underway. Historically, there has been a maximum of just over 500 MW installed in any one year since 2005 and on average the installation rate has been 200 MW.*
>
> *"In relation to the displacement of fossil fuels by renewable energy, it is estimated that in 2019 approximately €501 million in fossil fuel imports were avoided, of which €248 million was avoided by wind generation."*

In relation to the findings of this December 2020 SEAI report it is clear that wind energy represents the strongest and most deployable renewable energy resource available to reduce dependence on fossil fuels in Ireland. While it is clear that additional deployment is on-going, it is also apparent that it is unlikely that the 2020 targets for renewable electricity generation will be met. Achieving targets becomes even more challenging in the context of increasing electricity demand.

[1] *https://www.iwea.com/about-wind/facts-stats*

2.1.4 National Policy

2.1.4.1 National Renewable Energy Action Plan

Article 4 of Directive 2009/28/EC on renewable energy required each Member State to adopt a national renewable energy action plan (NREAP) to be submitted to the European Commission. The NREAP sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall national target established under the Directive.

Ireland's National Renewable Energy Action Plan (NREAP) sets out the Government's strategic approach and planned measures to deliver on Ireland's 16% target under Directive 2009/28/EC. In relation to wind energy, the NREAP states:

> *"It is noted that as a country, Ireland has immense potential for the development of renewable energy particularly wind energy, both on and offshore and wave energy. The development and expansion of the use of renewable energy, together with measures aimed at a reduction and more efficient use of energy are important as regards meeting our climate change objectives and priorities, both nationally and at European level. At a high level a significant increase in renewable energy and the protection of the environment are thus mutually reinforcing goals."*

2.1.4.2 White Paper on Energy Policy in Ireland 2015 – 2030

On 12th May 2014, *'The Green Paper on Energy Policy in Ireland'* was launched, opening the way for a public consultation process on the future of energy policy in Ireland for the medium to long-term. The paper 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.

A Government White Paper entitled 'Ireland's Transition to a Low Carbon Energy Future 2015-2030' was published in December 2015 by the Department of Communications, Energy and Natural Resources. This Paper provides a complete energy update and a framework to guide policy up to 2030. The Paper builds upon the White Paper published in 2007 and takes into account the changes that have taken place in the energy sector since 2007.

The White Paper states the advances in Ireland's energy efficiency and renewable energy and generation use between 2007 and 2015. Renewable energy sources (which include wind) accounted for nearly 23% of Ireland's electricity consumption in 2015, which is just over halfway to meeting Ireland's 2020 target of 40% ('Energy in Ireland: Key Statistics 2015', SEAI, December 2015).

The policy framework sets out a vision for a low carbon future that maintains Ireland's competitiveness and ensures a supply of affordable energy. The paper advises that a range of policy measures will be employed to achieve this vision and will involve amongst many things, generating electricity from renewable sources of which there are plentiful indigenous supplies and increasing the use of electricity and bio energy to heat homes and fuel transport.

The White Paper states that onshore wind continues to be the main contributor of renewable energy, 18.2% of total generation and 81% of renewable electricity (RES-E) in 2014.

In this White Paper the DCENR confirmed that onshore wind is the cheapest form of renewable energy in Ireland:

(Onshore Wind) *"is a proven technology and Ireland's abundant wind resources means that a wind generator in Ireland generates more electricity than similar installations in other countries. This results in a lower cost of support."*

2.1.4.3 Draft National Energy and Climate Plan (NECP) 2021-2030, December 2018

The Draft National Energy & Climate Plan (NECP) 2021-2023 was published by the Government of Ireland in December 2018. The NECP has been prepared in accordance with the Governance of the Energy Union and Climate Action Regulation. This first draft takes into account energy and climate policies developed to date, the levels of demographic and economic growth identified in the Project 2040 process and includes all of the climate and energy measures set out in the National Development Plan 2018-2027.

The NECP sets out how EU Countries (including Ireland) intend to address energy and climate related issues:

- energy efficiency
- renewables
- greenhouse gas
- emissions reductions
- interconnections
- research and innovation

Furthermore, a progress report must be prepared by each country within the EU every 2 years. The consultation period for the NECP closed in February 2019, it was expected that a final version of the NECP was to be submitted in December 2019 however it appears that this deadline has been missed.

2.1.4.4 Programme for Government 2020

The Programme for Government 2020 was published in June 2020. In relation to climate change the programme recognises that the next ten years are a critical period in addressing the climate crisis. It is an ambition of the programme to more than halve carbon emissions over the course of the decade (2020-2030). The programme notes that the government are committed to reducing greenhouse gas emissions by an average 7% per annum over the next decade in a push to achieve a net zero emissions by the year 2050. The programme also recognises the severity of the climate challenge as it clarifies that *"Climate change is the single greatest threat facing humanity".*

With regards to energy, the programme notes that the government will implement a new National Energy Efficiency Action Plan to reduce energy use, including behavioural and awareness aspects of energy efficiency such as building and data management. Further, the government are also committed to the rapid decarbonisation of the energy sector, along with this it is noted that the necessary steps will be taken to deliver at least 70% of renewable electricity by the year 2030.

2.1.5 Summary of Compliance with Renewable Energy Policy and Targets

Ireland faces significant challenges through efforts to meet its targets, EU targets for renewable energy by 2030 and its commitment to transition to a low carbon economy by 2050. The CAP sets out an ambitious course of action over the coming years to address the impacts which climate may have on Irelands environment, society, economic and natural resources. This Plan clearly recognises that Ireland must significantly step up its commitments to tackle climate disruption and sets a clear and definitive target of increasing onshore renewable energy production from the 3.3GW figure in 2017 to 8.2GW by 2030 (i.e. over double the currently installed capacity). The Proposed Development will help

Ireland address these challenges as well as addressing the country's over-dependence on imported fossil fuels.

2.2 Climate Change Policy and Targets

2.2.1 Impacts of Climate Change

Climate change, in the context of EU and national policy, refers to the change in climate that is attributable to human activity arising from the release of greenhouse gases into the atmosphere and which is additional to natural climate variability (Department of the Environment, Heritage and Local Government, 2006). In 2008, the Environmental Protection Agency (EPA) published the results of a study entitled *'Climate Change – Refining the Impacts for Ireland'*, as part of the STRIVE (Science, Technology, Research and Innovation) Programme 2007 – 2013. This report stated that mean annual temperatures in Ireland have risen by 0.7 º Celsius (C) over the past century. Mean temperatures in Ireland relative to the 1961 to 1990 averages are likely to rise by 1.4 to 1.8ºC by the 2050's and by more than 2º C by the end of the century due to climate change. Under a report published by the EPA titled "Irish Climate Futures: Data for Decision-making" (June 2019) the following is acknowledged:

> *"That the world has warmed since the 19th century is unequivocal. Evidence for warming includes changes in surface, atmospheric and oceanic temperatures; glaciers; snow cover; sea ice; and sea level and atmospheric water vapour."*

The report continues to note that should business as usual continue the Earth's average temperature is likely to increase by between 2.6˚C and 4.8˚C above today's levels, for Ireland, the changes listed (extreme events and sea level rise) would probably mean more frequent wet winters with dry and hot summers. It is acknowledged that this would pose challenges for water and flood risk management, agriculture and tourism.

2.2.2 International Policy

2.2.2.1 United Nations Framework Convention on Climate Change

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

2.2.3 Kyoto Protocol Targets

Ireland is a Party to the Kyoto Protocol, which is a protocol to the UNFCCC. The Kyoto Protocol is an international agreement that sets limitations and reduction targets for greenhouse gases for developed countries. It came into effect in 2005, as a result of which, emission reduction targets agreed by developed countries, including Ireland, are now binding. Further details on Ireland's obligations under the Kyoto Protocol are presented below. Under the Kyoto Protocol, the EU agreed to achieve a significant reduction in total greenhouse gas emissions of 8% below 1990 levels in the period 2008 to 2012. Ireland's contribution to the EU commitment for the period 2008 – 2012 was to limit its greenhouse gas emissions to no more than 13% above 1990 levels.

2.2.3.1 Doha Amendment to the Kyoto Protocol

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

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

During the first commitment period, 37 industrialised countries and the European Community committed to reduce GHG emissions to an average of 5% against 1990 levels. During the second commitment period, Parties committed to reduce GHG emissions by at least 18% below 1990 levels in the eight-year period from 2013 to 2020; however, the composition of Parties in the second commitment period is different from the first.

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

2.2.3.2 COP21 Paris Agreement

COP21 was the 21st session of the Conference of the Parties (COP) to the UNFCCC. Every year since 1995, the COP has gathered the 196 Parties (195 countries and the European Union) that have ratified the Convention in a different country, to evaluate its implementation and negotiate new commitments. COP21 was organised by the United Nations in Paris and held from 30thNovember to 12thDecember 2015.

COP21 closed on 12th December 2015 with the adoption of the first international climate agreement (concluded by 195 countries and applicable to all). The 12-page text, made up of a preamble and 29 articles, provides for a limitation of the global average temperature rise to well below 2°C above pre-industrial levels and to limit the increase to 1.5°C.

The "Report of the Secretary-General on the 2019 Climate Action Summit and the Way Forward in 2020", published 11th December 2019, makes for stark reading in relation to targets, it states:

> *"...the initial national climate pledges (Nationally Determined Contributions, or NDCs) made under the Paris Agreement are inadequate. Pathways reflecting countries' current climate plans imply global warming of about 30°C by 2100, with warming continuing afterwards. In addition, 2015-2019 has seen a continued increase in CO2 levels and other key greenhouse gases (GHG) in the atmosphere to new records, with CO2 growth rates nearly 20 percent higher than the previous five years. This trend is not estimated to begin reversing by 2030, let alone 2020."*

Against this backdrop and the urgent need to scale up climate action the Secretary-General convened the Climate Action summit on 23rd September 2019 to focus global attention in the face of the worsening climate crisis and to forge new pathways ahead to support the achievement of the Paris Agreement.

The Climate Action Summit reinforced 1.5°C as the socially, economically, politically and scientifically safe limit to global warming by the end of this century, and net zero emissions by 2050 as the global long-term climate objective for all. Countries need to urgently accelerate work to define what this

entails for the short-term (2020) and mid-term (2030) commitments that will be captured in their Nationally Determined Contributions and ensure the alignment of strategies to meet those commitments. The Secretary General's report stated that:

> *"The Summit reinforced on a global stage the critical need for countries to define and implement more ambitious national climate plans (NDCs) and long-term strategies (LTS) consistent with the objective of net zero emissions by 2050."*

2.2.3.3 Progress on Targets

The 'Europe 2020 Strategy' is the EU's agenda for growth and jobs for the 2010 - 2020 decade. The Europe 2020 Strategy targets on climate change and energy include:

- Reducing GHG emissions by at least 20% compared with 1990 levels;
- Increasing the share of renewable energy in final energy consumption to 20%; and
- Moving towards a 20% increase in energy efficiency.

The *'Europe 2020 headline indicators'* report (https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Europe_2020_headline_indicators#Energy_efficiency.2C_greenhouse_gas_emissions_and_share_of_renewable_energy_in_gross_final_energy_consumption) provides a summary of recent statistics on climate change and energy in the EU. In 2018, EU greenhouse gas emissions, including emissions from international aviation and indirect carbon dioxide (CO_2) emissions, were down by 23.2% when compared with 1990 levels, which means that the Europe 2020 target of reducing GHG emissions by 20 % by 2020 has been reached.

The share of renewable energy in gross final energy consumption more than doubled between 2004 and 2018, reaching 18.0 % in 2018. This is 2.0 percentage points below the Europe 2020 renewable energy target of 20 %.

Progress has also made towards the energy efficiency objective, although the trend has reversed since 2014. The 2020 target for final energy consumption was temporarily reached in 2014, but a subsequent increase in consumption now means an additional 3.4% fall is required by 2020. The Europe 2020 Headline Indicator note that "*With respect to primary energy consumption, the EU must achieve a further reduction of 4.4 % by 2020 to reach the Europe 2020 target of increasing its energy efficiency by 20 %. In 2018, the EU consumed 10.4 % less primary energy than in 2006, but 2.6 % more than in 2014. Energy efficiency policies have helped achieve reductions in primary energy consumption, but some of the reductions can also be attributed to lower economic output in the aftermath of the economic crisis and relatively warm years, such as 2013 and 2014.*"

Further details on Ireland's emissions projections are provided below.

2.2.3.4 Emissions Projections

In June 2019, the EPA published an update on Ireland's Greenhouse Gas Emission Projections 2018-2040. The report provides an assessment of Irelands progress towards achieving its emission reduction targets set under the EU Effort Sharing Decision (Decision No 406/2009/EU) – i.e. to achieve a 20% reduction of non-Emission Trading Scheme (non-ETS) sector emissions, i.e. agriculture, transport, residential, commercial, non-energy intensive industry and waste, on 2005 levels, with annual binding limits set for each year over the 2013-2020 period.

Greenhouse gas emissions are projected to 2020 using two scenarios; '*With Existing Measures*' and '*With Additional Measures*'. The '*With Existing Measures*' scenario assumes that no additional policies and measures, beyond those already in place by the end of 2017 are implemented. The '*With Additional Measures*' scenario assumes implementation of the '*With Existing Measures*' scenario in

addition to further implementation of Government renewable and energy efficiency policies and measures, as set out in the NREAP and the National Energy Efficiency Action Plan (NEEAP).

The EPA Emission Projections Update notes the following key trends:

- 2019 greenhouse gas emission projections show total emission increasing from current levels by 1% and 6% by 2020 and 2030, respectively, under 'With Existing Measures' scenario. Under '*With Additional Measures*', emissions are estimated to decrease by 0.4% and 10% by 2020 and 2030, respectively;
- Under the '*With Existing Measures*', emissions from Energy Industries are projected to increase by 31% between 2018 and 2030 to 15.4 Mt CO2eq. Under the '*With Additional Measures*', emissions between 2018 and 2030 are predicted to decrease by 27% to 8.6 Mt CO2eq;
- Under '*With Existing Measures*', approximately 41% of electricity generation is projected to come from renewable energy sources by 2030. In the 'With Additional Measures' scenario, it is estimated that renewable energy generation increases to approximately 54% of electricity consumption;
- Agriculture and transport dominate non-ETS sector emissions accounting for 75% and 80% of emissions in 2020 and 2030, respectively. In 2020, the sectors with the largest contribution of emissions are Agriculture, Transport and Energy Industries with 34%, 21% and 20% share in total emissions, respectively, under the With Additional Measures scenario. In 2030, this is projected to change to 38%, 22% and 16% for these sectors, respectively, which reflects the growth in emissions from agriculture and reduction of emissions from power generation; and
- Ireland has exceeded its annual binding limits in 2016 and 2017. However, even using this mechanism, Ireland will still be in non-compliance according to the latest projections.

The 2019 EPA report states that "*A significant reduction in emissions over the longer term is projected as a result of the expansion of renewables (e.g. wind), assumed to reach 41-54% by 2030, with a move away from coal and peat*". Over the period 2013 – 2020, Ireland is projected to cumulatively exceed its compliance obligations by approximately 10.3 Mt CO2 (metric tonnes of Carbon Dioxide) under the "*With Existing Measures*" scenario and 9.2 Mt CO2 under the "*With Additional Measures*" scenario.

2.2.4 National Policy

2.2.4.1 National Adaption Framework Planning for a Climate Resilient Ireland 2018

Ireland's first statutory National Adaptation Framework (NAF) was published on 19th January 2018. The NAF sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. The NAF was developed under the Climate Action and Low Carbon Development Act 2015.

The NAF, on the basis of evolving climate change literature within recent years, identifies a number of key facts which will need to be considered when designing adaptation measures and addressing climate change going into the future:

- Climate change will have diverse and wide-ranging impacts on Ireland's environment, society, economic development, including managed and natural ecosystems, water resources, agriculture and food security, human health and coastal infrastructures and zones;
- Sufficient robust information exists nationally to further progress the process of implementing adaptation actions and increasing social, economic and environmental resilience to climate change;

- Uncertainties exist in relation to the extent and rate of future climate change. Addressing uncertainties is a challenge, but should not be read as an excuse for inaction as there is overall agreement on the robustness of trends and projections; and
- The impacts and risks of climate change can be reduced and managed through mitigation and adaptation actions.

The Framework acknowledges that, as per the Intergovernmental Panel on Climate Change (IPCC, 2013), 95% probability that the global warming of the last 50 years is a result of human activities. Specifically, the main contribution to this warming has come from the burning of fossil fuels. The Framework provides a number of guiding principles for adaptation at national level, regardless of how successful efforts to mitigate greenhouse gas (GHG) emissions prove to be, as the impact of climate change will continue over the coming decades due to the delayed impacts of past and current emissions. In this regard, the Framework states that:

> *"Adaptation not only depends on action by all levels of government but also on the active and sustained engagement of all stakeholders, including sectoral interests, the private sector, communities and individuals. Everybody has a role to play in making sure Ireland is taking appropriate adaptation action to achieve a climate resilient future. This is a joint responsibility where "climate proofing" our country is an undertaking for which all of society is responsible and everyone has a role to play."*

The Framework concludes that there is limited choice in the context of climate change other than to implement adaptation measures simultaneously with on-going mitigation measures (e.g. the continued development and integration of renewable energy infrastructure) to deal with the unavoidable climate change impacts and associated economic, environmental and social costs.

2.2.4.2 National Policy Position on Climate Action and Low Carbon Development 2014

The National Policy Position on Climate Action and Low Carbon Development, published by the Department of Environment, Community and Local Government in April 2014, provides a high-level policy direction for the adoption and implementation by Government of plans to enable the State to move to a low-carbon economy by 2050. The position paper acknowledges that the evolution of climate policy in Ireland will be an iterative process, based on the adoption by Government of a series of national plans over the period to 2050.Statutory authority for the plans is set out in the Climate Action and Low Carbon Development Act 2015.

2.2.4.3 Climate Action and Low Carbon Development Act 2015

The Climate Action and Low Carbon Development Act 2015 was signed into law on 10th December 2015. The Act provides for the establishment of a national framework with the aim of achieving a low carbon, climate resilient, and environmentally sustainable economy by 2050, referred to in the Act as the *"national transition objective"*.

The Act provides the tools and structures to transition towards a low carbon economy and it anticipates that it will be achieved through a combination of:

- A National Mitigation Plan (to lower Ireland's greenhouse gas emissions levels);
- A National Adaptation Framework (to provide for responses to changes caused by climate change);
- Tailored sectoral plans (to specify the adaptation measures to be taken by each Government ministry); and
- Establishment of the Climate Change Advisory Council to advise Ministers and the Government on climate change matters.

2.3 Report of the Joint Committee on Climate Action: A Cross-Party Consensus for Action, March 2019

In March 2019 the Joint Committee on Climate Action released a report detailing a cross party consensus for action[2]. The report in its introduction notes that *"Irelands performance in meeting international obligations has to date been poor"*. The Committee places concern that predictions of emissions indicate that the state is off track in meeting its 2020 and 2030 targets under the Kyoto protocol and the EU Directives.

The committee recommended that new climate change legislation be enacted by the Oireachtas in 2019. The following recommendations have been listed:

1. A target of net zero economy-wide GHG emissions by 2050;
2. A provision for a 2030 target, consistent with the GHG emissions reduction pathway to 2050 to be set by 2020 by Statutory Instrument requiring the formal approval of both Houses of the Oireachtas following receipt of advice from the Climate Action Council;
3. Provision for five-yearly carbon budgets, consistent with the emissions reduction pathway to 2030 and 2050 targets, to be set by Statutory Instrument requiring the formal approval of both Houses of the Oireachtas following receipt of advice from the Climate Action Council;
4. A target for the renewable share of electricity generation of 70% by 2030.

Further to this the committee acknowledge that the measures which are currently in place, along with the measures suggested within the report, will not be sufficient in meeting Irelands targets.

Chapter 7 of the report outlines the committee's recommendations for developing Irelands capacity in renewable energies and renewable electricity in particular. It is noted that the transformation of Irelands energy system will be required for the country to meet its GHG emission targets. To reach net zero emissions by 2050 the report recognises that the country will be required to fully decarbonize electricity generation. Section 7.5 relates to onshore renewable energy generation, it is acknowledged that onshore wind energy is currently the primary source of renewable electricity within Ireland, accounting for 84% of renewable power generated in 2017, it is also detailed that, *'onshore wind alone will not supply Ireland with sufficient electricity to become self-sufficient, it is evident that it must be used alongside other sources of renewable energy'*.

Under its recommendations the Committee encourages the upgrading of existing onshore wind turbines where this will yield additional potential. While acknowledging that there are challenges in relation to securing additional on-shore wind generated renewable energy the Report fully supports the increased provision of on-shore wind farm development at appropriate locations and acknowledges that on-shore wind has a pivotal role to play in achieving climate action targets.

2.3.1 Summary of Compliance with Climate Policy and Targets

Climate change is now almost universally recognised by the scientific community, Governments and citizens worldwide as one of the most defining challenges of our time. Human activities are significantly contributing to natural climate change through our emissions of greenhouse gases, and the burning of fossil fuels is the largest contributory factor to climate change. Coupled with increasing uncertainty in

[2] *https://data.oireachtas.ie/ie/oireachtas/committee/dail/32/joint_committee_on_climate_action/reports/2019/2019-03-28_report-climate-change-a-cross-party-consensus-for-action_en.pdf*

energy supply, the ability to harness renewable energy such as wind energy will be critical in decarbonising the Irish economy and meeting our national and international renewable energy and climate change commitments and obligations. The Proposed Development will help Ireland address these challenges.

2.4 Strategic Planning Context

2.4.1 National Policy

2.4.1.1 National Planning Framework 2018-2040

The National Planning Framework (NPF), published in February of 2018, aims to shape and guide the future growth and development of Ireland up to 2040. The NPF forms the top tier of the national planning policy structure, accordingly, establishing the policy context for the Regional Spatial and Economic Strategies 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, a number of objectives and policies have been put in place in order for the country to grow and develop in a sustainable manner. 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.*"

The NPF seeks to achieve ten strategic priorities surrounding:

1. *Compact Growth*
2. *Enhanced Regional Accessibility*
3. *Strengthened Rural Economies and Communities*
4. *Sustainable Mobility*
5. *A Strong Economy, supported by Enterprise, Innovation and Skills*
6. *High-Quality International Connectivity*
7. *Enhanced Amenity and Heritage*
8. *Transition to a Low Carbon and Climate Resilient Society*
9. *Sustainable Management of Water and other Environmental Resources*
10. *Access to Quality Childcare, Education and Health Services*

Relevant to the Proposed Development, the **National Strategic Outcome 8** (Transition to Sustainable Energy), notes that in creating Ireland's future energy landscape, new energy systems and transmission grids will be necessary to enable a more distributed energy generation which connects established and emerging energy sources, i.e. renewables, to the major sources of demand. 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'*. Through this, it is noted that there are three pillars of focus which must be considered:

1. *Sustainability,*
2. *Security of supply,*
3. *Competitiveness*

The NPF also highlights the important role which the regions will have in promoting a sustainable renewable energy supply and have been noted as a key future planning and development priority. They note that '*harnessing the potential of the regions in renewable energy terms across the technology*

spectrum from wind and solar to biomass and where applicable, wave energy, focusing in particular on the extensive tracts of publicly owned peat extraction areas in order to enable a managed transition of the local economies of such areas in gaining the economic benefits of greener energy'. The government recognise that they must reduce greenhouse gas emissions which come from the energy sector by at least 80% by 2050 when compared to 1990 levels while ensuring a secure supply of energy.

A key aspect of the NPF surrounds the long-term sustainability of the environment, it 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."*

The Government will address environmental and climate challenges through the following overarching aims as listed under 'Resource Efficiency and Transition to a Low Carbon Economy':

1. *Sustainable Land Management and Resource Efficiency*
2. *Low Carbon Economy*
3. *Renewable Energy*
4. *Managing Waste*

In order to meet legally binding targets agreed at EU level, it is a national objective for Ireland to make a transition and become a competitive low carbon, economy by the year 2050.

2.4.1.1.1 Key Sustainability Elements of the National Planning Framework

A key focus running 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.*The NPF references the National Climate Policy Position which established the fundamental national objective of achieving transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050.

In relation to energy production, the NPF emphasises that rural areas have a strong role to play in securing a sustainable renewable energy supply for the country, and acknowledge 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".*

Section 9 of the NPF addresses the theme of *"Realising Our Sustainable Future"* and sets out a number of National Policy Objectives under this subject, with a key focus on resource efficiency and the transition towards a low carbon economy. In relation to climate action and planning, the NPF reiterates the commitment of the Government to a long-term climate policy based on the adoption of a series of national plans over the period to 2050, informed by UN and EU policy, and progressed through the National Mitigation Plan and the National Climate Change Adaptation Framework.

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, smartgrids, electric vehicles, buildings, ocean energy and bio energy.
- Legal and regulatory frameworks to meet demands and challenges in transitioning to a low carbon society.

The NPF reiterates that the *"transition to a low carbon economy from renewable sources of energy is an integral part of Ireland's climate change strategy and renewable energies are a means for reducing our reliance on fossil fuels".* This position is cemented in National Policy Objective 55 of the NPF which seeks to:

> *"Promote renewable energy generation at appropriate locations within the built and natural environment to meet objectives towards a low carbon economy by 2050".*

Section 10 of the NPF sets out a series of desired National Strategic Outcomes, underpinned by the national planning objectives set out in the NPF in combination with governance arrangements and aligned with capital investment. The transition towards a low carbon and climate resilient society is identified as one of the national strategic outcomes to guide the implementation of the NPF.

The NPF further emphasises that new energy systems and transmission grids will be necessary for a more distributed, more renewables focused energy generation system to harness the considerable on-shore and off-shore potential from energy sources such as wind, wave and solar and *"connecting the richest sources of that energy to the major sources of demand"*. The NPF recognises that the development of on-shore and off-shore renewable energy is critically dependent on the development of enabling infrastructure including grid facilities to connect to major sources of energy demand.

In achieving this desired National Strategic Outcome of a transition to sustainable energy, the NPF re-emphasises the following national policy target of delivering *"40% of our electricity needs from renewable sources by 2020 with a strategic aim of in excess of 50% by 2030 and more by 2040 and beyond using wind, wave, solar, biomass and hydro sources".*

There is a comprehensive range of policy and objectives within the NPF which strongly support the development for wind energy and associated enabling infrastructure, and with which the current proposal is compliant.

2.4.1.2 Draft Renewable Electricity Policy and Development Framework

The Renewable Electricity Policy and Development Framework has been formulated to ensure Ireland meets its future needs for renewable electricity in a sustainable manner compatible with environmental and cultural heritage, landscape and amenity considerations (*Source:*http://www.dccae.gov.ie/energy/en-ie/Renewable-Energy/Pages/Renewable-Electricity-Policy-and-Development-Framework.aspx).

The Framework will contribute toward meeting Ireland's future energy needs, particularly up to 2030 and beyond, as informed by national and European policy, and be reviewed at five-yearly intervals. The Policy and Development Framework will be primarily for the guidance of An Bord Pleanála, planning authorities, other statutory authorities, the general public and persons seeking development consent in relation to large scale projects for the generation of renewable electricity on land. It will set out policy in respect of environmental considerations, community engagement and in relation to potential, future export of renewable electricity. It will seek to broadly identify suitable areas in the State, where large-scale renewable electricity projects can be developed in a sustainable manner. The existing system for planning permission applications to local authorities or An Bord Pleanála will remain unchanged in respect of renewable electricity projects. These will still require planning permission, including environmental impact assessment where appropriate.

The most recently publicly circulated documentation (July 2018) has indicated that the updated REPDF will have the following objectives:

- To maximise the sustainable use of renewable electricity resources in order to develop progressively more renewable electricity for the domestic and potentially, for future export markets.
- To assist in the achievement of targets for renewable energy, enhance security of supply and foster economic growth and employment opportunities. It will identify appropriate parts of the country for large renewable electricity projects and will assess the environmental impact of renewable electricity projects at various scales at a national level.
- To identify strategic areas on land for large scale renewable energy generation and this analysis will include a spatial component.
- In addition, the amended scope will include renewable electricity projects below this threshold (including wind and solar PV) at a national level.

The updated scope will also include an assessment of available grid capacity in relation to the location of large and medium-scale renewable electricity generation plants. This analysis will support the strategic planning and location decision making process for Data Centres in Ireland.

2.4.2 Regional and County Policy

2.4.2.1 Eastern & Midland Regional Assembly Regional Spatial & Economic Strategy

The Midlands Regional Area was amalgamated within the Eastern and Midland Regional Assembly (EMRA) as of January 2015. The Region covers nine counties containing twelve Local Authorities namely – Longford, Westmeath, Offaly, Laois, Louth, Meath, Kildare, Wicklow, Fingal, South Dublin and Dún Laoghaire-Rathdown County Councils and Dublin City Council. One of the principal functions of the Assembly is to deliver a Regional, Spatial and Economic Strategy (RSES) which considers both spatial and economic factors within the regional planning framework. The principal statutory purpose of the RSES for the Eastern and Midland Region is to support the implementation of the Ireland 2040 NPF / NDP and the economic policies and objectives of the Government. Specifically, the RSES will provide a range of plans and strategies relevant to the Ireland 2040 NPF / NDP.

The RSES sets out a Vision Statement which is underpinned by three key cross-cutting principles which best reflect the challenges and opportunities of the Region: healthy placemaking; climate action; and economic opportunity.

> *"To create a sustainable and competitive Region that supports the health and wellbeing of our people and places, from urban to rural, with access to quality housing, travel and employment opportunities for all."*

Climate action is described as the need to enhance climate resilience and to accelerate a transition to a low carbon society recognising the role of natural capital and ecosystem services in achieving this. Chapter 7 of the RSES covers the regions plans for the Environment and Climate, and under section 7.9, the RSES sets out the theme of climate change within the region. Under this the RSES is noted:

> "*Climate change is a global challenge which requires a strong and coherent response at national, regional and local level. Observations show that Ireland's climate is changing in terms of sea level rise, higher average temperatures, changes in precipitation patterns, more frequent weather extremes, the spread of invasive alien species and increased risk of wild fires, for example upland gorse fires. These changes are projected to continue over the coming decades. Climate change will have diverse and wide-ranging impacts on the Eastern and Midland Region's environment, society and economic development, including managed and*

natural ecosystems, water resources, agriculture, food security and bioeconomy, human health and coastal zones."

It is recognised that climate change is impacting and will continue to impact many of the policies and objectives contained in the RSES, and as such, informs policies including those in relation to flood risk management and surface water drainage, settlement strategy, transport, waste management, water services, energy, natural heritage, and green and blue infrastructure.

With regards to the current situation, the RSES notes an overall increase in greenhouse gas emissions from most sectors. The main emissions sources which are relevant to the EMRA Region include electricity, built environment, the transport sector and agriculture. To support transition to a low carbon, circular & climate resilient region, the Eastern and Midland Regional Assembly is committed to the Region becoming a low-carbon and circular region. This will require reduction of all greenhouse gases, of which carbon dioxide is the most prominent. The priority is to minimise energy demand and waste, and then address how energy will be supplied and renewable technologies incorporated. In order to address this, it is necessary to reduce the effects of climate change through settlement and travel patterns, energy use, waste and protection of green infrastructure. The following Regional Policy Objectives (RPO's) have been proposed:

> **RPO 7.31**: Within 1 year of carrying out a regional emissions assessment, EMRA shall compile and publish an emissions inventory and, in collaboration with the relevant departments and agencies, agree emissions reductions targets in accordance with agreed national sectoral plans and to support an aggregate 40% reduction in greenhouse gas emissions by 2030 in line with the EU 2030 Framework.
>
> **RPO 7.32**: With the assistance and support of the Climate Action Regional Offices, local authorities shall develop, adopt and implement local climate adaptation and mitigation strategies which shall address issues including local vulnerability to climate risks and identify and prioritise actions, in accordance with the Guiding Principles of the National Adaptation Framework, National Mitigation Plan.

According to the RSES, the Dublin and Eastern Regions are a major load centre on the Irish electricity transmission system; specifically, approximately one third of total electricity demand is located in these regions. Having regard to projected population and economic growth in the eastern region, the RSES notes that the increasing demand for electricity in the region must be addressed in a way which balances the need for a significant shift towards renewable energy and enabling resources to be harnessed in a manner consistent with the principles of proper planning and sustainable development. With this in mind, the following objectives have been outlined:

- Facilitating the provision of appropriate renewable energy infrastructure and enabling technologies;
- Expansion and upgrading of the grid with the aim of increasing the share of variable renewable electricity;
- Onshore wind, bioenergy, solar and offshore energy;
- Moving from carbon intense fossil fuel generation to lower emissions fuels such as natural gas; and
- The need to ensure sufficient electricity to meet increased demand.

The RSES supports an increase in the amount of new renewable energy sources in the Region, including provisions for wind energy (both onshore and offshore), biomass, and solar photovoltaics and solar thermal, both on buildings and at a larger scale on appropriate sites in accordance with National policy and the Regional Policy Objectives outlined in this Strategy. The Proposed Development would facilitate a renewable energy project which would contribute to increasing the levels of renewable energy supply in a manner consistent with the proper planning and sustainable development of the area/region and would therefore be consistent with the provisions of the RSES.

The key drivers for the development and implementation of new infrastructure within the region are climate action and environmental sustainability. In this context, the RSES notes the following on the theme of infrastructure:

> *"The sustainable growth of the Region requires the provision of services and infrastructure in a plan led manner to ensure that there is adequate capacity to support future development. High-quality infrastructure is an important element of a modern society and economy, it provides essential functions and services that support societal, economic and environmental systems at local, regional and national levels."*

As noted above, a 'secure and resilient' supply of energy is critical to a well-functioning region. As population projections are set to increase into the future for the EMRA, the demand for energy and associated infrastructure is set to increase. To meet the State's energy targets, in addition to regional demand, the RSES states that the region will need to better leverage natural resources to increase our share of renewable energy. Relevant to the Proposed Development, there is an established tradition of energy production in the Midland counties by state agencies; however, key planning, environmental and commercial issues are dictating the wind down of traditional fossil fuel powered stations, such as peat fired power plants (Shannonbridge and Lough Ree Power Stations) in these counties. The subsequent diversification of energy production within the region towards green energy, such as wind, solar and biomass, will require the progressive and strategic development of a different form of energy grid. The RSES also emphasises that it will also be necessary to ensure more geographically focused renewables investment to minimise the amount of additional grid investment required, for example through co-location of renewables and associated grid connections.

The RSES has identified a number of key RPOs which have been designed to ensure the development of the energy networks in a safe and secure way to meet projected demand levels, to meet Government Policy, to ensure a long-term, sustainable and competitive energy future for Ireland to transition to a low carbon economy by 2050:

> **RPO 10.20**: Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. Including the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.
>
> **RPO 10.22**: Support the reinforcement and strengthening of the electricity transmission and distribution network to facilitate planned growth and transmission/ distribution of a renewable energy focused generation across the major demand centres to support an island population of 8 million people, including:
> - Facilitate the delivery of the necessary integration of transmission network requirements to allow linkages of renewable energy proposals to the electricity transmission grid in a sustainable and timely manner

The Proposed Development is in accordance with RPO 10.20 and RPO 10.22 as it will provide underground cabling to facilitate the connection of the proposed Coole Wind Farm to the national electricity grid, and will include an upgrade to the existing Mullingar substation, which will contribute to both national energy generation targets, as well as addressing the country's and the midlands region's over-dependence on imported fossil fuels and carbon intensive energy sources.

2.4.2.2 Westmeath County Development Plan 2014 – 2020

The Westmeath County Development Plan 2014 – 2020 provides the strategic framework for land-use planning in the county. The Plan sets out the Vision and Strategic Aims for the county, which are supported by a number of policies and objectives. In relation to energy it is an aim of the County

Development Plan *"to support and provide for the development of indigenous energy resources, with an emphasis on renewable energy supplies"*.

Section 10.5.2 of the Plan states the following:

- The preferred locations for large scale energy production, in the form of wind farms, is onto cutover cutaway peatlands in the county subject to nature conservation and habitat protection requirements being fully addressed.

Section 10.6 of the Plan sets out the relevant policies and objectives of Westmeath County Council in relation to large-scale wind energy projects, as follows:

- Policy P-WIN2: To strictly direct large-scale energy production projects, in the form of Wind Farms, onto cutover cutaway peatlands in the county, subject to environmental, landscape, habitats and wildlife protection requirements being addressed. In the context of this policy, industrial scale/large-scale energy production projects are defined as follows: Projects that meet or exceed any of the following criteria:

    - *Height: over 100 m to blade tip, or*
    - *Scale: More than five turbines*
    - *Output: Having a total output of greater than 5 MW*

In the context of the Westmeath County Development Plan and specially Policy P-WIN2, the Proposed Development is classed as an industrial-scale or large-scale wind energy project and is primarily located on cutover cutaway peatland which is in line with the requirements of the County Development Plan in relation to the preferred locations for wind farms. Turbines T1 to T4, and T6 to T13 are all located on cutover cutaway peatland, while T5 and T14 are located in areas of coniferous forestry and T15 is located within an area of agricultural (rough grazing) land.

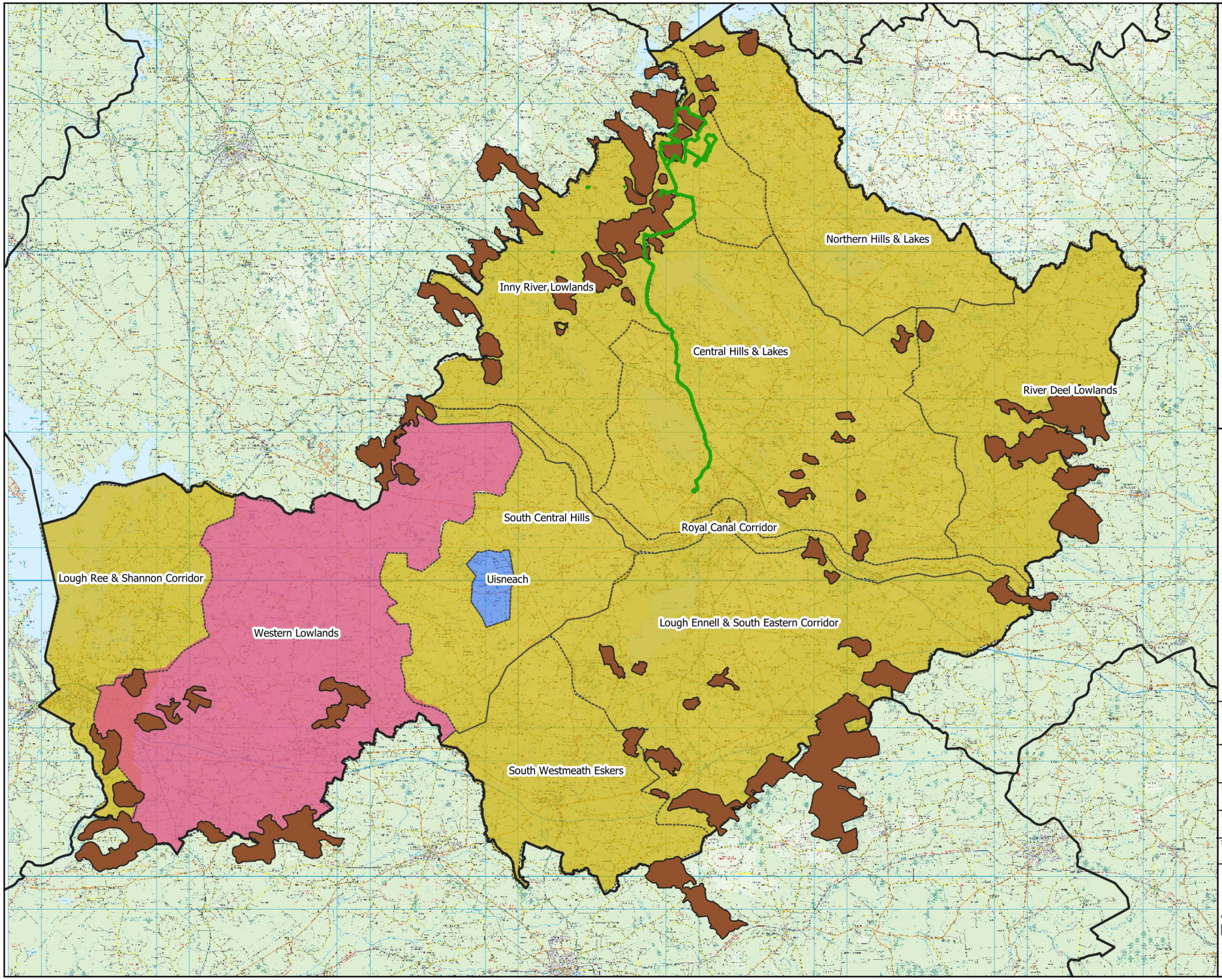
- Policy P-WIN3: To ensure the siting and development of wind turbines is carried out in accordance with the requirements of the DoEHLG Wind Energy Development Guidelines 2006, and as otherwise amended.

- Objective O-WIN1: To prepare and implement a Management Plan for the Industrial Peatlands in the county, in consultation with stakeholders and adjacent Local Authorities, during the lifetime of the Plan. Said plan shall focus on recreational opportunities, renewable energy, hydrological and ecological considerations and shall be subject to environmental assessment and the requirements of Article 6 of the Habitats Directive.

Map 04 in Volume 2 of the County Development Plan presents the Wind Energy Development map for Co. Westmeath. This map is based on the Landscape Character Assessment map for the County, which defines 11 no. distinct Landscape Character Areas (LCAs). Each LCA is classified by the Plan in terms of its capacity for wind energy development, according to the following terms:

- Low Capacity: 10 no. LCAs
- No Capacity: 1 no. LCA; Uisneach

All but one LCA of the county are currently classified as 'Low Capacity' for wind energy development. The Inny River Lowlands LCA, in which the Proposed Development site is located, is one of the 10 No. LCAs classified as 'Low Capacity' for wind energy development, as shown in Figure 2-1. The Inny River Lowlands LCA is described in the Plan as comprising *"the low-lying ground around the Inny River from Finnea to Ballynacarrigy and the Royal Canal including pastoral landscapes, extensive areas of cutaway bog, industrial peat production and conifer plantations"*.



Map Legend

- EIAR Site Boundary
- Peatlands
- County Boundary

Westmeath County Development Plan - Wind Energy Strategy

- Westmeath Low Wind Capacity (2015-2020) (draft 2021-2027)
- Westmeath No Wind Capacity (2015-2020) (draft 2021-2027)
- Westmeath Medium Wind Capacity (draft 2021-2027)
- Westmeath Landscape Character Areas 2015-2020 (draft 2021-2027)

N

Drawing Title: Westmeath Wind Energy Strategy, Landscape Character Areas & Peatlands

Project Title: Coole Wind Farm, Co. Westmeath

Drawn By	Checked By
EC	MW
Project No.	Drawing No.
200445	Figure 2-1
Scale	Date
1:300000	10.01.2021

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In relation to cutover cutaway peatlands as the preferred locations for 'industrial-scale' wind farms in Co. Westmeath, Section 10.5.2 of the County Development Plan states:

> *"The National Spatial Strategy refers specifically to the many worked out bogs in the Midlands, as being highly suited to wind energy development at a significant enough scale to support ancillary manufacturing, servicing and development activities.*
>
> *Furthermore, the Midland Regional Planning Guidelines 2010-2022 acknowledge the potential of the peatlands and associated cutaway areas to accommodate large scale energy production in the form of wind farms and bio-energy fuel sources. With a strong history of energy production and an extensive electricity transmission network in place, the potential exists in such peatland areas for a smooth transition to renewable energy sources. In addition the RPG's support the preparation of a Holistic Management Plan that will address the future uses of worked out industrial peatlands.*

The siting of the Proposed Development primarily on cutover cutaway peatland is recognised within the Inny River Lowlands LCA as 'extensive areas of cutaway bog' and therefore in line with the requirements of the County Development Plan in relation to preferred sites.

On the 24th April 2017, Westmeath County Council adopted Variation no. 2 of the County Development Plan 2014-2020, and was formerly incorporated into the Plan on the 19th of May, 2017. The variation made an amendment to the wind energy strategy for the council by inserting planning policy P-WIN 6 into Section 10.6 of the County Development Plan. P-Win 6 provides for the following separation distances between wind turbines and residential dwellings.

- **"500 metres**, where height of the wind turbine generator is greater than 25 metres but does not exceed 50 metres.
- **1000 metres**, where the height of the wind turbine generator is greater than 50 metres but does not exceed 100 metres.
- **1500 metres,** where the height of the wind turbine generator is greater than 100 metres but does not exceed 150 metres.
- **More than 2000 metres**, where the height of the wind turbine generator is greater than 150 metres."

In considering the variation submissions were made by the Department of Housing, Planning, and Local Government. In its submission the Department noted that the Variation was significantly in conflict with national and regional policy objectives to support the development of wind energy as a crucial component of meeting Irelands commitments to reducing greenhouse gas emissions and increasing renewable energy resources, furthermore it was considered that the imposition of such set-backs would be impractical and premature pending the issuing of revised Wind Energy guidelines following the current national review process. The Chief Executive of the Planning Authority in his report on the variation considered the variation to be *"seriously in conflict with national and regional policy,"* ... and he strongly recommended that the Councillors would not proceed to adopt it. Notwithstanding this recommendation, the Councillors voted to proceed with the Variation and it was subsequently adopted. The provisions of this variation of the Plan and its consideration in relation to the current proposal are further discussed in Section 2.4.2.1 below.

The wording of the variation does not specify the reasons for its inclusion in the County Development Plan and is not based on scientific evidence. However, it can be assumed by the reference to separation distances from residential properties that the primary reason is the protection of residential amenities. In this regard, the proposed wind farm development has been designed in accordance with national guidelines, and will not have an adverse impact on residential amenity, human beings, population or human health. The Proposed Development layout has been developed in adherence with current national policy and the detailed assessments on noise, shadow flicker, landscape, human beings, population and human health demonstrate that the proposal will not give rise to significant adverse impact on residential amenities.

The matter of separation distances was fully considered by An Bord Pleanála in their consideration of the 13 turbine wind farm development previously proposed at this location under the provisions of PL. 300686 (Pl. Ref. 17/6292). The inspector in their report concluded that the proposed development could be considered acceptable in principle in terms of policy context and noted the following in relation to Westmeath County Development plan separation distances:

> *"The setback distances required under Policy P-WIN 6 of the Development Plan are at variance with national guidelines set out in the WEDG, which remain statutory guidance under Section 28 of the Act. The proposed windfarm would be compatible with European, National and regional planning and renewable energy policy, as set out in sections 5.1 to 5.3* [of the inspector's report] *above and it would contribute to the achievement of European and national renewable energy targets. I am satisfied that the Proposed Development is situated in a suitable area for wind energy development, including tall turbines, and the Proposed Development would comply with national strategic objectives and policies in maximising Ireland's renewable energy resources and supporting Ireland's transition to a low carbon economy."*

The Board in granting permission for the previous application noted the provisions of the County Development plan but considered that permission should be granted notwithstanding the stated separation distances as the proposed development would, inter alia, make a positive contribution to the implementation of Irelands national strategy policy on renewable energy, have an acceptable impact on the landscape, not seriously injure the residential or visual amenities of the area, and would be in accordance with the proper planning and sustainable development of the area.

2.4.2.3 Draft Westmeath County Development Plan 2021-2027

Westmeath County Council has commenced the preparation of a new County Development Plan (2021-2027). Public consultation on the Material Amendments to the draft plan closed in January 2021.

Policy CPO 10.135 of the Draft Westmeath County Development Plan 2021-2027 maintains that the preferred locations for large scale energy wind farms is onto cutover cutaway peatlands in the County, subject to nature conservation and habitat protection requirements being fully addressed. In addition, the Draft Plan has transposed in full Variation no. 2 of the County Development Plan 2014-2020, as Policy CPO 10.132 which maintains the existing separation distances regarding wind farm design.

In their evaluation of the Draft Plan, the Office of the Planning Regulator acknowledges that while there is broad policy support for renewable energy use and generation, policy objective CPO 10.132 is deemed to be contrary to government policy on wind energy development having regard to Ministerial guidance on wind farm development and in particular the inclusion of onerous separation distances between wind turbines and residential dwellings.

In this regard 'Recommendation 6' of their evaluation advises that *'"The planning authority is required to remove policy objective CPO 10.132 in its entirety from Chapter 10 of the draft development plan as the inclusion of such mandatory separation distances between wind turbines and residential dwellings would restrict the potential for wind farm development in the county, would undermine other policy objectives supporting wind farm development and be contrary to national policy and Ministerial guidance on wind farm development"*

Notwithstanding the recommendation, Elected Members of the Local Authority voted to retain CPO 10.132 in the County Development Plan.

2.4.2.4 Other County Development Plans

The Proposed Development is located exclusively within the administrative boundary of Westmeath County Council; nonetheless, the Longford county boundary partially borders the Proposed Development site and is therefore taken account of here.

The Longford County Development Plan 2015 – 2021 recognises that the county provides good opportunities for the harnessing of wind energy, and states that the wind energy potential available within the Council is 3,120 MW of power per annum. The Plan states that in determining applications for wind farm developments consideration will be given to *'Wind Energy Guidelines for Planning Authorities'* (DOEHLG 2006, or any relevant updates). The Longford County Development Plan also contains a map which sets out the County's Areas of Wind Farm Potential, and designates non-preferred and preferred locations.

Policy WD 2 of the Plan states:

> *"Proposals for large scale industrial wind farm developments shall be directed to areas of cutaway bogs subject to the following;*
>
> - *Dependent on the completion of an investigation demonstrating suitability of the areas,*
> - *The preparation of revised Wind Energy Development Guidelines and the Renewable Energy Export Policy and Development Framework,*
> - *Compliance with the necessary environmental assessments."*

Although the Proposed Development site lies outside the functional area of the Longford County Plan, the proposal respects the general approach set out in the Plan and the Proposed Development is not located in the vicinity of any areas that have been designated as "Non-preferable locations" for wind farm development within Co, Longford. The closest such area lies approximately 10 kilometres northwest of the current proposal.

2.4.3 Other Relevant Guidelines and Policy

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

In July 2017, the Department of Housing, Planning, Community and Local Government (DoHPCLG) published *'Interim Guidelines for Planning Authorities on Statutory Plans, Renewable Energy and Climate Change'* under Section 28 of the Planning and Development Act 2000.

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

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

planning authority in a development plan or local area plan would create a significant limitation or constraint on renewable energy projects, including wind turbines, within the administrative area of the plan."

2.4.3.2 Department Circular PL5/2017

On the 3rd of August 2017, the Department of Housing, Planning and Local Government issued Circular PL5/2017 to provide an update on the review of the wind energy and renewable policies in Development Plans, and the advice contained within a previous Departmental Circular PL20-13.

Circular PL20-13 advised that local authorities should defer amending their existing Development Plan policies in relation to wind energy and renewable energy generally as part of either the normal cyclical six-yearly review or plan variation processes and should instead operate their existing development plan policies and objectives until the completion of a focused review of the Wind Energy Development Guidelines 2006. The new circular (PL05/2017) reconfirms that this continues to be the advice of the Department.

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

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

2.4.3.3 DoEHLG Wind Energy Guidelines 2006

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

Each wind project has its own characteristics and defining features, and it is therefore impossible to write specifications for universal use. Guidelines should be applied practically and do not replace existing national energy, environmental and planning policy. The Department of the Environment, Community and Local Government published proposed revisions to the guidelines in December 2013 as part of a targeted review relating to Noise, Proximity and Shadow Flicker for discussion. The Department has since issued the Draft Revised Wind Energy Development Guidelines in December 2019 and the consultation period for the Draft Guidelines closed on the 19th of February 2020. The Proposed Development has been designed in accordance with the current wind farm guidelines while also being cognizant of the provisions of the Draft Wind Energy Guidelines 2019. Should the revised Wind Energy Development Guidelines be adopted in advance of a planning decision being made on the Proposed Development, with current noise and shadow flicker thresholds being amended, the Proposed Development will comply with revised noise and shadow flicker requirements by implementing mitigation through the use of the turbine control systems.

2.4.3.4 Draft Revised Wind Energy Development Guidelines 2019

The Department of Housing, Planning and Local Government published the Draft Wind Energy Guidelines (referred to as the Draft Revised Guidelines) in December 2019 and these Draft Guidelines were under public consultation until 19th February 2020. Following the previous 2013 consultation and subsequent detailed engagement between the relevant Government Departments, a "preferred draft approach" to inform and advance the conclusion of the review of the 2006 guidelines was announced in June 2017. The current guidelines in force remain the 2006 guidelines, however it is acknowledged that the draft guidelines may be adopted prior to a decision issuing in relation to the current proposal, and accordingly in so far as is practicable the provisions of the Draft Guidelines have informed the design process for the current proposal.

The Draft Revised Guidelines recognise that the proper planning and sustainable development of areas and regions must be taken into account when local authorities prepare their development plans and assess planning applications, irrespective of the significant role renewable energy has to play in tackling climate change. The Draft guidelines also acknowledge that *"In broad terms, Ireland must double the level of output from the wind energy sector to meet its targets, which can be achieved, on-land through a combination of both upgrading existing wind energy development sites with newer more efficient turbines and developing new projects."*

The Draft Revised Guidelines note that potential impacts of wind energy development proposals on the landscape, including the natural and built environment, must be considered along with the legitimate concerns of local communities. With this in regard, and in line with the previously stated "preferred draft approach", the 2019 Draft Guidelines primarily focus on addressing a number of key aspects including, but not limited to:

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

At time of writing, the Draft Guidelines are not yet in force, and the relevant guidelines remain those published in 2006. Notwithstanding this, however, due to the timelines associated with the planning process for renewable energy projects it is possible that a version of the draft guidelines may be finalised during the consideration period for the current Proposed Development.

Should the revised Wind Energy Development Guidelines be adopted in advance of a planning decision being made on the Proposed Development, with current noise and shadow flicker thresholds being amended, the Proposed Development will comply with revised noise and shadow flicker requirements by implementing mitigation through the use of the turbine control systems. Along with the commitment made for the permitted development, Coole Wind Farm Ltd continue to commit to exceeding the existing daily and annual shadow flicker guideline requirements and commit to zero shadow flicker at occupied residential receptors within 10 rotor diameters of the Proposed Development. The Proposed Development is also capable of achieving a four times tip height setback to residential receptors. As detailed above, the closest occupied dwelling (i.e. dwelling not involved with the Proposed Development) is located at a distance of approx. 700 metres from the nearest proposed turbine location.

In relation to the grid connections the draft revised guidelines state that *"In general, it is considered that underground grid connections for wind energy projects are the most appropriate environmental and/or engineering solution, particularly in sensitive landscapes where the visual impacts need to be minimised. Therefore, this should be the default approach."*

The revised Guidelines also state that where undergrounding is being pursued, proposals should demonstrate that environmental impacts are minimised including the following:

- Habitat loss as a result of removal of field boundaries and hedgerows (right of way preparation) followed by topsoil stripping (to ensure machinery does not destroy soil structure and drainage properties);
- Short to medium term impacts on the landscape where, for example, hedgerows are encountered;
- Impacts on underground archaeology;
- Impacts on soil structure and drainage;
- Impacts on surface waters as a result of sedimentation.

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

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

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

Following on from the IWEA published Best Practice Guidelines in March 2012, the Association extended its guidance with the publication of this Best Practice in Community Engagement and Commitment. IWEA and its members support the provision of financial contributions by wind farm operators to local communities and have sought to formulate best practice principles for the provision of a community commitment. The document sets out IWEA's best practice principles for delivering extended benefits to local communities for wind farm developments of 5 Megawatts (MW) or above. Best Practice Principles of community engagement when planning the engagement strategy and preparing associated literature are also outlined in the document. The aim of these guidelines is to ensure that the views of local communities are taken into account at all stages of a development and that local communities can share in the benefits.

Further details on the community engagement that has been undertaken as part of the Proposed Development are presented in Section 2.8.4 below.

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

In December 2016, the Department of Communications, Climate Action and Environment (DCCAE) issued a Code of Practice for wind energy development in relation to community engagement. The Code of Good Practice is intended to ensure that wind energy development in Ireland is undertaken in adherence with the best industry practices, and with the full engagement of local communities. Community engagement is required through the different stages of a project, from the initial scoping, feasibility and concept stages, right through construction to the operational phase. The methods of engagement should reflect the nature of the project and the potential level of impact that it could have

on a community. The guidelines advise that ignoring or poorly managing community concerns can have long-term negative impacts on a community's economic, environmental or social situation. Not involving communities in the project development process has the potential to impose costly time and financial delays for projects, or prevent the realisation of projects in their entirety.

2.4.3.8 Commission for Regulations of Utilities: Grid Connection Policy

The Commission for Regulation of Utilities (CRU) (previously the Commission for Energy Regulation (CER)) launched a new grid connection policy in March 2018 for renewable and other generators, known as ECP-1, which seeks to allow "shovel ready" projects that already have a valid planning permission, connect to the electricity network. ECP-1 is the first stage of the CRU's development of enduring connection policy in Ireland. The principal objective which guided this decision was to allow those projects which are 'shovel ready' to have an opportunity to connect to the network, along with laying the foundations for future, more regular batches for connection. In August 2018, the applicants for new connection capacity under ECP-1 were published.

ECP-2 is the second stage of the CRU's development of enduring connection policy in Ireland. In June 2020 the CRU published their decision on ECP-2 which set the policy for at least three annual batches of connection offers (ECP 2.1, ECP 2.2 and ECP 2.3) with applications to open in the month of September each year. To accompany this, the system operator published a joint ruleset detailing the rules around applications and the connection offer process.

A grid connection for the project has been sought under the Enduring Connection Policy known as ECP2.1 which opened in September 2020. The Commission for Regulation of Utilities (CRU) develop the Enduring Connection Policy in Ireland and ECP2 is the second stage of this policy. In November 2020, Coole Wind Farm Ltd received confirmation of their successful application and acceptance into the ECP2.1 process. The grid connection offer for Coole Wind Farm was issued January 2021 for a Maximum Export Capacity of 88MW with a connection node at Mullingar substation.

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

2.4.3.9 Renewable Electricity Support Scheme (RESS)

On the 24th July 2018, the Department of Communications, Climate Action and Environment announced the Government approval for the new Renewable Electricity Support Scheme (RESS). The RESS incentivises the introduction of sufficient renewable electricity generation to deliver Ireland's contribution towards the EU wide 32% RES target, out to 2030. This new scheme replaces the previous support mechanism for renewable electricity known as the Renewable Energy Feed-in Tariff (REFIT) and marks a shift from guaranteed fixed prices for renewable generators to a more market-oriented mechanism i.e. auction based scheme where the cost of support will be determined by competitive bidding between renewable energy generators. A Community-led category and community capacity building measures within the scheme will provide opportunities for communities to play their part in Ireland's renewable energy transition. The RESS is an auction-based scheme which invites renewable electricity projects to bid for capacity and receive a guaranteed price for the electricity they generate.

The RESS is open to New Projects which rely on the following equipment to produce electricity:

- Onshore wind
- Offshore wind
- Onshore energy projects using solar thermal or solar photovoltaic technology
- Hydro
- High efficiency CHP boilers (fuelled by waste, biomass or biogas)

The Terms and Conditions for the first competition (RESS 1:2020) were published in February 2020 and provide support to renewable electricity projects in Ireland. The RESS 1 Auction took place in July 2020. It is anticipated that the Proposed Development will apply for support under the RESS2 which is expected in November 2021.

2.4.3.10 Forest Service Guidelines

The Forest Service is responsible for ensuring the development of Forestry within Ireland in a manner and to a scale that maximises its contribution to national socio-economic well-being on a sustainable basis that is compatible with the protection of the environment. The forestry works (felling/planting) associated with the Proposed Development will carried out under the relevant guidance from the Forestry Service.

2.4.3.11 Summary of Compliance with Other Relevant Guidelines

The Proposed Development has been informed by the foregoing Guidelines and has incorporated the relevant policies and objectives as contained therein. Accordingly, the Proposed Development is consistent with the overarching purpose and principles of the Ministerial and other Guidelines outlined above.

2.5 Planning History

This Section of the EIAR sets out the relevant planning history of the proposed wind farm site, planning applications in the vicinity of the site and other wind energy applications within the wider area.

2.5.1 Proposed Wind Farm Site

A review of Westmeath Council Planning Register shows the following planning applications lodged within the site of the currently proposed wind farm:

Forestry Entrances Pl. Ref. No. 98/1092

Planning application by Coillte Teo, for new forestry entrances. Permission was granted by the Planning Authority on the 03/12/98 subject to 2 no. conditions.

Permitted Coole Wind Farm Pl. Ref. No. 17/6292/ABP-300686-18

Coole Wind Farm Ltd. applied to Westmeath County Council in October 2017 for planning permission for the construction of a wind farm consisting of 13 no. wind turbines, upgrade of existing internal access roads and provision of new internal access roads, an on-site substation, underground cabling, temporary construction compound and all ancillary infrastructure. Permission was refused by the Planning Authority, however, the Board granted permission for the proposal following a first party appeal under PL25M.300686 in March 2019.

All elements of the permitted project, including an assessment of the proposed cable route were assessed as part of the EIS/EIAR submitted with the above application.

Grid Connection

A planning application for the electrical connection of the permitted Coole wind farm to the national grid which included for expansion of the above-mentioned onsite substation and upgrade works to the existing Mullingar substation was submitted to Westmeath County Council on 22nd May 2020 and was considered under Pl. Ref 20/6121. This application was lodged following An Bord Pleanála confirming that permission should be lodged with Westmeath after considering the S182A status or otherwise of the grid connection works under PL25M.304794. A Further Information Request (FIR) was issued by

Westmeath County Council on the 17th July 2020 in relation to that application. That application was subsequently withdrawn. A copy of the Further Information Request is included in Appendix 2-1 of this EIAR. Table 1-2 below provides a summary of the various further information points that were raised and references where these points have been dealt with within the EIAR and application documentation.

In preparing this EIAR for the Proposed Development, the applicant and design team have considered in full the previous applications for both Coole Wind Farm and the Coole Grid Connection, along with the Further Information Request that was issued in July 2020.

Table 2-1 Summary List of Grid Connection Further Information Request items

No.	FI Request Points – Key Requirements	Where Addressed in EIAR
1 (i)	The Department of Culture, Heritage and the Gaeltacht have, in their submission of the 25th June 2020, raised several concerns in respect of the EIAR submitted in respect of the Proposed Development. Accordingly, the applicant is requested to submit a response to the issues set out in this submission and address the following: It is noted that the EIAR data refers to surveys carried out over 2 days within the winter months and to additional survey work which is considered to be out of date for the purposes of assessing this application. Applicant is requested to provide updated surveys for same and address current limitations in respect of identifying signs of presence, absence or frequency and time of year which is integral to the outputs of these field surveys.	Chapter 6: Section 6.4.3.1 - Multi-disciplinary Walkover Surveys (as per NRA Guidelines, 2009)
(ii)	Applicant to ensure that all surveys are undertaken within the appropriate time, most notably in relation to strictly protected Annex IV species such as Otter and Bat species.	Chapter 6: Section 6.4.3.4.2 – Otter Survey Chapter 6: Section 6.4.3.5 – Bat Surveys
(iii) a)	Applicant is requested to provide further clarity in respect of peat depth surveys undertaken and the impacts of hydrology arising from the development proposed and address the following: The EIAR indicates that the installation will be within the road or verge of the road. Peat depths are recorded from 0.82 to 5.62metres. It is noted that the cable route is immediately adjacent to Lough Derravaragh NHA (000684) along two sections of the route and adjacent to Ballinafid lake and fen proposed NHA. The most northerly section at Lough Derravaragh is adjacent to raised bog habitat within the NHA, which includes part of Garriskil Bog SAC. Having regard to this, the applicant is required to address whether there will be an impact from the construction works on the hydrology of the NHA & pNHA from the excavation of peat and permanent installation of materials. The applicant is further requested to clarify whether the development works proposed will create a barrier to the hydrology post construction.	Chapter 9: Section 9.3.12 - Designated Sites and Habitats and Section 9.4.1.9 - Potential Hydrological Impacts on Designated Sites Appendix 9-4 – Cross Sections

b)	Applicant is requested to provide clarity in relation to the excavation material, in terms of transport and storage, including location of the storage compounds and an assessment of the potential for impacts resulting from storage of peat or mineral soils.	Chapter 4: Section 4.3.10.2 - Peat and Spoil Management, Section 4.7.3 - Construction Phase Monitoring and Oversight, and Section 4.8.7 - Grid Connection Cable Trench Appendix 4-2: Section 7.5 and 9 Appendix 4-8: CEMP Section 3.1.1.10 Grid Connection Cable Trench
c)	Lands associated with the substation site consists of a conifer plantation on peat substrate which may not be suitable for storage of cable route excavations material and rehabilitation of the substation site. Applicant is requested to address this matter for the consideration of the Planning Authority.	Chapter 4: Section 4.3.10.2 - Peat and Spoil Management, Section 4.7.3 Construction Phase Monitoring and Oversight and Section 4.8.7 - Grid Connection Cable Trench Appendix 4-2: Section 7.5 and 9 Appendix 4-8: Section 4.13 Outline Site Reinstatement Plan
(iv)	The survey of invasive species which has identified three locations along the cable route where invasive species occur and mitigation measures presented are noted. The applicant is requested to clarify the manner in which all imported material will be checked by a suitably qualified ecologist, having regard to a reference made within the EIAR that an ecologist is only present once per month at the substation site and along the cable laying route.	Chapter 6: Section 6.6.3.3 - Pre-Construction General Best Practice Appendix 4-8 CEMP Section 4-10
(v)	A portion of the road verge habitat includes GS2 Dry Meadows and Grassy Verges. The EIAR to assess if any the GS2 habitats, at the appropriate time of year, conform to the EU Annex 1 habitat 'lowland hay meadows' which is given a BAD status in the NPWS (2019) 'The status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview. Unpublished NPWS Report.'	Chapter 6: Section 6.5.2.1.3 - Habitats on the Grid Connection Route
(vi)	The EIAR to assess disturbance to nesting bird species along the hedgerows which align the development proposed.	Chapter 7: Section 7.8.4 - Effects Associated with the Grid Connection and Turbine Delivery Route

(vii)	The EIAR to assess the potential impacts for nesting habitat of bird species in the bridge structures.	Chapter 7: Section 7.8.4 - Effects Associated with the Grid Connection and Turbine Delivery Route
2. a)	The Department of Culture, Heritage and the Gaeltacht (Development Applications Unit) have, in their submission of the 25th June 2020 raised concerns in relation to information submitted within the Natura Impact Statement (NIS) submitted. Applicant is requested to address the following: The NIS cites the Stage 1 screening for appropriate assessment report and concludes that likely significant impacts could not be excluded from following Natura 2000 sites: • Lough Derravaragh SPA (004043) • Lough Iron SPA (004046) • Lough Owel SAC and SPA (000688 & 004047) • Lough Ennell SAC and SPA (000685 & 004044) The description of the location of Garriskil Bog SAC (000679) as being sited 60m west of the proposed grid connection is incorrect (refer screening report). A section of Garriskil Bog SAC is within Lough Derravaragh NHA (000684) and the proposed cable route is adjacent to this NHA. The likely significant impacts in terms of hydrological impacts on the NHA require assessment as to whether the project will in turn impact on this section of Garriskil Bog SAC adjacent to the River lnny which is approximately 230 metres from the cable route. Furthermore, Scragh Bog SAC which is sited 300m east of the cable route has been excluded from further assessment on the basis of no source-pathway receptor chain has been identified. Applicant is requested to provide clarify on hydrological impacts from the Proposed Development, if any.	Chapter 6: Section 6.5.1.1.1, Table 6-3 *Identification of European and Nationally designated sites within the Likely Zone of Impact*
b)	The 'Desktop study Results' description is inaccurate in terms of the location of the cable route with respect to Lough Derravargh and there is no map provided with the Natura Impact Statement referencing the cable route location to the proximity of the designated sites. Applicant is advised that it is useful to have a map to illustrate this within the NIS itself rather than referencing the appendix documentation and in this context, the NIS should in essence be a standalone document.	Chapter 6: Section 6.5.1.1.1 Figure 6-2 Proposed Development in relation to European Sites within a 15km buffer (also included as Figure 2-1 in the NIS as part of this application).

	Furthermore, applicant is requested to reference both the Article 12 Birds and Article 17 Habitats reports within the NIS. The NIS concludes that there will be no direct adverse effects on any European site from the development, however it identifies that indirect adverse effects may be caused to the listed designated sites from deterioration of water quality and disturbance in the SACs and SPA's and presents mitigation measures for these indirect effects.	Natura Impact Statement (NIS): Section 4.1.1. - Desk Study methodology Natura Impact Statement (NIS): Appendix 1 : Appropriate Assessment Screening Report (AASR)
c)	Concerns are expressed that the mitigation measures presented in Section 5 of the NIS and as outlined in the CEMP, in the appendix, are considered general mitigation measures for the project as a whole. Mitigation measures must be directly linked to the likely impacts identified in the appropriate assessment and can only be defined once the impacts are fully described and assessed. Full details of mitigation measures to be included in the project description and drawings, with method statements provided. It must be demonstrated that mitigation measures will be delivered in full, and at the appropriate time, at all post-consent stages, and that they will be effective in any specific locations or set of conditions, the necessary analysis should be presented to demonstrate how the mitigation measures will avoid or remove the risks of adverse effects on the integrity of European sites that have been identified in the NIS so that the appropriate assessment is undertaken in the context of the predicated residual effects. Applicant is requested that the provision of specific mitigation measures to avoid adverse impacts on water quality to the European sites are outlined for each of those locations, for example the water crossings, in order that these may then be specifically included in the CEMP highlighting that these are designed to prevent adverse effects on the specific European site at each location. Similarly with respect to the disturbance mitigation presented for bird species, the NIS states that, "Bird species are anticipated to have already habituated to the heavily trafficked road corridor and ongoing peat an agricultural activities in the wider area." The mitigation measures specified in Section 5 and the CEMP are general noise related mitigation measures. Applicant is requested that the mitigation measures proposed should be clear, concise and address any	Chapter 4: Section 4.7.1 - Construction Timing and Section 4.7.2 - Construction Sequencing Chapter 7: Section 7.9.2 - Mitigation During Construction, Operation and Decommissioning, and Section 7.10.1 - Commencement and Pre-Construction Monitoring Chapter 16: Section 16.2 Natura Impact Statement (NIS): Section 5.2.2.3 - Construction Phase Mitigation Appendix 4-8 CEMP: Section 8 Mitigation Proposals

	cumulative disturbance impact from the development works, such as duration of the works along sections of the road adjacent to the SPAs. Timing of the work has not been considered in the mitigation with respect to the listed wintering bird species using Lough Derravarragh and surrounding areas, which would avoid potential disturbance. Applicant is requested to address this matter.	
3.	The proposed cabling extends along approximately 3.5km of national road. The applicant is requested to liaise with Til and the Planning Authority in relation to Til's requirements associated with the laying and re-instating works for the undergrounding of cables along this national road.	Chapter 2: Section 2.6.2 – Scoping Responses
4 (a)	(a) In the interest of transparency, the applicant is requested to provide the rationale for increasing the size of the substation at Camagh, which was permitted by An Bard Pleanala under AMP-300686-18 and which is integrally linked to the subject application.	Chapter 4: Section 4.3.5 - Power Output, and Section 4.3.11 -Onsite Electricity Substation
(b)	Applicant is further requested to provide clarity by way of highlighting on revised plans all alterations proposed to the previously approved substation at Carnagh and any alterations proposed to lrishtown substation	Chapter 4: Figure 4-12 Onsite Substation Layout Planning Application Drawing 200445 - 39

2.5.2 Applications in the Vicinity of the Proposed Wind Farm Site

The majority of planning applications in the immediate vicinity of the proposed wind farm site are related to the provision and/or alteration of one-off housing and agricultural developments. Applications which are not of an individual domestic or agricultural nature in the vicinity of the EIAR study area include the following:

Peat Operations

- **Pl Ref. 88/313**: Planning application to retain peat moss processing plant and buildings at Doon, Castlepollard. The planning authority granted planning permission on 10th February 1989.
- **ABP-307853-20** - Substitute Consent - Extra Time Westland Horticulture Limited due to be submitted 23rd day of November, 2020,
- **ABP 305835 –** Leave to Apply Substitute Consent by Westland Horticulturefor peat harvesting on lands at Lower Coole, Mayne, Ballinealoe and Clonsura County Westmeath was granted on 1st May 2020
- **ABP 307281-20** - Substitute Consent Application for Peat Extraction Mountdillon, Duil na Gun, Co. Westmeath, Milkernagh, Co. Westmeath and Co. Longford and Coolcraff, Co. Longford. Due to be decided 5th October 2020

Other Applications

- **Pl Ref. 11/2043**: Planning application relating to Turbotstown House for alterations to the existing return wing and associated south - east elevation as well as removal of later internal partition and the provision of a reversible enclosure of the basement stairwell to main house pantry including ancillary associated works to a building listed as a protected structure, No. 261. The planning authority granted planning permission on the 23rd September 2011 subject to 7 no. conditions.
- **Pl. Ref.81/699**: Planning application for erection of a 38kV sub-station at Tromra. The Planning Authority granted permission on the 29th October 1981.

2.5.3 Applications in the Vicinity of the Proposed Grid Connection Route

The proposed underground grid connection route is in the general vicinity of over 100 no. valid planning applications made to Westmeath County Council. The majority of these applications are for residential development and were lodged since the early 1980s. The proposed grid connection route is also immediately adjacent to and/or within the general vicinity of a range of consented commercial developments, particularly within Multyfarnham, and ancillary agricultural infrastructure. Of those applications submitted the following are of note:

Energy Infrastructure

- Planning Ref. 18/6063 - Planning Application for a ten-year permission for the construction of an energy storage facility, including an electrical substation building, battery modules, transformer/invertor station modules and ancillary infrastructure (Planning Ref. 186063),

located c. 220m west of the proposed grid connection route. The development was granted planning permission by Westmeath County Council in February 2019. This decision was subsequently appealed to An Bord Pleanála. An Bord Pleanála granted permission for the development in July 2019.

- Planning Ref. 81/699: Planning application for erection of a 38 kV sub-station at Tromra. The Planning Authority granted permission on the 29th October 1981.

Peat Operations

- Planning Ref. 88/313: Planning application to retain peat moss processing plant and buildings at Doon, Castlepollard. The planning authority granted planning permission on 10th February 1989.

Residential

- Planning Ref. 16/6001 - Planning Application for the development of 28 no. houses to be constructed in three phases. The planning authority granted planning permission in January 2017.

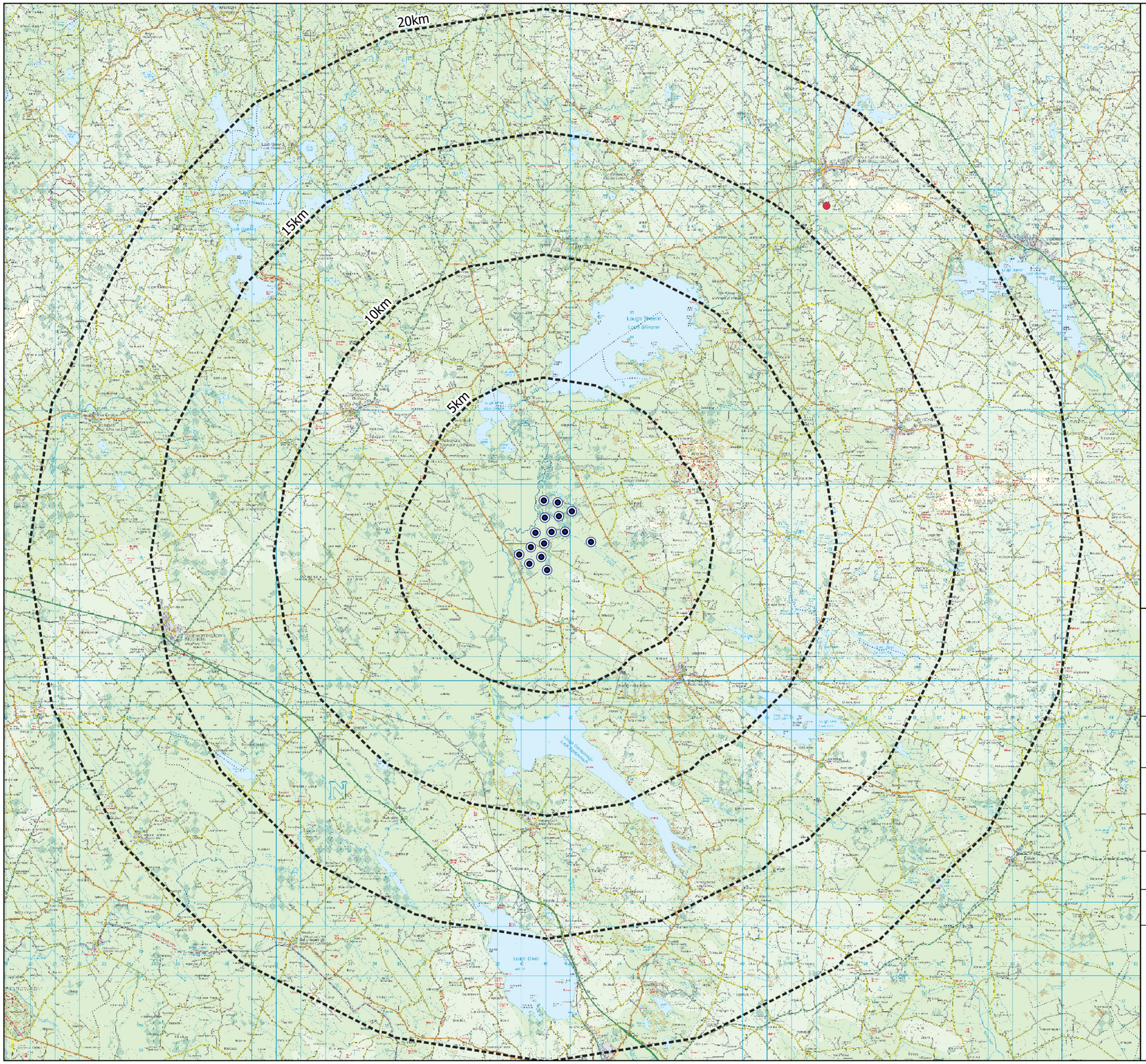
Community Facilities

There are several applications for community facilities, e.g. education and recreational facilities, located adjacent to or within general proximity of the proposed grid connection, as listed below. The majority of these applications have been submitted within the last 5 no. years.

- Planning Ref. 06/2334 - To remove existing prefabricated classroom and to extend existing school to provide a replacement classroom with toilets, staff room, resource room, wheelchair toilet facilities and a P.E. room. The Planning Authority granted permission for the Proposed Development in January 2007.
- Planning Ref. 10/2021 - To alter & extend part of the existing agricultural training collage buildings to provide a Cancer counselling and retreat centre and a suicide and training centre. The Planning Authority granted permission for the Proposed Development in August 2010.
- Planning Ref. 13/6091 - New single storey classroom extension (45sqm) to the rear of the existing building and the provision of a staff carparking area. The Planning Authority granted permission for the Proposed Development in February 2014.
- Planning Ref. 17/6116 - Change of use of a former agricultural yard to a horticultural based sessional training centre. The Planning Authority granted permission for the Proposed Development in November 2017.
- Planning Ref. 17/6112 - New single storey side extension (42.65 sqm) to the existing building comprising of a new classroom/toilet, disabled toilet and lobby, car-parking. The Planning Authority granted permission for the Proposed Development in July 2017.
- Planning Ref. 18/6174 - The installation of a multi-purpose playground unit. The Planning Authority granted permission for the Proposed Development in August 2018.
- Planning Ref. 18/6233 - A proposed sports and recreational development adjacent to the existing Community Centre and playing filed. Permission is also sought to upgrade the existing car parking area and to construct a new car parking area with a total number of 224 spaces and 2 no. bus parking bays. The Planning Authority granted permission for the Proposed Development in December 2018.

2.5.4 Other Wind Farm Sites

There is only 1 No. permitted wind turbine located within 20 kilometres of the proposed wind turbines, as shown in Figure 2-2. The relevant planning history of wind farm applications within the wider area is summarised below. This record lists the main relevant application in relation to the wind turbine applications. It is not intended to be exhaustive and list every application associated with the sites.



Map Legend

- Proposed Turbine Layout

Other Wind Farms

- Existing Ballyjamesduff Wind Farm (1 Turbine)

Drawing Title

Other Wind Farms within 20km

Project Title

Coole Wind Farm, Co. Westmeath

Drawn By	Checked By
EC	MW
Project No.	Drawing No.
200445	Figure 2-2
Scale	Date
1:150000	2021-03-16

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Website: ww.mkoireland.ie

2.5.4.1 County Westmeath

Dryderstown Wind Turbine

- **Pl Ref 12/2054**: Application by Reforce Energy Ltd. for a single electricity generating wind turbine of hub height up to 64m and rotor diameter up to 48m, a hardstanding, Control Building, Associated site roads, drainage & site works
- **Development Address:** Dryderstown, Delvin. The site is located approximately 21 kilometres southeast of the nearest proposed wind turbine.
- **Decision:** 1 no. turbine granted by the Planning Authority (Westmeath County Council) subject to 12 no. conditions.

Crowinstown Wind Farm

- **Pl. Ref. 08/2174:** Application by Gaelectric Developments Ltd.seeking to amend planning ref 03/2064 (An Bord Pleanála Ref 25C.205586) relating to the development of a wind farm comprising of 3 wind turbine generators, 1 control building, 1 control building compound, associated access roads and 1 meteorological tower. This amendment seeks to increase the height of the wind turbine generators from a hub height of 78m to 85m and the rotor diameter from 72m to 80m. This will result in a maximum rotor blade tip height of 125m previously 114m. In addition, this application seeks to amend condition 2 to allow the 20-year permission period to commence from the commissioning date of the wind farm rather than from the date of the grant which was 22nd of June 2004.
- **Development Address:** Townlands of Crowinstown Great, Delvin, Co. Westmeath The site is located approximately 24.9 kilometres southwest of the nearest proposed wind turbine.
- **Decision:** 3 no. turbines granted by the Planning Authority (Westmeath County Council) subject to 13 no. conditions.

Proposed Ballivor Wind Farm

- Bord na Móna is proposing to develop a wind farm within the Ballivor Bog Group located in Counties Meath and Westmeath. This project is currently undergoing pre-application consultation with An Bord Pleanála under the provisions of ABP 307471-20. The Proposed Development will be located on bogs within the Ballivor Bog Group in counties Meath and Westmeath, namely Ballivor, Bracklin, Carranstown, Lisclogher and Lisclogher West bogs. The site is located approximately 25.6 kilometres southwest of the nearest proposed Coole wind turbine.

Proposed Bracklyn Wind Farm

- Gaeltech Energy Developments Ltd is proposing to develop a wind farm of approximately 11 no. turbines in the townland of Bracklin, Co. Westmeath. The project is at the early design and consultation stage. The site is located approximately 24.9 kilometres southwest of the nearest proposed wind turbine.

2.5.4.2 County Cavan

Existing Ballyjamesduff Wind Turbine

- **Pl Ref 14/103ABP Ref. PL 02.243776:** Application by Liffey Energy for a development consisting of the erection of a single turbine with a hub height of 100m and rotor diameter of 103m, overall height not exceeding 152m and all associated site development works, including foundations, crane hardstanding, access track and underground cabling.

Also, the construction of 20kV switchroom building with a floor area 50sqm, and temporary alteration of existing factory entrance of the L30130.

- **Development Address:** Townlands of Cloggagh,Ballyjamesduff
  This site is located approximately 16.4 kilometres northeast of the the nearest proposed wind turbine.
- **Decision:** 1 no. turbines granted by the Planning Authority (Cavan County Council) subject to 11 no. conditions.

Proposed Ballyjamesduff Wind Turbine

- **Pl Ref 19/447 ABP Ref. PL 02.309478:** Application by Liffey Energy for a development consisting of the erection of a single turbine with a maximum height of 169m, associated access and reinstatement works including turbine foundation, hardstanding area, site access tracks, 1 no. temporary site entrance and underground electrical cabling.
- **Development Address:** Townlands of Kilquilly and Cloggagh, Ballyjamesduff
  This site is located approximately 16 kilometres northeast of the the nearest proposed wind turbine.
- **Decision:** Cavan County Council refused permission for the proposed on 22nd January 2021, however the application was appealed to An Bord Pleanála with the case due to be decided by 23rd June 2021.

2.6 Scoping and Consultation

2.6.1 Scoping

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

A detailed Scoping Document, providing details of the application site, the Proposed Development and the proposed scope of the EIAR, and inviting the comments and input of consultees, was prepared by MKO and circulated on the 31st August 2020. Prior to this, details of the proposed project were circulated to telecoms operators during August 2020, as part of the constraints mapping exercise for the site.

2.6.2 Scoping Responses

Table 2-2 presents a summary of all scoping responses received. Copies of the scoping responses are included in Appendix 2-2 of this EIAR. The recommendations of the consultees have informed the EIAR preparation process and the contents of the EIAR, as described in Table 2-3.

Table 2-2: Scoping Responses

No.	Consultee	Response
1	An Taisce	No response received to date
2	Broadcasting Authority of Ireland	No response received to date
3	Bat Conservation Ireland	No response received to date
4	BirdWatch Ireland	No response received to date
5	Commission for Communications Regulation	No response received to date
6	Department of Agriculture, Food and the Marine	Response Received on 5th November 2020
7	Department of Culture Heritage and Gaeltacht	No response received to date
8	Department of Communications, Climate Action & Environment	No response received to date
9	Department of Defence	Acknowledgement received
10	Department of Transport, Tourism & Sport	No response received to date
11	Eastern and Midland Regional Assembly	No response received to date
12	Eircom Ltd	No response received to date
13	EirGrid	No response received to date
14	Enet Telecommunications	No response received to date
15	Fáilte Ireland	Response received 2nd September 2020
16	Forest Service	No response received to date
17	Gas Networks Ireland	No response received to date
18	Geological Survey of Ireland	Response received on 2nd October 2020
19	Health Service Executive	Response received 14th October 2020
20	Iarnród Éireann	Response received 25th September 2020
21	Inland Fisheries Ireland	No response received to date
22	Irish Aviation Authority	Response received 14th September 2020
23	Imagine Network Services	No response received to date

24	Irish Peatland Conservation Council	No response received to date
25	Irish Red Grouse Association	No response received to date
26	Irish Raptor Study Group	No response received to date
27	Irish Water	No response received to date
28	Irish Wildlife Trust	No response received to date
29	Longford County Council	No response received to date
30	Meath County Council	Response received 25th September 2020
31	Meteor Mobile Communications Ltd.	No response received to date
32	National Transport Authority	No response received to date
33	Office of Public Works	Response received 11th November
34	Sustainable Energy Authority of Ireland	No response received to date
35	The Heritage Council	No response received to date
36	Three Ireland Ltd.	No response received to date
37	Transport Infrastructure Ireland	Response received on 6th January 2021 and 22nd January 2021
38	Údarás na Gaeltachta	No response received to date
39	Vodafone Ireland Ltd.	No response received to date
40	Waterways Ireland	No response received to date
41	Westmeath County Council – Planning Section	No response received to date
42	Westmeath County Council – District Manager Mullingar	No response received to date
43	Westmeath County Council – Roads Section	No response received to date
44	Westmeath County Council – Environment Section	No response received to date
45	Westmeath County Council – Water Services	No response received to date

Table 2-3 presents a summary of the key points from the scoping responses, and notes where they have been addressed in this EIAR. The scoping responses received were fully considered and issues raised were followed up through contact with the respondent where clarification was necessary and addressed throughout the EIAR.

Table 2-3: Review of Scoping Responses

No.	Consultee	Key Scoping Response Points	Addressed in EIAR
1	Department of Agriculture, Food and the Marine	If the Proposed Development will involve the felling or removal of any trees, the developer must obtain a Felling License from this Department before trees are felled or removed.	Chapter 4 Description: Section 4.3.16 Tree Felling and Replanting Appendix 4-6 Replanting Assessment
2	Fáilte Ireland	Provided a copy of Fáilte Ireland standard Guidelines for the Treatment of Tourism in an EIS which should be taken into account during preparation of the EIAR. The document highlights how tourism can be incorporated into different assessments throughout the EIAR.	Chapter 5 Population and Human Health: Section 5.3 Tourism
3	Geological Survey of Ireland	GSI provided details on their datasets which should be utilised as part of the assessment, <u>Geoheritage</u> The response notes that County Geological Sites (CGS) are being recognised and adopted under the National Heritage Plan and are now included in County Development Plans to ensure the recognition and appropriate protection of geological heritage within the planning system. The records show that there are 2 no. CGS located in the vicinity of the Proposed Development; 1) Lough Kinale and Derragh Lough, and 2) Rock of Curry and Hill od Mael. <u>Groundwater</u> Groundwater and Flood Risk Management need to be considered as part of the assessment. <u>Geohazards</u> GSI recommend that the potential for landslides are considered and assessed.	Chapter 8 Land, Land Soils and Geology: Section 8.3.6 Geological Heritage Sites Chapter 9 Hydrology: Section 9.3.6 Flood Risk Assessment Appendix 10-1 Flood Risk Assessment Chapter 4 Description of the Proposed Development: Section 4.3.13.1 Ground Investigations Appendix 4-4 AGEC Cable Route Survey Appendix 4-5 APEX Cable Route Geophysical Investigation Report Chapter 5 Population and Human Health: Section 5.5.5 Vulnerability of the Project to Natural Disasters and Major Accidents

		The response also makes reference to use of natural resources, and where relevant, should be discussed within the assessment.	Chapter 8 Land, Land Soils and Geology: Section 8.3.7 Peat Stability Assessment Appendix 8-1 Geotechnical and Peat Stability Assessment
4	Health Service Executive	› The HSE provided several guidance documents and reports to consider during preparation of the EIAR.	
		› The HSE also asked that early and meaningful public consultation is carried with the local community.	Chapter 2 Background: Section 2.6.4 Pub;ic Consultation
		› The EIAR should detail what will happen to the turbines once they have been decommissioned and how they will be recycled.	Chapter 4 Description: Section 4.11 Decommissioning
		› The EIAR should include a map and description of each of the turbines, substation and grid connection route.	Chapter 4 Description: Section 4.3 Development Components
		› The EIAR should note the opportunity for potential health gain as well as potential negative impacts.	Chapter 5 Population and Human Health: Section 5.5 Health Impacts of Wind Farms
		› An assessment of Consideration of Alternatives should be carried out.	Chapter 3 Reasonable Alternatives
		› The potential impacts due to noise and vibration, air quality, shadow flicker, surface and ground water quality and geology should also be assessed.	Please refer Chapter 11 Noise, Chapter 10 Air and Climate, Chapter 5 Population and Human Health, Chapter 9 Hydrology and Hydrogeology respectively.
		› The EIAR should include details of all ancillary facilities of the Proposed Development.	Chapter 4 Description: Section 4.3 Development Components

		› The EIAR should include a detailed Cumulative Impact assessment.	Chapter 2 Background: Section 2.7 Cumulative Impact Assessment
5	Iarnród Éireann	Advise that consent and a license agreement will be needed. More details on voltage and power to be carried by the proposed cable needed to assess interference and compatibility with their own electrical control cables.	Chapter 4 Description of the Proposed Development: Section 4.8.7.5 Grid Connection Watercourse/Culvert Crossings and Irish Rail Level Crossing Appendix 4-10 Eirgrid Standard Specification for Ducting/Cabling
6	Irish Aviation Authority	The Authority advised that they have no specific requirements in relation to the development of the EIAR. IAA provided the following generic observations in the event planning consent is granted: › agree an aeronautical obstacle warning light scheme for the wind farm development, › provide as-constructed coordinates in WGS84 format together with ground and tip height elevations at each wind turbine location › notify the Authority the intention to commence crane operations with at least 30 days prior notification of their erection.	Chapter 14 Material Assets: Section 14.2.4.2 Telecommunications and Aviation Scoping and Consultation. The required information will be provided to the IAA should the Proposed Development proceed to construction.
7	Meath County Council	Meath County Council requests that the impact on of the Proposed Development on Slieve na Calliagh is fully considered to ensure that the Proposed Development does not adversely impact upon the amenity and experience of this important visitor attraction and archaeological site.	Chapter 12 Landscape and Visual Volume 2: Photomontage Booklet Viewpoint (VP11) Appendix 12-2 Landscape Character Assessment Tables Appendix 12-3 Photomontage Assessment Tables

8	Office of Public Works	OPW note that the proposed site is located in lands that benefit from the River Inny Catchment Drainage Scheme. There may be a risk of flooding at this location. The Local Authority and the developers should satisfy themselves that there is adequate level of protection against flooding at this location.	Chapter 9 Hydrology: Section 9.3.6 Flood Risk Assessment Appendix 9-1 Flood Risk Assessment
9	Transport Infrastructure Ireland	TII note the below recommendations as general guidance for the preparation of the EIAR in regard to proposed schemes which affects the national road network. The developer should have regard to the following: › 1. As outlined in the Spatial Planning and National Roads Guidelines, it is in the public interest that, in so far as is reasonably practicable, the national road network continues to serve its intended strategic purpose. The EIAR should identify the methods/techniques proposed for any works traversing/in proximity to the national road network in order to demonstrate that the development can proceed complementary to safeguarding the capacity, safety and operational efficiency of that network. › 2. Consultations should be had with the relevant Local Authority/National Roads Design Office with regard to locations of existing and future national road schemes. › 3. In relation to cabling and potential connection routing, the scheme promoter should note locations of existing and future national road schemes and develop proposals to safeguard proposed road schemes. As outlined above, consult with the Local Authority/National Roads Design Office in relation to any schemes in planning in the area. Proposals should be developed to safeguard proposed road schemes as TII will not be responsible for costs associated with future relocation of cable routing where proposals are catered for in an area of a proposed national road scheme. In this regard, consultation with the Local Authority/National Roads Design Office in relation to the N4 Mullingar to Longford Scheme should be undertaken. Furthermore, consideration	Chapter 14 Material Assets: Section 14.1 Traffic and Transport

		should be given to routing options, use of existing crossings, depth of cable laying, etc. In the context of existing national roads, alternatives to the provision of cabling along the national road network, such as alternative routing or the laying of cabling in private lands adjoining the national road, should be considered in the interests of safeguarding the investment in and the potential for future upgrade works to the national road network. The cable routing should avoid all impacts to existing TII infrastructure such as traffic counters, weather stations, etc. and works required to such infrastructure shall only be undertaken in consultation with and subject to the agreement of TII, any costs attributable shall be borne by the applicant/developer. The developer should also be aware that separate approvals may be required for works traversing the national road network. 4. Clearly identify haul routes proposed and fully assess the network to be traversed. Separate structure approvals/permits and other licences may be required in connection with the proposed haul route and all structures on the haul route should be checked by the applicant/developer to confirm their capacity to accommodate any abnormal load proposed. Consultation with relevant PPP Companies and MMaRC Contractors may also be required. 5. Where appropriate, subject to meeting the appropriate thresholds and criteria and having regard to best practice, a Traffic and Transport Assessment (TTA) be carried out in accordance with relevant guidelines, noting traffic volumes attending the site and traffic routes to/from the site with reference to impacts on the national road network and junctions of lower category roads with national roads. TII's TTA Guidelines (2014) should be referred to in relation to Proposed Development with potential impacts on the national road network. The scheme promoter is also advised to have regard to Section 2.2 of the TII TTA Guidelines which addresses requirements for sub-threshold TTA.	

		6. TII Standards should be consulted to determine the requirement for Road Safety Audit (RSA) and Road Safety Impact Assessment (RSIA). 7. Assessments and design and construction and maintenance standards and guidance are available at TII Publications that replaced the NRA Design Manual for Roads and Bridges (DMRB) and the NRA Manual of Contract Documents for Road Works (MCDRW). 8. The developer, in conducting Environmental Impact Assessment, should have regard to TII Environment Guidelines that deal with assessment and mitigation measures for varied environmental factors and occurrences. In particular; a. TII's Environmental Assessment and Construction Guidelines, including the Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes (National Roads Authority, 2006). b. The EIAR should consider the Environmental Noise Regulations 2006 (SI 140 of 2006) and, in particular, how the development will affect future action plans by the relevant competent authority. The developer may need to consider the incorporation of noise barriers to reduce noise impacts (see Guidelines for the Treatment of Noise and Vibration in National Road Schemes (1st Rev., National Roads Authority, 2004)).	

2.6.3 Pre-Planning Meetings

Three pre-planning meetings were held with the Planning Department of Westmeath County Council in relation to the Proposed Development prior to the submission of the initial planning application on this site (Pl. Ref.17/6177). The first meeting was held on 17thNovember 2016, and the second on 18th January 2017, both of which were attended by representatives of the Planning Department, MKO and Coole Wind Farm Ltd.

At the initial pre-planning meeting in November 2016, the original 25 turbine layout was presented. Following feedback received during consultation with the local community, the initial local authority pre-planning meeting and a review of current planning policy, a decision was made to reduce the number of turbines to 13. This reduced layout was presented at the second pre-planning meeting with Westmeath County Council in January 2017.

A third meeting was held with the Planning Authority on the 25th of April 2017. This meeting constituted a general technical discussion in relation to the presentation of the project at that time and to agree the format, scale and presentation of the planning application drawings to be submitted to the Planning Authority in 2017.

The initial wind farm application (under Pl. Ref. 17/6177) was the subject of a Further Information (FI) request from the Planning Authority in relation to clarification on 53 No. items. Subsequent to this FI request, two meetings were held between the Planning Department of Westmeath County Council and the design team (representatives of MKO and Coole Wind Farm Ltd.) to discuss the items raised by the Planning Authority in its FI request. The first of these meetings was held on the 22nd August 2017 at Westmeath County Council offices in Mullingar and provided an opportunity to discuss the terms of the FI request and the envisaged scope of response from the design team.

A further meeting between the Planning Authority and the design team was held on the 28th September 2017, to further discuss the FI items identified by the Planning Authority and provided an opportunity for the design team to discuss its ongoing approach to responding to the various FI items. The items raised by the Planning Authority in its FI request, and the two subsequent meetings between the design team and the Planning Department of Westmeath County Council, informed the various design and assessment features of the permitted application (Pl Ref 17/6292/ABP-300686-18).

Two further pre-planning meetings were held with the Planning Department of Westmeath County Council (following the Boards decision issuing in relation to the permitted 13 turbine wind farm) and prior to the submission of the grid connection planning application in May 2020. The meetings were held on 15th of August 2019 and the 4th of February 2020. These meetings were attended by representatives of the Planning Department, MKO, Coole Wind Farm Ltd. and Ionic Consulting Ltd. Items discussed at the meetings included an overview of the grid connection proposal, assessment of alternatives, trenching and cables, crossing of rivers and the community benefit fund. The grid connection application (under Pl. Ref. 20/6121) was the subject of a Further Information (FI) request from the Planning Authority. This EIAR addresses the FI items raised by the Planning Authority in relation to the grid application. Although the grid application was ultimately withdrawn from consideration the FI items did not require any changes to the original proposed grid connection. Section 2.5.1 and Table 2-1 above identifies where each of the FI items has been addressed/responded to in this report.

A further pre-planning meeting and presentation on the current Proposed Development via video conferencing was made to the Planning Department of Westmeath County Council on the 13th November 2020. Attendee's at the meeting included representatives of Westmeath County Council, MKO and Coole Wind Farm Ltd. This meeting provided an overview of the design progress and the planning application approach (Strategic Infrastructure Development process) in relation to this

proposed application. Items discussed at the meeting included Westmeath CDP policy, surveys undertaken for the Proposed Development, hydrology and the grid connection route.

2.6.3.1 An Bord Pleanála Pre-Application Consultation

Pre-application consultation took place with An Bord Pleanála as part of the Strategic Infrastructure Development process. This matter was considered by the Board under their reference ABP-307620-20. The consultation process commenced on the 15th of July when the applicants requested to enter into pre-application consultations under the provisions of Section 37B of the Planning and Development Act, 2000 (as amended).

As part of this process a pre-application consultation meeting was held on the 1st of October 2020. Attendee's at the meeting included representatives of MKO, Coole Wind Farm Ltd and An Bord Pleanála.

At this meeting the Board set out their relevant procedures, and the design team made a presentation setting out the location, nature and character of the Proposed Development. The discussions included consideration of the Development Plan policy, noting that the Draft Plan has transposed in full Variation no. 2 of the County Development Plan 2014-2020, as Policy CPO 10.132 which maintains the existing separation distances regarding wind farm design (See Section 2.4.2.2 above). Other items discussed included baseline surveys undertaken, alternatives, the use of the borrow pit and the continued commitment by the applicant to avoid blasting at the borrow pit, carbon savings associated with the project, landscape & visual, noise and peat impact assessments, access, Appropriate Assessment, and EIAR.

Following the meeting the Board issued a record of the proceedings and the applicants moved to close out the pre-application process. The Board by letter dated 9th December 2020 confirmed that the Proposed Development falls within the scope of paragraphs 37A(2)(a) and (b) of the Act. Accordingly, the Board have confirmed that the Proposed Development would be strategic infrastructure within the meaning of Section 37A of the Planning and Development Act, 2000 (as amended), and that any application for permission must therefore be made directly to the Board. A copy of this correspondence is included as Appendix 2-3.

2.6.4 Community Consultation

Public consultation on the Coole Wind Farm began at a very early stage in the development process, with engagement with the local community beginning during the initial feasibility and scoping stages in 2013. At that time, a nominated Community Liaison Officer (CLO) was appointed to the area and since then has been the main point of contact to the local community. The CLO and the wind farm project being well known in the area for the last number of years has benefitted the engagement strategy significantly during the Covid-19 situation. Further information on this is provided below.

Over the course of engagement with the local community/individuals, local businesses and community groups (including at the Public Information Event in February 2017), feedback was not only actively sought on the design of the proposal, but was also actively sought on ideas regarding the form that the Community Benefit Scheme should take and how best to achieve maximum potential benefit from the available funding. Based on the revised and current proposal, and under the new Renewable Energy Support Scheme (RESS), a Community Benefit Fund in the region of c. €500,000 per annum will be made available for the local area over the lifetime of that scheme. The value of this fund will be directly proportional to the level of installed MWs at the wind farm and will be in line with the requirements of the relevant RESS scheme. Coole Wind Farm Ltd. is committed to working with communities in order to extract the maximum gain for local communities from these funds. Further details on the proposed Community Benefit Package for the development proposed are presented in Section 4.4 of this EIAR.

Public Engagement since 2013

Consultation with the local community/individuals, local businesses and community groups commenced from 2013, leading to a public consultation event being held in 2013 at which details of the project being considered at that time were shared. Details of survey areas being assessed and details on the likely size and scale of the Coole Wind Farm were provided. As the development process evolved over time, a Community Liaison Strategy (CLS) was established and set into motion during 2016 relating to the project which is now the permitted 13 turbine Coole Wind Farm. For the 15 turbine development now proposed, the CLS has been expanded further and previous engagement for the project has been built upon. Further information is provided below.

Consultation on the Coole Wind Farm commenced prior to the publishing of the '*Code of Practice for Wind Energy Development in Ireland Guidelines for Community Engagement (December 2016)*' however, the CLS undertaken in the Coole area generally reflected what was subsequently set out in the Code of Practice and is in line with the fundamentals of the Code. This includes engaging with the local community in an open, honest and transparent manner with the aim to not only provide clear and understandable information but also to gain feedback to understand the views of the local community and to use this information to inform the design process, thus allowing the local community an opportunity to have an influence on the final project design.

Public engagement was carried out in the Coole area whilst design works were ongoing, with feedback informing the design process. Over the course of community engagement for the 13 turbine project, the CLO and members of the Community Liaison Team called to all households in the local area at various different stages as proposals developed. At all stages of engagement for the Project, there has been a flexible approach to facilitating the timing of meetings i.e. arrangements to meet with people at times and locations convenient to them. In relation to the 13 turbine project, there are 12 houses located within 1km. The radius of engagement extended beyond 1km of the turbine locations and over 115 households were individually contacted with information and seeking feedback on the proposal.

The main intention of the initial meetings was for the CLO to introduce both himself and the project to the individuals locally and to ultimately establish a line of dialogue with local residents which could continue into the future. As a result, the CLO has become well-known in the area and has built good relationships with the local community which has been beneficial for the project now proposed. At the

time of lodging this application, given the current situation with Covid-19, engagement for the project now proposed has been carried out in line with all Covid-19 restrictions. Further information is provided below.

At the initial meetings, information and a leaflet on the project being considered at the time were provided. The initial meetings were followed up with the establishment of the Project Website www.coolewindfarm.ie and a second one-to-one call to each homeowner with more detailed project information in the form of a 12-page Project Information Booklet disseminated. The Coole Wind Farm Website has continued to be used since this time. The Website is updated regularly at the relevant stages with information and updates on the project and the website has been a key feature and facilitator of disseminating information on the project now proposed, including during Covid-19 restrictions through the addition of the Virtual Consultation Room. Further information on the Virtual Consultation Room is provided below.

Every effort was made to understand the views of those living in each household to allow the final 13 turbine design to take consideration of these views to the greatest extent possible. Feedback from the one-to-one meetings was passed on to the Project Design Team on an ongoing and regular basis to allow the feedback from engagement to inform the design process. The initial layout proposed in the Coole area consisted of 25 turbines however following feedback received during consultation with the local community a decision was made to significantly reduce the number of turbines from 25 to 13. This 13 turbine layout subsequently formed the Coole Wind Farm application which received a grant of planning permission from An Bord Pleanála in March 2019 (Planning Ref: 300686).

In response to concerns expressed during the community consultation regarding the use of roads, a commitment was previously given not to use the local road leading to Clonsura bog from the Finea road (L57671 local road, which adjoins the R394 Regional Road), nor the local road L18266 in front of Coole National School for access purposes. This commitment remains for this planning application.

Upon revision of the design layout at that time, the community were advised of details of ancillary infrastructure including proposed roads, cabling, substation, etc. as it became available. This information was disseminated at the earliest possible date following the revision of the design layout and confirmation of the reduced 13 turbine layout.

As the design process progressed an update leaflet was distributed in the local area and to households to provide clear information on the main aspects and changes to the project at that time. The update leaflet included a map detailing the proposed reduced 13 turbine layout and key points of note on the revised design and layout. Through one to one meetings, the local community were also made aware of the details and date of the Public Information Event (refer to Section 2.6.5 below).

Since the submission of the original application in October 2017, engagement and consultation with the local community has been ongoing with the CLO continuing to engage with the community on project proposals. The views of the local community have continued to be taken into consideration with feedback from consultation used to inform ongoing project proposals. Blasting was originally considered as a method for rock extraction at the development site. However, following ongoing consultation with individuals and the local community it was found that blasting would not be viewed as an appropriate extraction method in the area with locals expressing concerns. For this reason, blasting was omitted as a proposed method of rock extraction. This remains true for this application. Over the course of consultation concerns were also raised regarding shadow flicker. As detailed in Chapter 5, Coole Wind Farm Ltd are continuing to commit to exceeding the existing daily and annual shadow flicker guideline requirements and commit to zero shadow flicker at occupied residential receptors within ten rotor diameters of the development now proposed.

All locally elected representatives were made aware, informed of the project and provided with copies of the information booklets and leaflets disseminated in the local area. A letter with copies of the information booklets and leaflets was forwarded to all elected members on the 23rd January 2017, as

included in Appendix 2-4. All locally elected representatives were also made aware and invited to the Public Information Evening (see Section 2.6.5 below) by letter on the 6th February 2017.

In early October 2017, the CLO distributed a Project Information Brochure in the local and wider Coole area. Approximately 600 Project Information Brochures were personally distributed to residences in the local and wider Coole area to discuss the proposal, provide an update in relation to the overall project and the intention to lodge a planning application at that time. The Project Information Brochure included contact details in the form of a contact phone number and email address for enquiries and to organise follow up meetings.

Public Engagement during 2020 and 2021

Since 2013 and following the grant of planning permission for the 13 turbine layout, the CLO has continued to engage with individuals, the local community, businesses and community groups on the Coole Wind Farm. As proposals developed for amendments to the permitted 13 turbine development including increasing the output of the wind farm, the addition of 2 turbines and the development of the grid route proposal, the CLS was revisited and revised in order to ensure that early and clear information was made available in the local area. The previous engagement carried out by the CLO in the local area was built on and all those within a minimum of 1.7km of all proposed turbine locations were made aware of the proposed alterations and provided with information.

Due to the unprecedented nature of Covid-19, engagement with the local community has been a key consideration of the Project Team and the CLO during the 2020 and 2021 periods.

At all times, engagement on the project is carried out in line with all Covid-19 restrictions. Engagement consists of face to face meetings (where appropriate and when allowed under restrictions), telephone calls and letters issued to householders in the local area to advise of proposals. In light of the Covid-19 restrictions, the Project Team also adapted the community engagement process to utilise online platforms to provide up to date information on the proposal. This has included the development of an online virtual consultation room which is accessible through the project website www.coolewindfarm.ie and discussed further in detail below.

There are 18 houses located within 1km of the 15 turbine layout. Engagement extended to a minimum radius of 1.7km of the turbine locations with individuals contacted with information and seeking feedback on the proposal. The wind farm project and the CLO being well known in the area for the last number of years has benefitted the approach to engagement significantly during the Covid-19 situation.

In November 2020, a letter was issued to all individuals within 1.7km of the 15 turbine layout to provide information on the contents of the application now proposed. The letter provided information on the proposed changes, contact details for the CLO and directing people to the Project Website and Virtual Consultation Room as the key feature for providing information during the Covid-19 situation. This letter also confirmed that the grid connection to the existing Mullingar Substation as previously proposed and consulted on during engagement with the local community and at the Public Information Event in 2017 would now also form part of the planning application for the project.

All locally elected representatives were made aware and issued with information on the current proposal in November 2020 and March 2021. Copies of letters are included in Appendix 2-4.

Feedback from the engagement with the local community has been passed to the Project Design Team on an ongoing and regular basis to inform the design process. Where areas of concern or interest were expressed every effort was made to not only provide accurate information but also to guide the individuals concerned towards sources of accurate information to assist them in the process of informing themselves.

In July 2020, as part of our ongoing engagement during the Covid-19 situation, Coole Wind Farm Ltd. provided funding to facilitate and assist the local playschool in Coole village to adapting to the new Covid-19 restrictions. This included the provision of an outdoor weatherproof area to be used for the dual purpose of increasing the area available to children and providing a covered hand sanitising and waiting area at drop off and pick up times. This initiative has proved very useful during the Covid-19 situation and has greatly benefitted the local community.

Coole Wind Farm Project Website and Virtual Consultation Room

As detailed above in order to assist in the delivery of updated and clear information during the Covid-19 situation, a Virtual Consultation Room was developed and added to the existing Coole Wind Farm Project Website.

The Project Website www.coolewindfarm.ie has evolved as the project has developed and along with displaying up to date information on the Proposed Development, a Virtual Consultation Room has been added as a key feature and approach to engaging with the local community during Covid-19 restrictions. Refer to Plates 2-2 and 2-3 below. While some of the initial aims of the Project Website were to provide context for the project, develop a greater understanding on the need for renewable energy development, provide project information and advice on the consultation approach, the website has evolved with the project, to provide a source of updated information as the project progresses and acted as a key information dissemination feature during 2020/2021.

In November 2020, the interactive Virtual Consultation Room was added to the project website and the local community alerted to this by phone and/or letter. This Virtual Consultation Room provides information on the following:

- An introduction to the project;
- The need for Climate Action;
- Background to Statkraft (parent company of Coole Wind Farm Ltd);
- The proposal and layout map;
- Grid connection route;
- EIAR;
- The Community Benefit Fund;
- Photomontages; and
- A contact us facility.

Plate 2-2: Coole Wind Farm Project Website

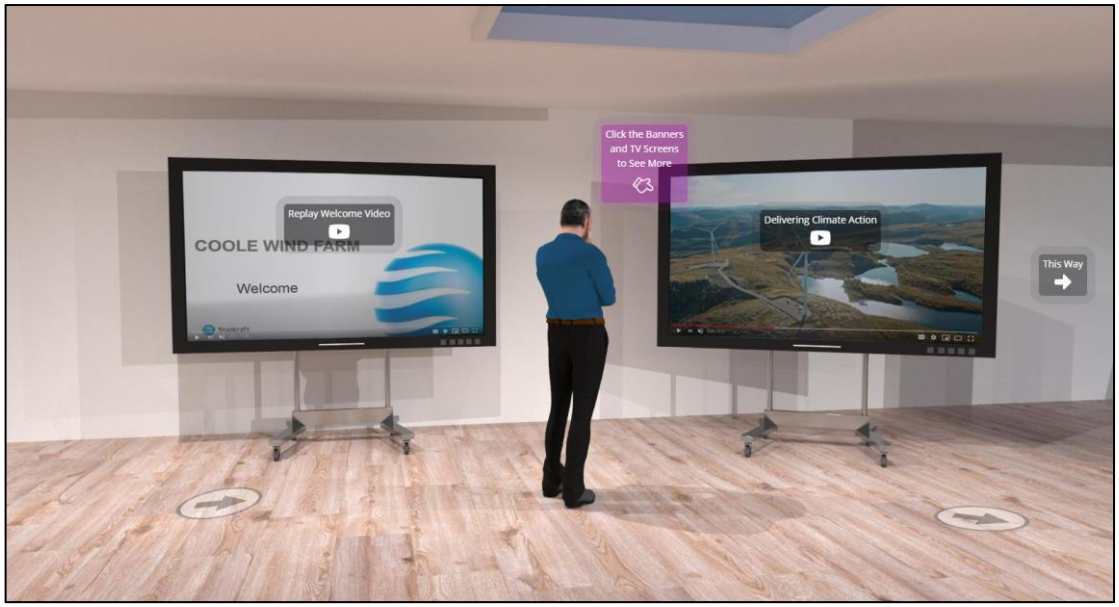

Plate 2-3: Coole Wind Farm Virtual Consultation Room

During the course of engagement on the current proposal, information has been sought on an ongoing basis regarding previous commitments made in relation to the wind farm development. As detailed above concerns were previously expressed regarding the use of roads and a commitment was given not to use the local road leading to Clonsura bog from the Finea road (L57671 local road, which adjoins the R394 Regional Road), nor the local road L18266 in front of Coole National School for access purposes. This commitment will be maintained for the Proposed Development.

The use of alternative extraction methods to blasting and the commitment to zero shadow flicker were also queried. The commitment to avoid the use of blasting and the commitment to zero shadow flicker at occupied residential receptors within ten rotor diameters of the development will also be maintained for the development now proposed. The views of the local community have continued to be taken into consideration and used to inform ongoing project proposals.

The response to the ongoing community liaison and consultation has been positive and Coole Wind Farm Ltd.'s Community Liaison Team continues to build on this positive foundation through continuing to actively engage with the local community in ongoing consultations and engagement to understand their views and provide clear and understandable information as the project progresses through the remainder of the development process. The wind farm project and the CLO being well known to the area for the last number of years has significantly benefitted the approach to engagement during the Covid-19 situation.

Publicly available, full, clear and comprehensive information has been made available about the Proposed Development at all key milestone stages. At all stages of the community engagement process contact details in the form of a contact phone number and email address for enquiries were distributed. A contact and feedback facility is also included on the Coole Wind Farm Project Website and Virtual Consultation Room. Leading on from this consultation approach, the CLO has become well-known in the area and has fostered very good relations with the local community. A copy of the public consultation information is included as Appendix 2-4 of this EIAR. The Website has been and will continue to be regularly updated at key stages with information and updates on the Proposed Development and the Virtual Consultation Room has been a key feature and facilitator of disseminating information on the Proposed Development during Covid-19 restrictions.

2.6.5 Public Information Event 2017

A public information event for the Coole Wind Farm was previously held on 15th February 2017 at Coole Hall, in Coole Village. The purpose of this information event was to inform the wider public of progress on the development at that time, present the site layout and grid connection proposals and to invite feedback from the local community. The event was advertised through the display of public posters in the local post office, shop, pub and newspaper notices. The event was advertised in the Westmeath Examiner on 7thFebruary 2017. All locally elected representatives were also invited to the event, by letters informing them of the event sent on the 6th February 2017. (see Consultation documents in Appendix 2-4).

The public information event was attended by representatives of Element Power (parent company of Coole Wind Farm Ltd at the time) and McCarthy Keville O'Sullivan Ltd. Many of these representatives, including the CLO and Project Manager, remain involved in the continued development of this proposal. A total number of ten information panels, A0 size maps detailing the layout at the time and potential grid connection routes, photomontages and "pano-pods" were on display at the event, as shown in Plate 2-4 below. Copies of the information panels are included in Appendix 2-4. A total of 5 No. photomontages and 5 No. pano-pods were displayed during the event, to present views from the area surrounding the Proposed Development site and key local viewpoints such as Coole Village, Hall and church.

Plate 2-4: Photomontages and pano-pods on display in Coole Hall for the Public Information Event of 15th February 2017

The information panels displayed at the event presented information under the following headings:

- Why consider renewable energy? Fossil fuels and the future energy challenge
- Global Warming and Climate Change
- Addressing the issues
- How was this location decided upon?
- How this proposal has developed
- The proposed Coole Wind Farm
- Wind Farms in Ireland
- Community Benefit for the Coole area

All information leaflets disseminated in the local community were also made available to attendees, to take away from the event. Feedback was also invited from all who attended the event via a 'comment box'. The public information event was open from 3pm to 8pm and attended by approximately 70 people.

The feedback gained from the Coole Public Information Event has been beneficial along with all of the other feedback received from the local community. The main issues and queries that arose during the event, and were discussed with attendees by the project representatives, included project location, design and layout, haul routes, setback distance from houses, potential impacts due to noise and shadow flicker, visuals, cultural heritage, grid connection, community benefit proposals and the timelines involved in the planning process. The feedback from the Public Information Event has been used to info the information presented to the public for the project now proposed i.e. potential employment opportunities and economic benefits including community benefit proposals. Further details on the proposed Community Benefit Scheme are presented in Section 4.4 of this EIAR.

2.7 Cumulative Impact Assessment

The EIA Directive requires that the description of likely significant effects of a project includes an assessment of cumulative impacts that may arise. The factors to be considered in relation to cumulative effects include, inter alia, flora and fauna, soil, water, landscape and cultural heritage. The potential for cumulative impacts arising from the Proposed Development in combination with other Projects has therefore been fully considered. This section of the EIAR provides an overview of other projects located within the wider area that have been considered within the cumulative impact assessments. The methodology used for carrying out the cumulative assessment is set out below.

2.7.1 Methodology for the Cumulative Assessment of Projects

The potential for cumulative effects to arise from the Proposed Development was considered in the subject areas of human beings, flora and fauna, soil, water, air and climate, noise, landscape, cultural heritage and material assets. To comprehensively consider potential cumulative impacts, the final section of each relevant chapter within this EIAR includes a cumulative impact assessment where appropriate.

The potential cumulative impact of the Proposed Development (which includes the proposed means of grid connection) and other relevant developments has been carried out with the purpose of identifying what influence the Proposed Development will have on the surrounding environment when considered cumulatively and in combination with relevant permitted, proposed and constructed projects in the vicinity of the proposed site.

The Cumulative Impact Assessments (CIA) of projects has three principle aims:

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

Assessment material for this cumulative impact assessment was compiled on the relevant developments within the vicinity of the Proposed Development. The material was gathered through a search of relevant online Planning Registers, reviews of relevant EIAR 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 Section 2.9.2 below.

2.7.2 Projects Considered in Cumulative Assessment

The projects considered in relation to the potential for cumulative impacts and for which all relevant data was reviewed include those listed below.

Peat Extraction

Commercial peat harvesting at the Proposed Development site, as described in Section 2.6.2 above.

Forestry

Some areas within the site are planted with commercial forestry.

Road Scheme

Proposed upgrade to a 52km section of the N4 between Mullingar and Longford (Roosky). A second Public Consultation on the Route Corridor Options is currently underway.

Other Wind Turbines

There is only one turbine permitted within a 20-kilometre radius of the Proposed Development site, located near Ballyjamesduff, Co. Cavan, as detailed in Section 2.7.4 above. This turbine is located approximately 16.4 kilometres from the nearest proposed turbine location at Coole. An application for a single turbine approximately 16km north east of the Proposed Development site and 370m south west of the existing Ballyjamesduff turbine Proposed Development has been appealed to An Bord Pleanála (Pl Ref 19/447 / ABP-309478-21) and is due to be decided by 23rd June 2021.

Other Developments

The review of the Westmeath County Council planning register documented relevant general development planning applications in the vicinity of the proposed wind farm site and the grid connection route, most of which relate to the provision and/or alteration of one-off rural housing and agriculture-related structures, as described in Section 2.7.3 above. 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 EIAR consider all potential significant cumulative effects arising from all land uses in the vicinity of the Proposed Development. These include ongoing agricultural practices, and drainage/maintenance works/programmes. Overall the Proposed Development has been designed to mitigate impacts on the environment and particularly water, and a suite of mitigation measures is set out within the EIAR. The mitigation measures set out in this EIAR have been developed to ensure that significant cumulative affects do not arise during construction, operational or decommissioning phases of the Proposed Development. Additional detail in relation to the potential significant cumulative effects arising and, where appropriate, the specific suite of relevant mitigation measures proposed are set out within each of the relevant chapters of this EIAR.