2. BACKGROUND TO THE PROPOSED DEVELOPMENT

2.1 Introduction

This section of the Environmental Impact Assessment Report (EIAR) presents information on renewable energy and climate change policy and targets, the strategic, regional and local planning context for the Proposed Development, planning history, scoping and consultation, as well as setting out the nature of the cumulative impact assessment process undertaken.

The Proposed Development will generate and export renewable energy for use onto the national grid. Ireland's mandatory target under EU Directive 2009/28/EC is for renewable resources to account for 16% of total energy consumption by 2020. At national level, the targets within the Government's 2007 White Paper, *Delivering a Sustainable Energy Future for Ireland: The Energy Policy Framework 2007 – 2020*, set a target of 33% electricity from renewable sources by 2020, a target that was subsequently increased to 40%. The Climate Action Plan, published by the Government in 2019, clearly sets out this need for and urgency of change, as reproduced below:

> *"The accelerating impact of greenhouse gas emissions on climate disruption must be arrested. The window of opportunity to act is fast closing, but Ireland is way off course.... The shift in climate is bringing profound shifts of desertification, rising sea levels, displaced population, profound challenges to the natural world, and economic and social disruption. We are close to a tipping point where these impacts will sharply worsen. Decarbonisation is now a must if the world is to contain the damage and build resilience in the face of such a profound challenge."*

Furthermore, the Programme for Government released in June 2020 also highlights the need for a clean and reliable supply of energy:

> *"Energy will play a central role in the creation of a strong and sustainable economy over the next decade. The reliable supply of safe, secure and clean energy is essential in order to deliver a phase-out of fossil fuels. We need to facilitate the increased electrification of heat and transport. This will create rapid growth in demand for electricity which must be planned and delivered in a cost-effective way."*

The primary driver behind the Proposed Development is the need to provide additional renewable energy to offset the use of fossil fuels within the electricity generating sector. Increasing electricity generation from wind power represents the most economical renewable option to reduce emissions within the power generation sector and is the most mature technology available to achieve national targets that have been established for decarbonisation.

The Proposed Development represents the provision of a significant wind energy development and will contribute towards Irelands energy 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, https://www.seai.ie/.

A 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 67% of Ireland's dependency in 2018 at an estimated cost of €4.5 billion (Source: *'Energy in Ireland 2019 Report'* Sustainable Energy Authority of Ireland (SEAI), December 2019). 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 grew by 4.5% with increases in all sectors, resulting in a primary energy demand increase of 1.6%. Overall demand for fossil fuels increased by 0.1% in 2018. Furthermore the share of electricity generated from renewable sources increased by 3.1 percentage points in 2018, to 33.2%. 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 Policy

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 established 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; and
- Introduce "*appropriate measures*" and outline them in a National Renewable Energy Plan. The "*appropriate measures*" include ensuring that grid-related measures and administrative and planning procedures are sufficient to achieve the 2020 target. The Draft National Renewable Energy Plan for Ireland was published in June 2010.

These targets represented an important first step towards building a low-carbon economy. They are also headline targets of the Europe 2020 strategy for smart, sustainable and inclusive growth. This recognises that tackling climate and energy challenge contributes to the creation of jobs, the generation of "green" growth and a strengthening of Europe's competitiveness.

Additionally, Ireland supports the adoption of a net zero target by 2050 at the EU level. In this regard it should be noted that 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.

2.1.2.1 2030 Climate Change and Energy Framework

The 2030 Climate and Energy Framework was adopted by EU leaders in October 2014 and marked 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 set three key targets for the year 2030:

- A binding commitment at EU level of at least 40% domestic Greenhouse 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 on the revision of the renewable energy directive. The new regulatory framework paves 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.

2.2 Climate Change Policy and Targets

2.2.1 Introduction

Climate change 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*). This section of the EIAR presents the relevant and specific policies and targets which relate to climate change and greenhouse gas emissions in the context of EU and national policy.

International and national policy consistently identifies the need to reduce GHG emissions and stresses the importance of reducing global warming. The context of international policy has altered over the last 30 years from being of a warning nature to the current almost universally accepted belief that we are in a climate crisis. The current Proposed Development, as a generator of renewable energy, will contribute to the decarbonisation of the energy sector and reduce harmful emissions. In this regard, the Proposed Development is in broad compliance with national and international climate change policy and targets.

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 further notes 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, dry and hot summers. It is acknowledged that this would pose challenges for water and flood risk management, agriculture and tourism.

Against this backdrop for Ireland, predicted changes are likely to result in extensive direct and indirect harm to Ireland and its people, as well as to other countries more exposed and less able 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; and
- Acknowledgement that the pollutants associated with climate change are also damaging to human health.

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 did not set binding limits on greenhouse gas emissions for individual countries and does not contain any enforcement mechanisms. Instead, the framework outlines how specific international treaties (called "protocols" or "Agreements") may be negotiated to set binding limits on greenhouse gases.

Kyoto Protocol Targets

Ireland is a Party to the Kyoto Protocol, which is a protocol to the UNFCCC, as discussed above. 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.

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.

Doha Amendment to the Kyoto Protocol

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

- New commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from 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.

Conference of Parties to the UNFCCC – Paris Agreement

Every year since 1995, the Conference of Parties (COP) has gathered the 196 Parties (195 countries and the European Union) that have ratified the Convention to evaluate its implementation and negotiate new commitments. COP21 was organised by the United Nations in Paris and held from 30th November to 12th December 2015. Of significance, the COP21 closed with the adoption of the first international climate agreement (concluded by 195 countries and applicable to all). The 12-page text, made up of a preamble and 29 articles, provides for a limitation of the global average temperature rise to well below 2°C above pre-industrial levels and to limit the increase to 1.5°C. It is flexible and takes into account the needs and capacities of each country. It is balanced as regards adaptation and mitigation, and durable, with a periodical ratcheting-up of ambitions.

COP 25 Madrid – Current Progress

COP25, the 25th session of the COP and the most recent convention at the time of writing this report, was held between the 2nd and 13th of December 2019 in Madrid. The conference was characterised by repeated warnings from civil society (NGOs and corporates) on emerging evidence and scientific consensus on climate change risk. Specifically, as indicated above, it is noted that there are only '*10 years left*' before the opportunity of limiting global warming to 1.5°C is no longer feasible. As such, the only scenario that makes achieving this curtailment of rising global temperature possible is a '*7.6% reduction of global GHG emissions every year between 2020 and 2030, and to reach net zero emissions by 2050'*. However, there was no consensus achieved between States to finalise the operating rules of the Paris Agreement and ensure that it became operational by 2020. Three issues which emerged between States from the COP25 are summarised below:

- There was no uniform consensus between States to raise countries' climate ambitions, e.g. to make increased commitments in light of growing climate change data. Some States were opposed to imposing any obligation on countries to submit enhanced pledges next year, arguing it should be each country's own decision. All states must submit a review of their commitments for COP 26 in 2020. At the current level of climate targets, within a decade, the objective of the Paris Agreement will no longer be achievable;
- There was no agreement on finalising Article 6, the foundations for international cooperation to combat climate change. The aim was to establish the rules for new international mechanisms for financing and transferring GHG emission reductions; and
- There was no agreement on financing (Green Climate Fund); specifically, relating to both loss and damage caused by climate change.

Despite the lack of consensus to the above challenges, the COP25 did achieve more limited success in the introduction of the "*San Jose Principles for High Ambition and Integrity of International Carbon Markets*", which sets out the framework on which a robust carbon market should be built. These principles include, but are not limited to:

- Ensures environmental integrity and enables the highest possible mitigation ambition;
- Delivers an overall mitigation in global emissions, moving beyond zero-sum offsetting approaches to help accelerate the reduction of global greenhouse gas emissions;

- Prohibits the use of pre-2020 units, Kyoto units and allowances, and any underlying reductions toward Paris Agreement and other international goals; and
- Ensures that double counting is avoided and that all use of markets toward international climate goals is subject to corresponding adjustments.

These principles were supported by 23 EU, including Ireland, and Latin American countries, 5 no. pacific islands and 2 no. countries in the Caribbean.

In addition, the European Union's *Green Pact* was introduced on the 11th of December 2019 with agreement of the European Council and all Member States (except Poland)on the ambition of climate neutrality in 2050, supported by a financing plan of €1,000 billion over 10 years.

2.2.2.2 Intergovernmental Panel on Climate Change

The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body (consisting of a group of scientists whose findings are supported by the worlds governments) for assessing the science related to climate change. In August 2021 the IPCC produced its Sixth Assessment Report (AR6) it found the following:

- It is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred.
- The scale of recent changes across the climate system as a whole and the present state of many aspects of the climate system are unprecedented over many centuries to many thousands of years
- Human-induced climate change is already affecting many weather and climate extremes in every region across the globe. Evidence of observed changes in extremes such as heatwaves, heavy precipitation, droughts, and tropical cyclones, and, in particular, their attribution to human influence, has strengthened since the Fifth Assessment Report (AR5).

The IPCC report warns of increasingly extreme heatwaves, droughts and flooding. The report is hopeful that if global emissions can be cut in half by 2030 and that if net zero emissions can be achieved by 2050 the rise in temperatures can be halted and possibly reversed. This report is a stark warning that de-carbonisation must be increased additional efforts made to reduce carbon emissions across all sectors.

2.2.3 National Policy

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.

Climate Action and Low Carbon Development Act (2015)

The Climate Action and Low Carbon Development Act 2015 was signed into law on the 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.

National Adaptation Framework - Planning for a Climate Resilient Ireland (2018)

Ireland's 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 and builds on the work already carried out under the National Climate Change Adaptation Framework (NCCAF, 2012). 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 emissions (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. Clare County Council produced their Climate Change Adaptation Strategy in 2019, covering the period 2019-2024, discussed further below.

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

In March 2019, the Joint Committee on Climate Action Change released a report detailing a cross party consensus for action. The report, in its introduction, notes that *"Irelands performance in meeting international obligations has to date been poor".* The Report highlights on-going concern regarding emission projections and that Ireland is also off track in meeting its 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 that will include:

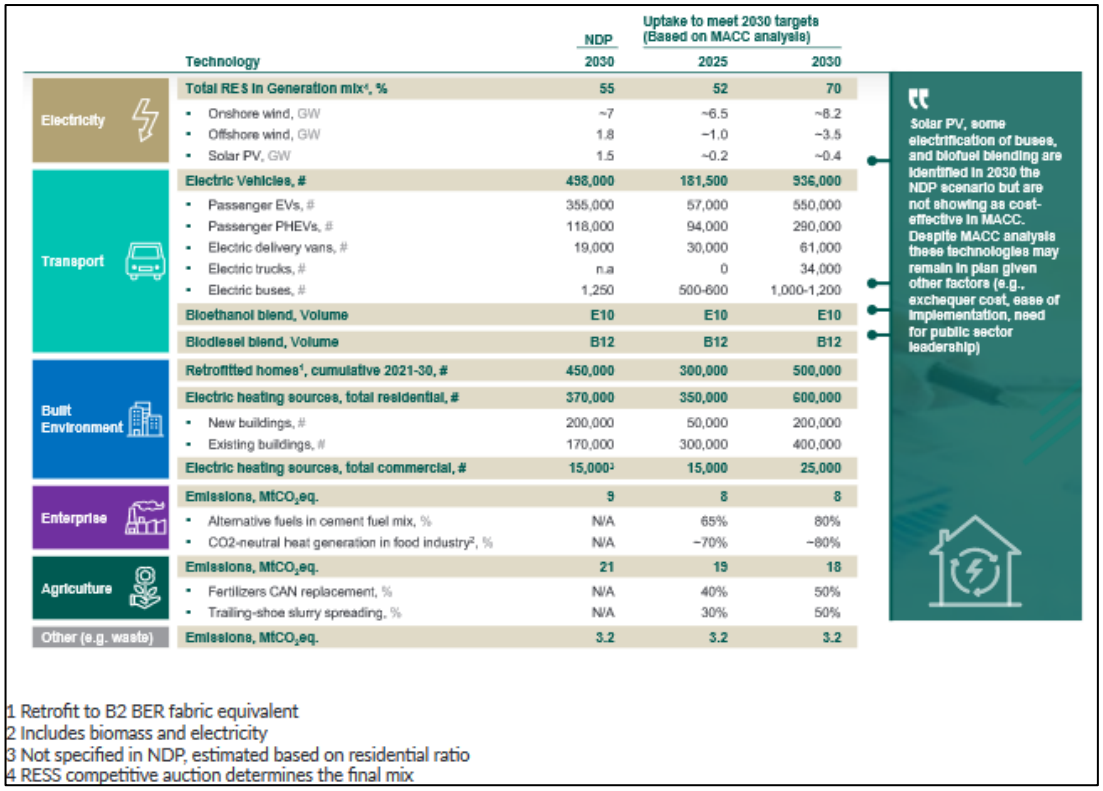
1. *A target of net zero economy-wide GHG emissions by 2050;*
2. *A provision for a 2030 target, consistent with the GHG emissions reduction pathway to 2050 to be set by 2020 by Statutory Instrument requiring the formal approval of both Houses of the Oireachtas following receipt of advice from the Climate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

Further to this, the Committee acknowledged that the measures which are currently in place, in addition to those suggested within the Report, remain insufficient in meeting Ireland's targets and further action is required. The report states that the transformation of Ireland's energy system will be required for the country to meet its future 2030 and 2050 GHG emission targets; specifically, to reach net zero emissions by 2050, Ireland will be required to fully decarbonise electricity generation. Therefore, there is a clear incentive for developing Ireland's capacity in renewable energies and renewable electricity in particular.

The Report details that onshore wind energy is currently the primary source of renewable electricity within Ireland, accounting for 84% of renewable power generated in 2017. While acknowledging that there are challenges in relation to securing additional on-shore wind energy, the Committee emphasises its support for the increased provision of on-shore wind farm development at appropriate locations (such as that of the current proposal) as wind energy has a pivotal role to play in achieving climate action targets.

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 Ireland's environment, society, economic and natural resources. Similar to the above Joint Committee on Climate Action Change's Report, the overall aim of the CAP is to deliver a significant step-change in Ireland's emissions performance over the coming decade such that EU targets for 2030 are met and the country will in a position to successfully achieve its mid-century decarbonisation objectives in 2050. Figure 2-1 below depicts Irelands decarbonisation pathway up to the year 2030. The below will be used to manage Irelands decarbonisation pathway and details the path for the various sectors:



	Technology	NDP 2030	Uptake to meet 2030 targets (Based on MACC analysis) 2025	2030
Electricity	Total RES in Generation mix[4], %	55	52	70
	• Onshore wind, GW	~7	~6.5	~8.2
	• Offshore wind, GW	1.8	~1.0	~3.5
	• Solar PV, GW	1.5	~0.2	~0.4
Transport	Electric Vehicles, #	498,000	181,500	336,000
	• Passenger EVs, #	355,000	57,000	550,000
	• Passenger PHEVs, #	118,000	94,000	290,000
	• Electric delivery vans, #	19,000	30,000	61,000
	• Electric trucks, #	n.a	0	34,000
	• Electric buses, #	1,250	500-600	1,000-1,200
	Bioethanol blend, Volume	E10	E10	E10
	Biodiesel blend, Volume	B12	B12	B12
Built Environment	Retrofitted homes[1], cumulative 2021-30, #	450,000	300,000	500,000
	Electric heating sources, total residential, #	370,000	350,000	600,000
	• New buildings, #	200,000	50,000	200,000
	• Existing buildings, #	170,000	300,000	400,000
	Electric heating sources, total commercial, #	15,000[3]	15,000	25,000
Enterprise	Emissions, $MtCO_2eq.$	9	8	8
	• Alternative fuels in cement fuel mix, %	N/A	65%	80%
	• CO2-neutral heat generation in food industry[2], %	N/A	~70%	~80%
Agriculture	Emissions, $MtCO_2eq.$	21	19	18
	• Fertilizers CAN replacement, %	N/A	40%	50%
	• Trailing-shoe slurry spreading, %	N/A	30%	50%
Other (e.g. waste)	Emissions, $MtCO_2eq.$	3.2	3.2	3.2

Solar PV, some electrification of buses, and biofuel blending are identified in 2030 the NDP scenario but are not showing as cost-effective in MACC. Despite MACC analysis these technologies may remain in plan given other factors (e.g., exchequer cost, ease of implementation, need for public sector leadership)

1 Retrofit to B2 BER fabric equivalent
2 Includes biomass and electricity
3 Not specified in NDP, estimated based on residential ratio
4 RESS competitive auction determines the final mix

Figure 2-1: Irelands Decarbonisation Pathway Dashboard to 2030

Relevant to the proposed Slieveacurry renewable energy development, Chapter 7 of the CAP details the Plan's views surrounding electricity generation. Within Ireland, electricity accounted for 19.3% of Ireland's greenhouse gases in 2017. The CAP notes the following in this regard:

> *"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 2017, a total of 30.1% of electricity produced in Ireland came from renewable sources whilst the target to be achieved by 2020 is set at 40%. The CAP goes on to note that *'given our 40% target is based on a percentage of total energy demand, 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'*. Specifically, the rapid growth of electricity demand in the country is projected to increase by 50% above existing capacity in the next decade. The continued decarbonisation of the energy network remains an essential component of this strategy in the context of 2030 and 2050 targets.

With regard to policy measures to date, the CAP notes that current frameworks will not achieve the level of decarbonisation required in the electricity sector to meet the 2030 emissions reduction targets. As such, it is emphasised that *'we must 'reduce our electricity sector emissions to 4-5 Mt in 2030'*. In relation to emissions, the CAP states:

> *"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."*

Key Metrics	2017	2025 Based on MACC	2030 Based on NDP	2030 Based on MACC
Share of Renewable Electricity, %	~30%[20]	52%	55%	70%
Onshore Wind Capacity, GW	~3.3	6.5	N/A	8.2
Offshore Wind Capacity, GW	NA	1.0	N/A	3.5
Solar PV Capacity, GW	NA	0.2	N/A	0.4
CCGT Capacity, GW	~3.6	5.1	N/A	4.7

Figure 2-2. Potential Metrics to Deliver Abatement in Electricity

In order to meet these future targets, the electricity sector will need to establish a 70% share of renewable electricity would require 50-55% emissions reduction by 2030. Under Section 7.2 of the CAP, 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 increasing renewable electricity generation, reinforcing the existing grid network (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. Ultimately, the measures needed to deliver the 2030 targets centre on the increased harnessing of renewable energy. As indicated above in Figure 2-2, CAP sets out the need to deliver up to 8.2GW total of onshore wind capacity. As of 2019, there is 4.1GW[1] of installed wind capacity in Ireland; therefore, Ireland needs to more than double its installed capacity of wind generation. The addition of the Proposed Development to Ireland's deployable onshore wind farm fleet would result in a direct positive impacts on current output, and furthermore, the continued progression towards future targets. Accordingly, the CAP presents clear and unequivocal support for the grant of permission for the subject development in order to progress Ireland's complete decarbonisation of its energy network.

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

The Climate Action and Low Carbon Development (amendment) Bill 2021 was published by the Irish Government in March 2021 and signed into law in July 2021. The Bill which is entitled an Act, supports Ireland, in law, to move to a climate resilient and climate neutral economy by 2050. It will establish a legally binding framework with clear targets and commitments set in law, and ensure the necessary structures and processes are embedded on a statutory basis to ensure we achieve our national, EU and international climate goals and obligations in the near and long term. The Bill significantly strengthens the framework for governance of climate action by the State in order to achieve national, EU and international climate goals and obligations.

[1] *Sustainable Energy Authority of Ireland's Renewable Energy in Ireland Update (April 2020)*

The Bill includes the following key elements, among others:

- Places on a statutory basis a 'national climate objective', which commits to pursue and achieve no later than 2050, the transition to a climate resilient, biodiversity-rich, environmentally -sustainable and climate-neutral economy.
- Embeds the process of carbon budgeting into law, Government are required to adopt a series of economy-wide five-year carbon budgets, including sectoral targets for each relevant sector, on a rolling 15-year basis, starting in 2021.
- Actions for each sector will be detailed in the Climate Action Plan, updated annually.
- A National Long Term Climate Action Strategy will be prepared every five years.
- Government Ministers will be responsible for achieving the legally-binding targets for their own sectoral area with each Minister accounting for their performance towards sectoral targets and actions before an Oireachtas Committee each year.
- Strengthens the role of the Climate Change Advisory Council, tasking it with proposing carbon budgets to the Minister.
- Provides that the first two five-year carbon budgets proposed by the Climate Change Advisory Council should equate to a total reduction of 51% emissions over the period to 2030, in line with the Programme for Government commitment.

2.2.4 Renewable Energy Policy and Targets

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 Ireland's 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[2]. 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; and
- Investment and employment in our indigenous renewable energy projects; often in rural and underdeveloped areas.

As described in the previous section, 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 fossil fuels to meet its energy needs, with fossil fuels accounting for 67% of electricity in 2018, 97% of transport and 93.5% of heat in 2018[3]. In contrast, the Report estimates that in 2018 wind energy displaced 1.3Mtoe of fossil fuel and avoided 3.1MtCO2 or 64% of the total CO2 avoided by renewables.

2.2.4.1 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. The Directive established the "20-20-20" targets: 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.

[2] *Sustainable Energy Authority of Ireland (SEAI) website, www.seai.ie*
[3] *Energy in Ireland: 2020 Update Report (SEA1) website, www.seai.ie*

In December 2018 the recast 2018/2001/EU Renewable Energy Directive came into force which drives the legal framework to 2030 and sets a new binding renewable energy target of the EU to 2030 of at least 32%.

2030 Climate and Energy Framework

The 2030 Climate and Energy Framework (adopted by EU leaders in October 2014) marks the further development of EU renewable energy policy. The framework builds upon the EU 2020 climate and energy targets and 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 32% 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 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 (up from 27%). It is important to note that this increase is subject to a review clause by 2023 for an upward revision of the EU level target. This amended target is a clear indication that increased renewable energy and related faciliatory infrastructure will remain at the forefront of both EU and national energy policy.

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.

The consent of the Slieveacurry renewable energy development will ensure that the forward progression toward these above targets is built upon going into the future.

Energy Roadmap 2050

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

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

The analysis found that decarbonising the energy system is technically and economically feasible. The Roadmap notes that all scenarios show the biggest share of energy supply technologies in 2050 comes from renewables. The share of renewable energy sources (RES) rises substantially in all scenarios; specifically, RES achieves at least 55% in gross final energy consumption in 2050, up 45 percentage points from 2011's level at around 10%. As such, a major prerequisite for a more sustainable and secure energy system is a higher share of renewable energy beyond 2020. Each of the scenarios assumes in the analysis that increasing the share of renewable energy and using energy more efficiently are crucial, irrespective of the particular energy mix chosen.

2.2.4.2 National Policy on Renewable Energy

White Paper on 'Ireland's Transition to a Low Carbon Energy Future' 2015 - 2030

On 12th May 2014, the Green Paper on Energy Policy in Ireland was launched which marked the start of a public consultation process on the future of Ireland's energy policy over the medium to long-term. The Department of Communications, Climate Action & Environment acknowledged that energy is an integral part of Ireland's economic and social landscape and that "*a secure, sustainable and competitive energy sector is central to Ireland's ability to attract and retain Foreign Direct Investment and sustain Irish enterprise. The three key pillars of energy policy are to focus on security, sustainability and competitiveness*".

Following on from an extensive consultation process, the 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. The Paper builds upon the White Paper '*Delivering a Sustainable Energy Future for Ireland'* published in 2007 and takes into account the changes that have taken place in the interim. This Paper provides a complete energy update and a framework to guide policy up to 2030.

The policy framework was developed to guide policy and actions that the Irish Government intends to take in the energy sector up to 2030 and also reaching out to 2050 to ensure a low carbon future that maintains Ireland's competitiveness and ensures a supply of affordable energy. The Energy Vision 2050, as established in the White Paper, describes a '*radical transformation*' of Ireland's energy system which will result in GHG emissions from the energy sector reducing by between 80% and 95%, compared to 1990 levels. The paper advises that a range of policy measures will be employed to achieve this vision with emphasis on the generation of electricity from renewable sources, which there are plentiful indigenous supplies and increasing the use of electricity and bio energy to heat homes and fuel transport.

In this White Paper, the DCENR acknowledges that onshore wind is one of the cheapest forms of renewable energy in Ireland, stating that:

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

The grant of permission for the proposed Slieveacurry renewable energy development will directly contribute to Ireland's on-going progression towards its 2030 and 2050 targets, and the affordability of its energy supply, by increasing the penetration of renewable electricity to the local and wider region.

2.2.4.3 Progress on Targets

The SEAI *Renewable Energy in Ireland 2020 Update* was published in April 2020 and set outs the most recent updates to Ireland's progress towards its binding European and National renewable energy targets. Based on confirmed 2018 data, the primary conclusion of the report relates to Ireland's overall renewable energy supply representing 11% of gross final consumption (EU target of 16%). Against this backdrop, Ireland had the second lowest progress to meeting the overall RES target of all EU Member States (26th out of the EU-28). With regard to Ireland's national renewable energy target for 2020, the 2018 data indicates that Ireland is not on track to meet any of its 2020 renewable energy targets:

- 33.2% renewable electricity by 2020 (target is 40%) - up from 30.1% in 2017;
- 6.5% renewable heat by 2020 (target is 12%); and
- 7.2% renewable transport by 2020 (target is 10%).

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 pace of 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.

Drawing on the 2030 Climate and Energy Framework and the CAP 2019, EirGrid's *'All Island Generation Capacity Statement 2021 – 2030'* (September 2021) states that the national power system will require unprecedented change over this decade, "a fundamental transition for our electricity sector", in order to accommodate at least 70% of electricity from renewable sources by 2030. The retiring of traditional fossil fuel plant (coal, peat and oil-fired generators), c. 1,650MW of generation over the next 5-years within Ireland, further emphasises the need for a deliberate and swift transition to a low-carbon power system based on renewable energy, natural gas and ancillary supporting infrastructure. With regard to wind energy, the All Island Generation Capacity Statement 2021 – 2030 states that,

"It can be assumed that Ireland's renewable targets will be achieved largely through the deployment of additional wind powered generation."

New onshore wind farms commissioned in Ireland in 2020 brought the total wind capacity to 4,300MW, contributing to the increase in overall RES percentage to 43.3%. This value is set to increase as Ireland endeavours to meet its 2030 renewable targets; specifically, the All Island Generation Capacity Statement 2021 – 2030 estimates that onshore wind energy will increase by 1,000MW between 2020 and 2025. EirGrid have also released their *Strategy 2020-2025: Transform the Power System for Future Generations* which is driven by climate change and the need to transform the electricity sector. Currently, the electricity grid can operate with up to 65% of renewable power but by 2030 this must increase to 95%.

The additional wind energy output from the proposed Slieveacurry renewable energy development will further assist Ireland's overall capability to meet its future targets.

SEAI 's *National Energy Projections to 2030* notes that wind energy deployment has "*made the most significant contribution to RES-E to date. The historic build rate (2005-2010) was 180MW per year. Since 2010 the build rate has increased to an average of over 200MW per year. In 2017 the installed capacity increased by 335MW to just over 3.3GW total installed capacity*." Furthermore, "*Post 2020, as electricity demand continues to grow at an anticipated rate of 3% per annum, increasing levels of deployment will be needed just to maintain the share achieved in 2020."*

2.3 Planning Policy Context

2.3.1 National Policy

2.3.1.1 National Planning Framework (2018)

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

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

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

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

The Framework notes that while the overall quality of the country's environment is good, it is not without challenges. It acknowledges that the manner in which we plan for the potential challenges, e.g. sustaining and increasing renewable energy generation, will be important in how we create a sustainable environment for the future.

> *"While the overall quality of our environment is good, this masks some of the threats we now face. Key national environmental challenges include the need to accelerate action on climate change, health risks to drinking water, treating urban wastewater, protecting important and vulnerable habitats as well as diminishing wild countryside and dealing with air quality problems in urban areas. It is also important to make space for nature into the future, as our population increases."*

Relevant to the subject development, the **National Strategic Outcome 8** (*Transition to Sustainable Energy*), notes that in creating Ireland's future energy landscape, new energy systems and transmission grids will be necessary to enable a more distributed energy generation which connects established and emerging energy sources, i.e. renewables, to major sources of demand. Specifically, the NPF notes that

reinforcement of the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres is a critical objective of the Framework. 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 emphasises that the Southern Region will have an important role in promoting a sustainable and renewable energy supply, which is identified as a key future planning and development priority. It notes that,

> "*harnessing the potential of the regions in renewable energy terms across the technology spectrum from wind and solar to biomass, 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 national government recognises 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, which the operation of the subject development will contribute towards. In the context of Ireland's binding climate change and renewable energy objectives, the NPF sets out the key need for the long-term sustainability of the environment. The NPF aims to ensure that decisions 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."*

It is described within the NPF that the Government will address pressing environmental and climate challenges through the following overarching aims listed under '*Resource Efficiency and Transition to a Low Carbon Economy*':

- Sustainable Land Management and Resource Efficiency
- Low Carbon Economy
- Renewable Energy
- Managing Waste

In order to meet legally binding targets agreed at EU level (as discussed above), it is a national objective for Ireland to make a transition and become a competitive low carbon, economy by the year 2050. To aid in meeting these targets, the NPF notes that the Government will aim to '*integrate climate considerations into statutory plans and guidelines in order to reduce vulnerability to negative effects and avoid inappropriate forms of development in vulnerable areas'*. Accordingly, it is envisioned that the national strategy will be supported, implemented and translated through the planning hierarchy by the local development plans and regional strategies.

2.3.1.2 Key Sustainability Elements of the NPF

A critical element underpinning the NPF is the need to facilitate Ireland's transition toward a low carbon, climate-resilient society. In this regard, one of the key overarching objectives of the NPF is to realise an Ireland which has a *secure and sustainable renewable energy supply* and has the ability to

diversify and adapt to new energy technologies. Against this backdrop, 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, such as the study area, have an important role to play in securing a sustainable renewable energy supply for the country, acknowledging that *"rural areas have significantly contributed to the energy needs of the country and continue to do so".* In this regard, the NPF states:

> *"In meeting the challenge of transitioning to a low carbon economy, the location of future national renewable energy generation will, for the most part, need to be accommodated on large tracts of land that are located in a rural setting, while also continuing to protect the integrity of the environment."*

The NPF sets out a number of National Policy Objectives under this subject (Section 9) with a key focus on resource efficiency and enabling actions required to 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, smart grids, electric vehicles, buildings, ocean energy and bio energy.
- Legal and regulatory frameworks to meet demands and challenges in transitioning to a low carbon society.

The NPF acknowledges that increased generation and deployment of renewable energy within the country is a critical element in progressing the decarbonisation of Ireland's economy. Specifically, it is noted 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"*

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 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".*

2.3.2 Regional Policy

The strategic objectives of the NPF are implemented at a regional level by the Southern Regional Assembly's Regional Spatial and Economic Strategy (RSES). The overall footprint of the subject development is located within the administrative boundary of Clare County Council, which in part comprise the Southern Regional Assembly (SRA), as of January 2015.

The SRA covers 9 no. counties, Carlow, Tipperary, Waterford, Wexford, Kilkenny, Cork, Kerry, Clare and Limerick.

2.3.2.1 Southern Regional Assembly Regional Spatial & Economic Strategy (2020)

The Southern Regional Assembly has a recognised leadership role in setting out regional policies and coordinating initiatives which support the delivery and implementation of the NPF. The primary vehicle for this is the preparation and implementation of the Regional Spatial and Economic Strategy (RSES). One of the principal functions of the SRA is to deliver the RSES which considers both spatial and economic factors within the regional planning framework.

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

- Nurture all our places to realise their full potential;
- Protect, and enhance our environment;
- Work to achieve economic prosperity and improved quality of life for all our citizens;
- Successfully combat climate change;
- Achieve economic prosperity and improved quality of life for all citizens;
- Accommodate expanded growth and development in suitable locations; and
- Make the Southern Region one of Europe's most creative, innovative, greenest and liveable regions.

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

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

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

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

- **RPO 87 (Low Carbon Energy Future)**: The RSES is committed to the implementation of the Government's policy under Ireland's Transition to a Low Carbon Energy Future 2015-

30 and Climate Action Plan 2019. It is an objective to promote change across business, public and residential sectors to achieve reduced GHG emissions in accordance with current and future national targets, improve energy efficiency and increase the use of renewable energy sources across the key sectors of electricity supply, heating, transport and agriculture.

- **RPO 95 (Sustainable Renewable Energy Generation)**: It is an objective to support implementation of the National Renewable Energy Action Plan (NREAP), and the Offshore Renewable Energy Plan and the implementation of mitigation measures outlined in their respective SEA and AA and leverage the Region as a leader and innovator in sustainable renewable energy generation.
- **RPO 96 (Integrating Renewable Energy Sources)**: It is an objective to support the sustainable development, maintenance and upgrading of electricity and gas network grid infrastructure to integrate a renewable energy sources and ensure our national and regional energy system remains safe, secure and ready to meet increased demand as the regional economy grows.
- **RPO 99 (Renewable Wind Energy)**: It is an objective to support the sustainable development of renewable wind energy (on shore and offshore) at appropriate locations and related grid infrastructure in the Region in compliance with national Wind Energy Guidelines.
- **RPO 100 (Indigenous Renewable Energy Production and Grid Injection)**: It is an objective to support the integration of indigenous renewable energy production and grid injection.

An important element within the Southern RSES is the introduction of a regional scale approach to identifying and capitalising on renewable energy opportunities.

- **RPO 98 (Regional Renewable Energy Strategy)**: It is an objective to support the development of a Regional Renewable Energy Strategy with relevant stakeholders.

This policy instrument, if implemented correctly, could assist in facilitating a more consistent approach to renewable energy / wind strategies at the county level, and furthermore, could identify opportunities for large cross-county renewable schemes via stakeholder led collaboration. In this context, the Clare Energy Agency is a well-established stakeholder within the renewable energy research sector. At present, the RSES notes that the Region has more renewable energy generation than demand which indicates a strategic role for the region's energy assets in national energy generation and transmission. With projected increases in population and economic growth, the demand for energy is set to increase in the coming years. In the context of transitioning to a more energy efficient society and increasing renewable sources of energy, the RSES notes that there is a need to set a policy approach which address meeting national targets for renewable electricity generation, climate change and security of energy supplies, both regionally and nationally.

The sustainable growth of the Southern Region requires the provision of services and infrastructure central to the RSES strategy in a plan led manner to ensure the sustainable management of environmental resources. As such, existing regional infrastructure represents major and on-going capital and infrastructural investment in strategic national assets and is considered by the RSES as essential for the continued provision of a secure and reliable electricity supply. The sustainable development of the Region, however, must also be balanced with consideration to natural heritage and biodiversity, particularly landscape. **RPO 129** notes that it is an objective of the Regional Authority to develop a *Regional Landscape Strategy* in order to facilitate landscape protection, management and change in the region.

The RSES sets out a number of infrastructural RPOs, relevant to the proposed Slieveacurry renewable energy development, which indicate that the Region is open to, and ready to invest in, renewable energy generation.

- **RPO 219 (New Energy Infrastructure)**: It is an objective to support the sustainable reinforcement and provision of new energy infrastructure by infrastructure providers (subject to appropriate environmental assessment and the planning process) to ensure the energy needs of future population and economic expansion within designated growth areas and across the Region can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs.
- **RPO 221 (Renewable Energy Generation and Transmission Network)**
  - A) Local Authority City and County Development Plans shall support the sustainable development of renewable energy generation and demand centres such as data centres which can be serviced with a renewable energy source (subject to appropriate environmental assessment and the planning process) to spatially suitable locations to ensure efficient use of the existing transmission network;
- **RPO 222 (Electricity Infrastructure)**: It is an objective to support the development of a safe, secure and reliable supply of electricity and to support and facilitate the development of enhanced electricity networks and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this plan under EirGrid's (2017) Grid Development Strategy (subject to appropriate environmental assessment and the planning process) to serve the existing and future needs of the Region and strengthen all-island energy infrastructure and interconnection capacity.

The Southern Regional Assembly strongly supports renewable wind energy development such as the subject development in order to ensure a '*safe, secure and reliable supply of electricity*' for the region. The successful operation of Slieveacurry renewable energy development will contribute to the successful transition to a low carbon economy.

2.3.3 Local Policy

2.3.3.1 Clare County Development Plan 2017-2023 (as varied)

The Clare County Development Plan 2017 - 2023 (as varied), hereafter referred to as the CDP, sets out an overall strategy for the proper planning and sustainable development of County Clare over a 6 year period. The CDP is the primary policy document for planning policy throughout the functional area of Clare County Council.

The strategic vision of the CDP is underpinned by 18 no. key goals which the following are considered relevant to the proposed Slieveacurry renewable energy development:

- **Goal 1**: A County Clare that drives local and regional sustainable growth by harnessing the potential of its unique location, quality of life, natural resources and other competitive advantages;
- **Goal V**: A County Clare in which jobs and people are brought together and where the growth of employment, indigenous enterprise and economic activity is pursued proactively across all economic sectors throughout the County;
- **Goal VII**: A County Clare that supports strong economic growth and a high quality of life for all residents through the provision of efficient and robust physical infrastructure whilst having regard to environmental responsibilities and complying with European and National legislation;
- **Goal IX**: A County Clare with diverse and strong rural communities and economy, where its natural resources are harnessed in a manner that is compatible with the sensitivity of rural areas and the existing quality of life; and
- **Goal XVII**: A County Clare that is resilient to climate change, manages flood risk, facilitates a low carbon future, supports energy efficiency and conservation and enables the decarbonisation of our lifestyles and economy.

The CDP acknowledges that the achievement of these above key goals will be dependent upon the Council's capacity to deliver a competitive and uninterrupted energy supply. As such, *energy efficiency*, *renewable energy development* and *progression towards a low carbon economy* are identified as central themes of this Plan.

Due to the '*favourable position*' of County Clare on the western seaboard, it highlighted that the County has significant potential to accommodate further electricity generating activity; specifically, significant potential to increase the production of electricity from renewable energy sources (e.g. wind). Having regard to the County's available renewable resources, the CDP states that Clare County Council will seek to take a '*lead role in respect of renewable energy technology'* to assist in meeting national, regional and County targets in energy consumption and CO2 reduction. On this basis, the creation of sustainable forms of energy and development of new energy technologies, such as the proposed Slieveacurry renewable energy development, will assist in the creation of a low-carbon economy, and subsequently, further investment within local businesses and markets.

- **Objective CDP6.17** (Energy Supply): To contribute to the economic development and enhanced employment opportunities in the County by:
  - A) Facilitating the development of a self-sustaining, secure, reliable and efficient renewable energy supply and storage for the County;
  - B) Enabling the County to become a leader in the production of sustainable and renewable energy for national and international consumption through research, technology development and innovation.
- **Objective CDP6.18** (Green Technology): To support the development of low carbon and green tech businesses and industries throughout the County.
- **Objective CDP8.37** (Energy Security): To promote and facilitate the achievement of secure and efficient energy supply, storage and distribution for County Clare.
- **Objective CDP18.3** (Development of a Low Carbon Economy):
  - A) To promote County Clare as a Low Carbon County as a means of attracting inward investment to the County and the Mid-West region;
  - B) To facilitate measures to establish a low carbon economy and society by 2020;
  - C) To facilitate the development of energy sources which will achieve low carbon outputs.

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

- **Objective CDP8.40** (Renewable Energy):
  - A) To encourage and to favourably consider proposals for renewable energy developments and ancillary facilities in order to meet national, regional and County renewable energy targets, and to facilitate a reduction in CO2 emissions and the promotion of a low carbon economy;
  - B) To assess future renewable energy-related development proposals having regard to the Clare Renewable Energy Strategy 2017-2023;
  - C) To assess proposals for wind energy development and associated infrastructure having regard to the Clare Wind Energy Strategy and the associated SEA and AA, or any subsequent updated adopted strategy;
  - D) To prepare an updated Wind Energy Strategy for County Clare during the lifetime of this Development Plan;
  - E) To strike an appropriate balance between facilitating renewable and wind energy-related development and protecting the residential amenities of neighbouring properties;

- F) To support and facilitate the development of new alternatives and technological advances in relation to renewable energy production and storage, that may emerge over the lifetime of this Plan;
- G) To ensure that all proposals for renewable energy developments and ancillary facilities in the County are in full compliance with the requirements of the SEA and Habitats Directives and Objective CDP2.1;
- H) To promote and market the County as a leader of renewable energy provision;
- I) To support the implementation of 'Ireland's Transition to a Low Carbon Energy Economy 2015-2030'.

It should be noted that in their consideration of the previous application for a renewable energy development on this site (Pl. Ref. 21/370), that the second reason for refusal recommended by the Planning Authority raised concern that such a proposed development would be contrary to Objective 8.40. The primary issues being cited in this regard being that due to *".. to the scale and height of the turbines as proposed, the location of the site on this open landscape and the proximity to existing residential properties, it is considered that the consequent noise and disturbance generated from the proposed wind turbines in combination with existing and permitted windfarms would seriously injure the amenities of residential property in the vicinity."*

Matters relating to turbine location, height and suitability are dealt with in full in Chapter 12 (Landscape and Visual) of this EIAR, while Chapter 11 (Noise and Vibration) considers in full the potential Noise effects. It is fully acknowledged that there is a balance to be achieved with regards residential amenity in the vicinity of wind energy development.

The first Items of CPD 8.40 (particularly Items B and C) promotes referral to the Clare Wind Energy Strategy 2017-2022. Considering the objective as a whole, in their previous decision the planning authority appears to have focused on and given more weighting to Item E of the ten points that comprise Objective 8.40 in order to rationalise the grounds for refusal. As noted above, this item relates to the balance between protecting residential amenity and facilitating renewable energy.

A thorough assessment of the likely visual impacts upon residential visual amenity is presented in Chapter 12 of the EIAR – and includes *Local Residential Amenity.* There are no dense housing developments in the landscape immediately surrounding the Proposed Development. The low housing density in conjunction with the designation of the site as a Strategic Area for wind energy development in the 2017 Clare Wind Energy Strategy supports the selection of the site as an appropriate location for the Proposed Development. The Proposed Development accords with the minimum 500 metre set back distance in the current Wind Energy Development Guidelines (2006, DoHELG) and also the 4 times tip height set-back distance explicitly set out for residential visual amenity prescribed by the Draft Revised Wind Energy Development Guidelines (2019, DoHPLG), the closest third-party occupied dwelling to any of the proposed turbines is, in fact, located 700m from Turbine 3.

With regards noise, AWN Consulting the project acoustic specialists carried out the noise monitoring surveys and prepared the Noise Section of the EIAR. The noise and vibration assessment carried out as part of the submitted EIAR is considered robust, comprehensive and in line with best practice and also provides a detailed assessment of potential cumulative impact of the Proposed Development and the existing Slievecallan Wind Farm as well as the Coor Shanavogh Wind Farm on residential properties in the area. In carrying out their assessment AWN have adhered to and complied with all relevant noise guidance including A Good Practice Guide to the Application of ETSU-R-97 for the Assessment and Rating of Wind Turbine Noise (IOA GPG). The outcome of that robust and detailed assessment is that predicted, cumulative, worst-case noise levels are within the criteria limits. The submitted EIAR Noise and Vibration assessment demonstrates that the Proposed Development along with other permitted and constructed wind energy developments in the area can operate within the noise criteria derived from the relevant guidance. Accordingly the Proposed Development can operate without significant effects on the amenity of any sensitive receptors as set out.

Other relevant objectives of the County Development Plan are set out below.

- **Objective CDP18.1** (Climate Change):
  - A) To support the implementation of the Limerick Clare Climate Change Strategy 2006, and any subsequent versions of the Strategy;
  - B) To facilitate measures which seek to reduce emissions of greenhouse gases;
  - C) To adopt sustainable planning strategies through integrating land use and transportation and by facilitating mixed use developments as a means of reducing greenhouse emissions;
  - D) To raise awareness and understanding of the impacts of climate change on both the local economy and communities in the County.

The Development Plan clearly states that it is essential to ensure '*energy demands are met without compromising environmental quality*'. For example, the CDP notes that almost the entire County has either an excellent or very good wind energy resource. Notwithstanding, the development and siting of wind energy projects must be '*balanced with the potential impacts on the landscape, ecology and the amenities of local communities*'. In this regard, the CDP identifies areas that are considered suitable for commercial wind energy in their Wind Energy Strategy, as discussed later in this section.

- **Objective CDP10.11** (Renewable Energy Development): To facilitate the development of renewable energy developments in rural areas in accordance with the adopted Clare Wind Energy Strategy and Renewable Energy Strategy and the associated SEA and NIR (and any subsequent strategies).

In order to facilitate further renewable energy generation within the county, the CDP states that

> *"A strong transmission grid is essential to attract and retain high-tech industrial investment; to ensure competitive energy supplies; to achieve balanced development; to reduce dependency on fossil fuels; and to achieve climate change targets."*

The provision of a secure and adequate electricity transmission infrastructure, including the reinforcement and extension, where required, of the existing grid, will be a critical prerequisite for further investment within the Co. Clare renewable energy sector.

- **Objective CDP8.38** (Electricity Networks):
  - A) To facilitate improvements in energy infrastructure and encourage the expansion of the infrastructure within the County;
  - B) To facilitate future alternative renewable energy developments and associated utility infrastructure throughout the County.

Other CDP Policies which are considered of relevance to the proposed Slieveacurry renewable energy development include those relating to Appropriate Assessment, Strategic Environmental Assessment (SEA) and Strategic Flood Risk Assessment. These are dealt with in **Objective CDP2.1**, which notes that it is an objective of the Development Plan:

- A) To require the preparation and assessment of all planning applications in the Plan area to have regard to the information, data and requirements of the Natura Impact Report, SEA Environmental Report and Strategic Flood Risk Assessment Report contained in Volume 10 of this Development Plan;
- B) To require projects to be fully informed by ecological and environmental constraints at the earliest stage of project planning and any necessary assessment to be undertaken, including assessments of disturbance to species, where required; and
- C) To require compliance with the objectives and requirements of the Habitats Directive, the Bird Directive, Water Framework Directive, all other relevant EU Directives and all relevant transposing legislation.

Objective CDP14.2 in relation to European Sites is also considered relevant. It states that it is an objective of the Development Plan:

- A) To afford the highest level of protection to all designated European sites in accordance with the relevant Directives and legislation on such matters;
- B) To require all planning applications for development that may have (or cannot rule out) likely significant effects on European sites in view of the site's Conservation Objectives, either in isolation or in combination with other plans or projects, to submit a Natura Impact Statement in accordance with the requirements of the EU Habitats Directive and the Planning and Development Act, 2000 (as amended); and
- C) To recognise and afford appropriate protection to any new or modified SPAs or SACs that are identified during the lifetime of this Plan, having regard to the fact that proposals for development outside of a European site may also have an indirect effect.

Development Plan **Objective CDP14.1** (Biodiversity) states that it is an objective of the Council:

- A) To implement the County Clare Heritage Plan 2011-2017 and the Clare Biodiversity Action Plan 2014-2017, or any subsequent plans, in partnership with all relevant stakeholders;
- B) To review the Clare County Heritage Plan 2011-2017 and to prepare a new Plan, which will be set within the context of the National Heritage Plan, upon the expiry of the existing adopted Plan;
- C) To support National Biodiversity Week and events such as Bioblitz in order to increase awareness of biodiversity and its benefits to the community;
- D) To ensure that features of importance to local biodiversity are retained as part of developments and projects being undertaken in the County; and
- E) To identify ecological buffer spaces/zones, where appropriate, in the Plan area.

As demonstrated in the above analysis, the reduction of energy demand, reduction of greenhouse gas emissions and the promotion of a low carbon economy in line with the sustainable protection of the receiving environment is an underlying principle throughout the Development Plan. The role of renewable energy, and furthermore, the proposed Slieveacurry development, is dealt with in greater detail in the Clare Wind Energy Strategy and the Clare Renewable Energy Strategy (Volumes 5 and 6 of this Plan).

Clare Renewable Energy Strategy 2017-2023 (Volume 6)

As reflected within the key goals of the CDP, Clare County Council wants to ensure that Co. Clare has the necessary land use and strategy framework in place to maximise the harnessing and use of its renewable energy resources, provide a degree of certainty to future investors and communities and inform and guide the planning process for future renewable energy development. Against this backdrop, the Clare Renewable Energy Strategy 2017-2023 (RES) provides the necessary framework to maximise the County's renewable energy potential and to assist it in becoming an energy secure, low carbon county, to meet renewable energy targets, with the potential to export excess energy. The Vision of the RES is as follows:

> *"A County Clare that is the national leader in renewable energy generation which supports energy efficiency and conservation and which achieves balanced social and economic development throughout the County and assists in achieving Ireland's Green Energy target."*

This Vision is underpinned by a range of comprehensive strategic aims of which the following are considered relevant to the proposed Slieveacurry renewable energy development:

- A) To support the attainment of and to exceed in County Clare, where possible, the National targets and commitments to renewable energy;
- B) To identify/highlight the opportunities for various renewable energy technologies and resources and identify broad areas suitable for their development in full compliance with the requirements of all environmental legislation including the requirements of the

Strategic Environmental Assessment Directive, Habitats Directive and Water Framework Directive;
- D) To maximise the opportunities for renewable energy development whilst safeguarding the environment and existing residential amenities; and
- E) To safeguard, where appropriate, areas with potential for renewable energy projects and to guide renewable energy development to preferred locations.

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

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

- **Objective RES 3.1** (Renewable Energy Targets): To facilitate the achievement of (or to exceed where possible) the renewable energy targets set out in Table 3.2 by 2020, ensuring that County Clare is the national leader in sustainable renewable energy generation, supporting energy efficiency, security and conservation, achieving balanced social, environmental and economic development throughout the County and assisting in the achievement of Ireland's Green Energy target.

Clare Wind Energy Strategy 2017-2023 (Volume 5)

The Clare Wind Energy Strategy (WES) was prepared with the overall aim to facilitate the development of wind farms, such as the Proposed Development, by maximising the wind resource of the County having regard to recent technological advances and national guidance while minimising any environmental and visual impacts. A key priority underpinning this aim is the identification of sites of strategic regional and national importance that have the potential to accommodate wind energy development. The objectives of the Strategy are as follows:

- To reflect and plan for technological advances in wind farms over the next number of years;
- To more closely align the County's wind generation policy to the existing wind energy resources;
- To support a planned approach to wind energy development in County Clare predicated on the optimal harnessing of the County's wind energy resource, and at a minimum, requiring that 40% of the County's electricity needs can be met from wind farms;
- To identify strategic areas for wind energy development of Regional and National importance;
- To recommend that a working target of 550 MW of wind energy is harnessed in County Clare, to enable the County to make the initial steps toward a low carbon economy by 2020; and
- To promote economic development through wind energy and other renewables in the County, underpinning the need for energy security, the promotion and establishment of a low carbon economy and the development of green business within the County.

The WES sets out 12 no. General Objectives for wind energy development which have been considered throughout the site selection and design process for the proposed Slieveacurry renewable

energy development. While various iterations of these policies have already been considered under the CDP and RES, it is considered important to highlight the following with regard to highlighting the policy basis for the subject development in Co. Clare:

- **WES One** (Development of Renewable Energy Generation): It is the objective of the Council to support, in principle and in appropriate scales and locations, the development of wind energy resources in County Clare. It is an objective of the Council to ensure the security of energy supply by accommodating the development of wind energy resources in appropriate areas and at appropriate scales within the County;
- **WES Two** (Development of Low Carbon Economy): County Clare will seek to promote itself as moving towards becoming a low carbon County by 2017 as a means of attracting inward investment to the County and the wider Mid-West region;
- **WES Four** (Response to National Policy): The White Paper on Energy has set a target of 40% of electricity to be generated from renewable sources by 2020. In the Mid-West Regional Climate Change Strategy, County Clare is identified as having a potential 600MW energy produced from renewables by 2020. Clare County Council will aim to achieve a minimum target of 550MW from wind energy by the conclusion of this Strategy;
- **WES Six** (Infrastructure Development Proposals): Proposals for the development of infrastructure for the production, storage and distribution of electricity through the harnessing of wind energy will be considered in appropriate sites and locations, subject to relevant policy, legislation and environmental considerations.

It should be noted that in relation to WES Four above, the Climate Action Plan 2019 has identified the need for a 70% share of renewable electricity and the delivery of up to 8.2GW total of onshore wind capacity by 2030. As of 2019, there is 4.1GW of installed wind capacity in Ireland. As such, the national target has been increased since the WES was produced and the national drive to increase the installed renewable generation capacity throughout the Country, and Co. Clare, in order to meet national and local targets is clear.

The WES designates areas as being '**Strategic**', '**Acceptable in Principle'**, '**Open for consideration**' and '**Not Normally Permissible'**. The total land area designated as 'Strategic' is 9,112 hectares and the area proposed as 'Acceptable in Principle' is 47,320 hectares. This represents 2.6% and 13.8% of the County respectively or 16.4% of the total land area of County Clare. The proposed Slieveacurry renewable energy development is located within a 'Strategic' designated site with the surrounding lands designated as 'Acceptable in Principle' (refer to Figure 2-3), accordingly the site of the Proposed Development is located in an area that has been designated as the most suitable in the hierarchy for the provision of wind energy development in the County.

Set out under **WES Eight**, Strategic Areas are considered to be eminently suitable for wind farm development and are classified as having strategic importance by the WES due to good / excellent wind resources, access to the national grid, distance from properties and are located outside any Natura 2000 sites. The target wind energy generation from Strategic Areas within the County is 400MW of the overall 550MW target. Notwithstanding the policy basis to site wind energy infrastructure within these areas, the WES states that the onus will be on applicants to demonstrate that Proposed Development will:

- Conform with existing and approved wind farms to avoid visual clutter;
- Be designed and developed in line with the Wind Energy Development Guidelines, Guidelines for Planning Authorities (DoEHLG, 2006) in terms of siting, layout and environmental studies;
- Provide a Habitats Directive Assessment under Article 6 of the Habitat Regulations if the site is located in close proximity to a Special Area of Conservation or Special Protection Area; and
- Be developed in a comprehensive manner avoiding the piecemeal development of the areas designated as 'strategic'.

WES Nine defines areas designated as 'Acceptable in Principle' as having sufficient wind speeds, access to the national grid network and established patterns of inquiries on the development of wind energy infrastructure. Similar to 'Strategic' areas, projects sited in areas considered 'Acceptable' will also need to demonstrate that the Proposed Development will conform with existing infrastructure, avoid cumulative visual clutter, comply with Planning Guidelines with regard to siting, layout and environmental studies and provide a Habitats Directive Assessment, if required to do so. Target wind energy generation from 'Acceptable in Principle' areas is 150MW of the overall 550MW target.

The location of the Proposed Development is therefore considered acceptable under the terms of WES 8 and 9, as noted above.

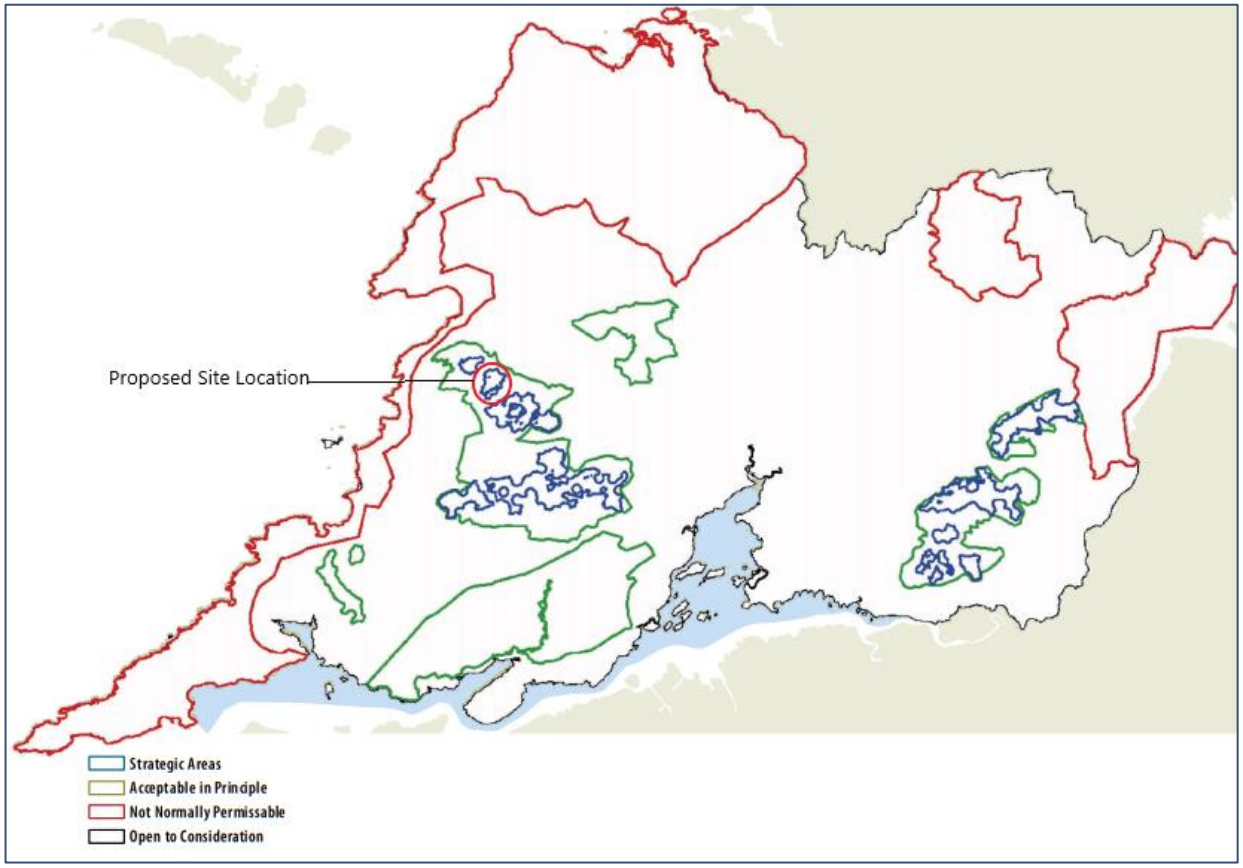


Figure 2-3: Clare Wind Energy Strategy - Strategic Windfarm Development Areas, Figure D, Showing Indicative Site Location

Landscape Character Assessment of County Clare

The CDP describes Co. Clare as containing significant areas of landscape importance, having regard to both their intrinsic value as places of natural beauty and their localised value to local communities and visitors in terms of recreation, tourism and other uses. In this context, the CDP sets out a series 'Living Landscapes' which broadly describe how different parts of County Clare's landscapes can accommodate new development in different ways. These 'Living Landscapes' are classified under 3 no. headings as reproduced below:

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

The proposed Slieveacurry renewable energy development is located within a Settled Landscape. Relevant to the Proposed Development, the CDP notes that uses of Settled Landscapes include energy

generation amongst other economic and social uses. As indicated in **Objective CDP13.2**, a high standard of development will be applied to Proposed Development sited within Settled Landscapes, including the evaluation of site suitability, site design and the design and management of all installations for the interception, storage and treatment of all effluents.

- **Objective CDP13.2** (Settled Landscapes): To permit development in areas designated as 'settled landscapes' that sustain and enhance quality of life and residential amenity and promote economic activity subject to:
  - Conformity with all other relevant provisions of the Plan and the availability and protection of resources;
  - Selection of appropriate sites in the first instance within this landscape, together with consideration of the details of siting and design which are directed towards minimising visual impacts; and
  - Regard being given to avoiding intrusions on scenic routes and on ridges or shorelines.

  Developments in these areas will be required to demonstrate:
  - That the site has been selected to avoid visually prominent locations;
  - That the site layouts avail of existing topography and vegetation to reduce visibility from scenic routes, walking trails, water bodies, public amenities and roads; and
  - That design for buildings and structures reduce visual impact through careful choice of forms, finishes and colours, and that any site works seek to reduce visual impact.

In relation to woodlands, trees and hedgerows, the CDP recognises the high amenity value of woodlands as set out under **Objective CDP14.7**. As discussed previously, a portion of the Proposed Development site is occupied by commercial forestry. As part of the Proposed Development, tree felling will be required within and around the development footprint to allow the construction of turbine bases, access roads and the other ancillary infrastructure.

The Landscape Character Assessment of County Clare (2002), which has been adopted for this iteration of the CDP, provides an analysis of the character, value, and sensitivity of landscapes identified within County Clare. A landscape character area (LCA) is defined as:

> *'Units of the landscape that are geographically specific and have their own character and sense of place. Each LCA has its own distinctive character, based upon patterns of geology, landform, land use, cultural, historical and ecological features.'*

It is an objective of Clare County Council (**CDP13.1**) to encourage the utilisation of the Landscape Character Assessment of County Clare and other relevant landscape policy and guidelines and to have regard to them in the management, enhancement and promotion of the landscapes of County Clare.

The proposed Slieveacurry renewable energy development is located within the Slieve Callan Uplands (LCA 17) which are described as the upland hills and slopes of Sliabh Callan and Ben Dash, extending south to Lisnafaha, west to Caheraghacullin, to N67 near Rineen, and northwards towards Ennistimon. The Character Assessment describes the Slieve Callan Uplands as extensively afforested with interspersed with blanket bog and marshy areas. The upper slopes are generally open and exposed, with occasional enclosure by post and wire fencing, and are considered sensitive in this regard. Valley areas are less sensitive partly due to infrastructure and forestry development already located within these areas.

The WES states that the rolling hills, low settlement density and extensive conifer plantations generally reduce the overall sensitivity of this LCA for wind farm development. As such, the area could accommodate large (11 to 25 turbines) or medium (6 to 10 turbines) wind farms subject to careful siting to avoid significant impacts on skylines. The proposed Slieveacurry renewable energy development falls within the 'medium' sized classification of wind energy infrastructure at 8 no. turbines, and therefore, acceptable in principle with regard to landscape capacity. Potential renewable energy generation target for this area is 250MW which the Proposed Development will positively contribute towards.

Views and Prospects

The CDP notes that Co. Clare contains a number of scenic views and prospects which offer '*a very attractive cross-sectional view and overall impression of differing landscapes'* . These designated views and prospects are primarily located along identified scenic routes. As per **Objective CDP13.7**, it is an objective of Clare County Council to:

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

The CDP emphasises that the conservation of these views should not prohibit development along these routes, but rather, development, where permitted, should not seriously hinder or obstruct these views and should be designed and located to minimise their impact. The nearest scenic route to the proposed Slieveacurry renewable energy development is the R474 (Miltown Malbay to Connolly) which is c. 2.9km south of the nearest turbine.

Slievecallan Wind Farm Case Example - Renewable Energy Infrastructure & Landscape and Visual Considerations

Slievecallan Wind Farm received a Notification of Grant of Permission on the 19th August 2010 which was subsequently subject to several 3rd Party appeals to An Bord Pleanála on the 10th September 2010 (PL03.237524). In considering the appeal, in terms of landscape the Board noted the following:

> *"Board accepted that implementation of the planning authority wind energy strategy would result in an impact on the landscape in the relevant areas of the County. In this context and having regard to the overall policies of the planning authority for protection of visual amenity in County Clare, the Board considered that the proposed development would be acceptable at this location in terms of visual amenity, notwithstanding the proximity to a designated "scenic route"."*

The Board's conditional grant of permission (18th August 2011) and direction on this matter corroborates the Planning Authority's assessment of potential landscape and visual impacts associated with the Slievecallan Wind Farm. This analysis is considered relevant to the proposed Slieveacurry renewable energy development, having regard to its close proximity to Slievecallan Wind Farm, as it indicates that there is a certain degree of flexibility with regard to weighing potential landscape and visual impacts against wind energy designations within the county. Specifically, the proposed Slieveacurry renewable energy development, also located in a 'Strategic Area' for wind energy, has a significantly reduced footprint (8 no. turbines) compared to Slievecallan Wind Farm which should facilitate greater integration within the receiving landscape.

Further analysis on potential landscape and visual impacts, in addition to cumulative effects, arising from Slieveacurry renewable energy development are set out in Chapter 10 (Landscape) of this EIAR.

Clare County Climate Change Adaptation Strategy 2019-2024

The document states that "*Clare County Council fully supports the implementation of the 2016 Paris Agreement on Climate Change... The Local Authority is committed to working with the Climate Action Regional Office.*"

It is noted that the SEAI in their Annual Report 2018 on Public Sector Energy Efficiency Performance credited Clare with a 17.8% energy savings against its 2006-2008 energy usage baseline. The Strategy

highlights that "*while this is more efficient than the original baseline, we are not yet on the path to meet the 2020 target.*" Specifically, the 'gap to the target energy performance' is set out as follows:

- The target energy consumption in 2020 is 15.671 GWh;
- An energy performance improvement of 18% is required for the period 2017 to 2020; and
- An energy reduction of 3.56 GWh is required to achieve the performance improvement required.

The Strategy highlights that public lighting represents 36% of all energy use which is to be further scrutinised to achieve energy savings.

The Strategy further notes that the Council have been actively targeting energy efficiency and increasing the renewable energy share of energy consumption via a range of measures, including (inter alia:

- Building fabric and heating system upgrades in buildings, offices, libraries, museum;
- Retrofits to local authority houses (over 900 to date) to achieve C3 minimum BER;
- Installation of biomass boilers & solar thermal heating panels in County Hall, Ennis;
- Installation of 5 Electric Vehicle (EV) charging points on local authority sites; and
- Building Management System (BMS) at County Hall, Ennis.

Amongst the listed adaptation objectives and actions of the Strategy is *"to promote County Clare as a low carbon county and support the development of low carbon and green technology businesses and industries throughout the county."* Proposed actions to achieve this objective include:

- Support on-land and off-shore renewable energy production by a range of appropriate technologies; and
- As a means of de-carbonising the economic and social sectors, thus reducing greenhouse gases, we will support the increased use of renewable energy in the commercial and agricultural sectors.

Following on from this, objective 4 of the Strategy is to specifically "*promote and facilitate the provision of high quality, secure, efficient and reliable renewable energy sources along with appropriate energy storage facilities in order to assist in the creation of a low carbon County Clare.*" The actions listed associated with this specific objective include:

- A) Encourage proposals for renewable energy developments and ancillary facilities in order to meet national, regional and county renewable energy targets, and to facilitate a reduction in CO2 emissions and the promotion of a low carbon economy through Planning Policy and land use objectives;
- B) Through land use policy and objectives, support and facilitate the development of new alternatives and technological advances in relation to renewable energy production and storage; and
- C) Support the implementation of the policy document *'Ireland's Transition to a Low Carbon Energy Economy 2015-2030.*

2.3.4 Relevant Guidelines

DoEHLG Wind Energy Guidelines (2006)

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

As each wind project has its own characteristics and defining features, it was acknowledged that it was impossible to write specifications for universal use. As such, it is commonly understood that the 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 is continuing this review and Draft Revised Guidelines were published in December 2019.

As demonstrated in the following chapters of this EIAR, the installation and operation of Slieveacurry renewable energy development (8 no. turbines with an overall blade tip height of up to 175m) will not result in any significant effects on shadow flicker, noise, visual impact/landscape, traffic and transport, ecology, population/human health, water, soils or cultural heritage. The 8 no. turbines and their associated ancillary infrastructure will be constructed and operated with an appropriate suite of mitigation measures and will not have significant adverse impact on the environment.

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).

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. Planning authorities are obliged to have regard to guidelines issued pursuant to Section 28 in the performance of their functions under the Planning and Development Act 2000 (as amended).

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

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."*

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. The circular also provided an update on 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.

Commission for Regulation of Utilities: Grid Connection Policy (2018)

The Commission for Regulation of Utilities (CRU) launched a new grid connection policy in March 2018 for renewable and other generators, known as the Enduring Connection Policy (ECP-1), which sought to allow *"shovel ready"* projects, that already have a valid planning permission, connect to the electricity networks. The principal objective which guides this decision is to facilitate greater opportunities for advanced projects to connect to the network in addition to the preparing for future, more regular batches for connection.

The CRU announced the launch of ECP2 in June of 2020, under ECP2 the following timelines have been set:

- ECP-2.1 applications in September 2020
- ECP-2.2 applications in September 2021
- ECP-2.3applications in September 2022

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

While community -led projects do not require planning permission to be in place to apply for ECP-2, in order to receive a connection offer planning permission will have to be in place.

With the ECP2 rule set now published and with a timeline set for the next three rounds of applications there is a clear pathway for the Slieveacurry Project to secure a grid connection in a timely manner, subject to receipt of planning permission.

Renewable Energy Support Scheme (RESS)

The Climate Action Plan, published in June 2019, is the Government's plan to give Irish people a cleaner, safer and more sustainable future. The Plan sets out actions across every sector which will ensure we meet our future climate commitments. A key part of the Plan is a move to 70% renewable electricity by 2030, a measure which will be driven by the introduction of the Renewable Electricity Support Scheme ('RESS').

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. Terms and Conditions for the first competition (RESS 1:2020) was published in February 2020 and will provide support to renewable electricity projects in Ireland. It is intended that the RESS will deliver, amongst other policy objectives:

> *"An ambitious renewable electricity policy to 2030 increasing energy security, energy sustainability and ensuring the cost effectiveness of energy policy."*

The preliminary results of the RESS 1 auction were published on the 4th of August 2020, EirGrid ran the auction in on the 28th of July 2020 and of the 108 projects who submitted an offer price, 82 projects have been deemed to be provisionally successful while 26 were considered to be unsuccessful. The successful projects constitute a mix of on-shore wind and solar.

The Auction Scheme and the ECP framework has now been established and is operational and will facilitate and provide a pathway to realise the for renewable electricity (RES-E) ambition of up to 70% by 2030, that has been established.

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 be carried out under the relevant guidance from the Forestry Service.

2.3.4.1 Draft Guidelines

DoEHLG Wind Energy Guidelines 2006 (Revisions)

Further to the noted in Section 2.3.5.2 it should be acknowledged that 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. Revisions to the Wind Energy Guidelines continue to be considered and draft revisions were published in December 2019, these are further discussed below.

Draft Revised Wind Energy Development Guidelines, December 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.

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.

Similar to the 2006 Guidelines, the Draft Revised Guidelines also state that underground grid connections for wind energy projects are considered the most appropriate environmental and/or engineering solution (e.g. default approach), particularly in sensitive landscapes.

The EIAR is cognisant of the *Draft Revised Wind Energy Development Guidelines* and will address each key matter (e.g. noise and shadow flicker standards) in turn within the relevant sections of this EIAR. As demonstrated in the subsequent chapters, the Slieveacurry renewable energy development will not result in any likely significant effects on the receiving environment.. In relation to the Shadow Flicker, the Proposed Development can satisfy the draft guidelines requirement as this is an operational matter that can be controlled by the SCADA system if necessary. In relation to the noise elements of the Draft Guidelines, it is this section that has given rise to the most scrutiny from industry experts who have sought significant amendments and clarifications. While the outcome of the public engagement process on the Draft Revised Guidelines is not yet known, the operational noise parameters can be controlled using the SCADA system, and therefore, the Slieveacurry renewable energy development will ultimately comply with future guidelines should they be adopted/finalised during the consideration period of the current application.

There is, at the time of writing, no timeframe associated with the formalisation of the Revised Guidelines.

2.4 Planning History Review

This section of the EIAR sets out the relevant planning history of the Proposed Development site, planning applications in the immediate vicinity of the proposed works and other wind energy applications within the wider area. For the purposes of reviewing and stating the relevant planning history for this project the following methodology/criteria has been adopted

1. All planning applications which overlap or are within the red line planning application boundary of the current Proposed Development have been identified (listed in Table 2-1 below).
2. A two kilometre zone was established from any proposed turbines to identify any proposed/permitted developments that could be considered as s sensitive receptor (and which was not yet built) or that should be considered cumulatively with the Proposed Development, the applications identified in this phase are also listed in Table 2-2 below.
3. A buffer zone of 20 kilometres was established from the site of the Proposed Development in order to identify other wind farm sites in the wider area. For the purposes of this EIAR the planning history was extended to this wide range for wind farm developments due to the nature of the projects, potential for visual and cumulative affects to arise with the Proposed Development.

2.4.1 Proposed Development Site and its Environs

A review of Clare County Council Planning Register was undertaken on the 7th July 2020 and 14th October 2020 in order to identify relevant planning applications within and proximate to the proposed Slieveacurry renewable energy development site.

Applications Within/Overlapping the Application Site Boundary

The review identified 2 no. valid application lodged within the application site boundary in February 2005 for outline permission for a dwelling house and associated site development works (Pl Refs. 05/223 and 05/226) both of which were withdrawn.

A further planning application Ref: 20/806 for a wind energy development was lodged in November 2020 and withdrawn in January 2021.

Other valid applications lodged within the application boundary are set out in Table 2-1 below:

Table 2-1: Planning Applications within/Overlapping the Application Site Boundary

Planning Ref:	Description	Lodged	Decision
10/9	The construction of a wind farm which will comprise 31 no. wind turbines with hub height of 80 metres and rotor diameter of 90 metres, substation and associated 2 No. control buildings, borrow pits, 1 No. anemometry mast, underground electricity connection to site boundary, new and upgraded access roads and all associated site and ground works. This application is seeking a 10-year planning permission. This application is accompanied by an Environmental Impact Statement	08/01/2010	19/08/2011, Granted by Clare County Council; 29no. turbines granted by An Bord Pleanála ref: PL03.237524
12/64	Demolition of existing dwelling and construction of new dwelling house, connection to existing septic tank and associated site works.	08/02/2012	16/10/2021, Granted by Clare County Council
13/558	For the construction of a revised electricity substation in the townland of Knockalassa. This application represents an amendment to the substation already granted permission under Pl. Ref. No. P10/9 (An Bord Pleanála Ref: PL03.237524) The revised substation layout includes 3 No. control buildings, associated electrical plant and equipment and ancillary works. The application also includes consequent alterations to the adjacent borrow pit permitted under the above planning permission. This application is seeking a 10-year planning permission. This application is accompanied by a Natura Impact Statement (NIS)	24/10/2013	16/12/2013, Granted by Clare County Council
18/223	To construct a battery storage compound adjacent to an existing 110KV electricity substation. The	22/03/2018	16/05/2018 Granted by

Planning Ref:	Description	Lodged	Decision
	proposed works will involve the construction of new palisade fencing, bunded concrete plinths, up to 21 no. battery storage units and associated equipment, transformers and all ancillary site works.		Clare County Council
20/806	Application for a 10-year permission for the construction of a renewable energy development comprising the provision of 8 no. wind turbines with a total tip height of up to 175m, and all associated site works, met mast, borrow pit, electrical connections, as well as an extension to an existing substation	03/11/2021	Application withdrawn.
21/370	Application for a 10-year permission for the construction of a renewable energy development comprising the provision of 8 no. wind turbines with a total tip height of up to 175m, and all associated site works, met mast, borrow pit, electrical connections, as well as an extension to an existing substation	19/04/2021	Permission refused by Clare County Council, Application withdrawn at Appeal stage

Applications within 2km of Turbine Infrastructure

A 2km radius was considered adequately robust to guide this review in the context of confirming up to date records of sensitive receptors within the immediate setting of the Proposed Development. The following planning application has been approved:

Table 2-2: Approved Planning Application within 2km of Proposed Turbine Infrastructure

Planning Ref:	Description	Lodged	Decision
95/780	Construction of a cottage.	14/08/1995	19/03/1996 Granted by Clare County Council
95/779	Construction of a cottage.	14/08/1995	11/03/1996 Granted by Clare County Council
96/917	24m high lattice tower carrying antennae with associated equipment housing in a fenced compound	10/07/1996	27/02/1997 Granted by Clare County Council
01/6352	To construct a dwelling house, sewerage treatment system and percolation area along with associated site works.	14/08/2008	14/11/2008 Granted by Clare County Council
01/999	Construct dwelling house, garage and proprietary treatment system	21/05/2001	18/07/2001

Planning Ref:	Description	Lodged	Decision
02/142	To construct a dwelling house, garage and septic tank with proprietary treatment system under Planning Ref. No. P01/999	01/02/2002	14/03/2002, Granted by Clare County Council
02/1012	To construct an extension to the rear of the existing school	05/06/2002	26/07/2002, Granted by Clare County Council
02/1103	To reconstruct dwelling and outhouses and to construct a septic tank	27/06/2002	13/11/2002, Granted by Clare County Council
02/1484	To demolish section of the front boundary wall and to construct a new wall.	22/08/2002	15/10/2002 Granted by Clare County Council
02/1503	Approval to construct dwelling house, garage and effluent treatment unit with percolation area.	30/08/2002	19/11/2002 Granted by Clare County Council
04/1697	To reconvert existing dwelling into 2 no. dwellings	05/08/2004	16/11/2004, Granted by Clare Council
04/1625	To construct a slatted house on a farm.	27/07/2004	17/09/2004 Granted by Clare County Council
04/1885	To construct a dwelling house.	09/09/2004	01/02/2005 Granted by Clare County Council
04/1960	To erect sunroom to existing dwelling and permission to erect garage.	21/09/2004	09/11/2004 Granted by Clare County Council
04/1966	Retain the extension to the rear of and build an extension to the side of the existing dwelling	22/09/2004	12/11/2004, Granted by Clare County Council
04/2337	Approval to construct 2 dwelling houses and sewerage treatment systems consequent to the grant of permission ref. P00-394	11/11/2004	06/01/2005, Granted by Clare County Council
04/2471	To construct a dwelling house and sewerage treatment system.	25/11/2004	05/04/2005 Granted by Clare County Council
04/2527	To erect front porch to existing dwelling.	06/12/2004	07/02/2005 Granted by Clare County Council

Planning Ref:	Description	Lodged	Decision
05/844	To construct a dwellinghouse and garage.	16/05/2005	01/07/2005 Granted by Clare County Council
06/113	To construct new dwelling with water and sewage facilities.	24/01/2006	15/03/2006 Granted by Clare County Council
06/1167	To construct a dwellinghouse.	25/05/2006	10/11/2006 Granted by Clare County Council
06/1235	To construct a dwellinghouse and garage.	02/06/2006	26/07/2006 Granted by Clare County Council
06/1251	To construct an extension to the existing dwelling.	06/06/2006	27/07/2006 Granted by Clare County Council
06/1167	Permission consequent on the grant of outline permission P03/705 to construct a dwelling house, sewerage treatment system and associated site works	25/05/2006	10/11/2006, Granted by Clare County Council
07/161	To construct farm buildings with effluent storage	31/01/2007	26/03/2007, Granted by Clare County Council
07/540	Outline permission to construct dwelling house.	05/03/2007	25/06/2007 Granted by Clare County Council
07/675	To construct a slatted cattle shed.	15/03/2007	11//2007Granted by Clare County Council
07/1315	To erect a dwelling house.	21/05/2007	11/07/2007 Granted by Clare County Council
07/1465	Development of a livestock slatted unit with cubicles, calf creep, cattle crush, and concrete apron and silage slab.	05/06/2007	26/07/2007 Granted by Clare County Council
07/539	To change site boundary of dwelling house and garage (Pl Ref. 06/1235).	05/03/2007	26/04/2007 Granted by Clare County Council
07/2044	To construct a new domestic garage and all ancillary site works.	01/08/2007	20/09/2007 Granted by Clare County Council

Planning Ref:	Description	Lodged	Decision
07/213	Retention(Ref. No. P96/917) of an existing 24 metre high telecommunications support structure, antennas, equipment cabins and associated equipment within a fenced compound. The development forms part of Vodafone Ireland Limited's existing GSM and 3G Broadband telecommunications network	02/02/2007	14/06/2007, Granted by Clare County Council
08/911	To construct an extension to existing dwelling house.	06/06/2008	19/12/2008 Granted by Clare County Council
08/1786	To revise front/gable elevations and convert attic space to living area.	19/11/2008	12/01/2009 Granted by Clare County Council
09/394	To alter and extend existing dwelling house.	21/04/2009	10/06/2009 Granted by Clare County Council
09/667	To retain dwelling house and outbuildings as constructed under planning permission P02/1103. Increased floor area including extension of sunroom. - Retain elevational changes, additional windows, minor elevation changes to outbuildings and all associated site works.	25/06/2009	17/08/2009, Granted by Clare County Council
09/1137	To demolish extension to dwelling house, construct new extension and upgrade septic tank and percolation area	12/11/2009	22/12/2009, Granted by Clare County Council
09/1201	Outline permission to construct dwelling house and garage with effluent treatment system.	27/11/2009	25/01/2010 Granted by Clare County Council
10/286	Permission consequent on the grant of outline permission (Reference No 09/1201) to construct dwelling house and garage with effluent treatment system.	09/04/2010	26/05/2020 Granted by Clare County Council
10/781	To construct a shed, cattle crush and yard	16/09/2010	02/11/2010, Granted by Clare County Council
10/923	To construct dwelling house and connect to public services.	29/10/2010	08/12/2010 Granted by Clare County Council
10/933	To construct a shed.	02/11/2010	14/12/2010 Granted by Clare County Council

Planning Ref:	Description	Lodged	Decision
11/458	To construct a dwelling house, garage, ancillary works.	24/06/2011	03/08/2011 Granted by Clare County Council
11/624	The construction of a dwelling house, garage, wastewater treatment system, percolation area, entrance and all associated site works.	16/09/2011	26/01/2012 Granted by Clare County Council
12/64	Demolition of existing dwelling and the construction of new dwelling house.	08/02/2012	16/10/2012 Granted by Clare County Council
13/227	To amend the house design, site layout and site boundaries granted under planning reference P11-624	16/05/2013	24/06/2013, Granted by Clare County Council
15/190	To construct extension to the existing dwelling	26/03/2015	26/07/2015, Granted by Clare County Council
15/414	Extend the Appropriate Period of Planning Permission P10-286 for construction of a dwelling house and garage with effluent treatment system.	23/06/2015	04/08/2015 Granted by Clare County Council
16/108	Retention permission to retain the granny flat to the side of existing dwelling house.	18/02/2016	13/05/2016 Granted by Clare County Council
16/851	To increase the size of the existing percolation area.	07/11/2016	14/12/2016 Granted by Clare County Council
16/1013	To replace an existing sub-standard dwelling with a new dwelling house.	22/12/2016	15/02/2017 Granted by Clare County Council
17/415	To retain 2 No French doors and existing balcony to rear elevation and to install a new balcony to rear of dwelling.	29/05/2017	19/08/2017, Granted by Clare Council
17/528	Retain the changes to the original cottage and for permission to alter the fenestration.	06/07/2017	22/09/2017 Granted by Clare County Council
17/796	Construction of a machinery shed and yard	17/10/2017	07/12/2017, Granted by Clare County Council
18/521	To construct an extension on the Northwest side of the existing school consisting of a G.P. Hall and ancillary site works	28/06/2018	21/09/2018, Granted by Clare County Council

Planning Ref:	Description	Lodged	Decision
19/718	To upgrade an existing agricultural entrance to a Forest Road Bellmouth to facilitate timber harvesting, haulage operations.	12/09/2019	06/12/2019 Granted by Clare County Council
20/793	The development will consist of the replacement of existing substandard dwelling with a new dwelling house and the replacement of existing septic tank with a proprietary wastewater treatment system and polishing filter together with ancillary works	30/10/2020	18/01/2021, Granted by Clare County Council

Applications within 2km of Underground Cabling and Substation

Planning applications lodged within 2km of the proposed underground cable route from the proposed on-site Slieveacurry 110 kV substation to the Slievecallan 110 kV substation (c. 7.1km) have also been considered as part of this assessment. The 2km distance from the proposed grid works is considered highly conservative as any potential impacts associated with the works will be localised and temporary, i.e. confined to the construction phase of development. These applications are set out in Table 2-3 below:

Table 2-3: Approved Planning Applications within 2km of the Cable Route and Substation

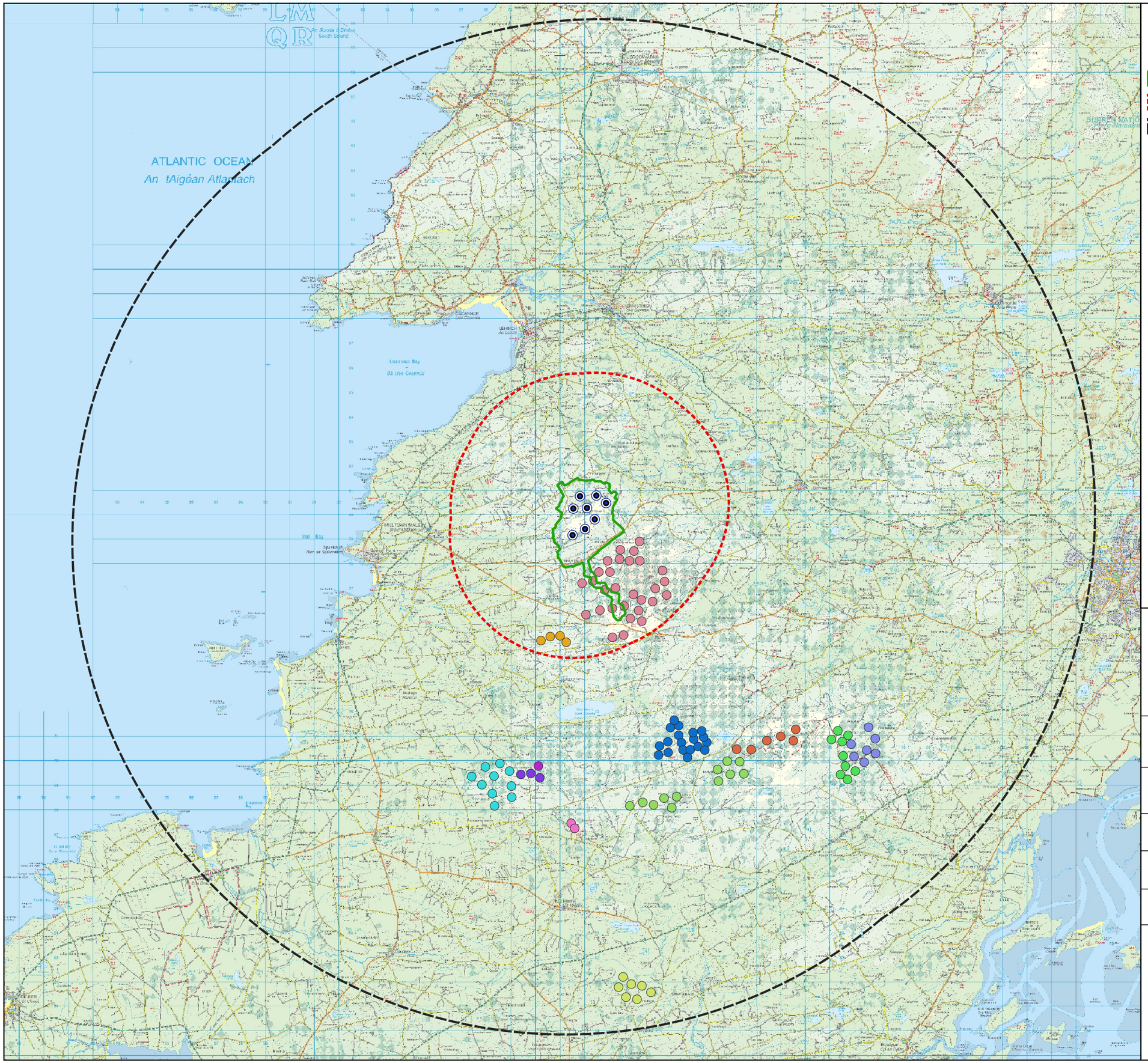
Planning Ref.	Description	Lodged	Decision
04/526	To construct a dwelling house and sewerage treatment system.	10/03/2004	20/08/2004 Granted by Clare County Council
08/1314	To construct a dwelling house.	14/08/2008	14/11/2008 Granted by Clare County Council
09/353	To renovate and extend an existing dwelling house together with ancillary site works.	14/04/2009	20/10/2009 Granted by Clare County Council
10/811	Retention of the following: 2 storey extension to rear of existing dwelling; Single storey extension to side of existing dwelling.	27/09/2010	11/11/2010 Granted by Clare County Council
16/352	To construct a three bay single slatted shed with creep area, contiguous machinery shed and concrete apron.	03/05/2016	24/07/2016 Granted by Clare County Council
16/851	To increase the size of the existing percolation area.	07/11/2016	14/12/2016 Granted by Clare County Council

The above-noted planning permissions have been considered within this EIAR and informed the various cumulative assessments as necessary in the relevant sections.

2.4.2 Other Wind Farm Sites

The existing, permitted or proposed wind farms set out in Table 2-4 overleaf have been identified within a 20km radius of the application site. The 20km planning search reflects the study area taken for the visual impact analysis of the development proposal. The existing and permitted wind energy developments located within 20km of the Slieveacurry Renewable Energy Development site are shown in Figure 2-4.

The Slievecallan Wind Farm (Pl Ref. 10/9), is the most proximate operating wind farm to the Proposed Development being located circa. 1.15km south of the subject turbines. It comprises 29 no. turbines with an overall blade tip height of 125m and is the most proximate wind farm to the proposed Slieveacurry renewable energy development. The Slievecallan Wind Farm planning application was lodged with the Planning Authority on the 8th January 2010 by West Clare Renewable Energy Ltd and permission was ultimately granted on appeal by An Bord Pleanála (ref: PL03.237524) for 29 no. turbines on the 18th August 2011.



Map Legend

- Proposed Turbine Locations
- EIAR Site Boundary
- 5km Buffer
- 20km Buffer

Wind Farms within 20km of Proposed Slieveacurry Wind Farm

- Coor Shanavogh Wind Farm - Under Appeal (4 Turbines)
- Existing Booltiagh Wind Farm (19 Turbines)
- Existing Boolynagleragh Wind Farm (9 Turbines)
- Existing Boolynagleragh Wind Farm Extension (7 Turbines)
- Existing Cahermurphy Wind Farm (3 turbines)
- Existing Glenmore (Sorrel Island) Wind Farm (12 Turbines)
- Existing Kiltumper Wind Farm (2 Turbines)
- Existing Letteragh Wind Farm (6 Turbines)
- Existing Slievecallan Wind Farm (29 Turbines)
- Permitted Cahermurphy Wind Farm (1 Turbine)
- Permitted Crossmore Wind Farm (7 Turbines)
- Proposed Cahermurphy Two Wind Farm (10 Turbines)

Drawing Title

Other Wind Farms within 20km

Project Title

Slieveacurry Renewable Energy Development, Co. Clare

Drawn By	Checked By
Ellen Costello	Michael Watson
Project No.	**Drawing No.**
170224c	Figure 2-4
Scale 1:150000	**Date** 29.10.2021

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Table 2-4 Planning History – Wind Farms in the Vicinity of Application Site

Project Name	Pl. Ref.	Lodged	Description	Location	Local Authority Decision	Appeal	Appeal Outcome	Operational Status
Slievecallan Wind Farm, Co. Clare	10/9	08/01/2010	Construction of a wind farm which will comprise 31 no. wind turbines with hub height of 80 metres and rotor diameter of 90 metres, substation and associated 2 No. control buildings, borrow pits, 1 No. anemometry mast, underground electricity connection to site boundary, new and upgraded access roads and all associated site and ground works.	Boolynamiscaun Boolinrudda, Coor East, Doonsallagh Glenageer, Knocklassa, Letterkelly, Magherabaun and Shanavogh East c. 1.15km south of application site	Conditional (37 no.) – 19/08/2010	3rd Party - Pl03.237524	Modified Grant of Permission 18/08/2011	Operational
Booltiagh Wind Farm, Co. Clare	00/567	21/03/2000	Erection of a wind farm comprising 26 wind turbines with towers not exceeding 60 metres in height and rotor diameter not exceeding 62 metres and ancillary equipment for generation of electricity.	Booltiagh & Glenmore North c. 8km south of application site	Refused – 03/07/2000	1st Party - PL03.120616	Conditional (12 no.) - 08/03/2001	Operational
Booltiagh Wind Farm Ext., Co. Clare	07/2900	11/12/2007	Erection of six wind turbines with towers up to 80 metres in height and total tip height up to 120 metres with ancillary equipment for generation of electricity and two borrow pits adjacent to Booltiagh Wind Farm.	Booltiagh townland and Carncreagh Townland c. 8.2km south of application site	Conditional (19 no.) – 17/10/2008	N/A	N/A	Operational
	08/1678	31/10/2008	Modification of Condition 2 of permitted development P07/2900. This proposal seeks permission for an extension of the permitted lifetime of the six turbine wind farm and ancillary equipment to a twenty year operational lifetime.	Booltiagh townland and Carncreagh Townland near Connolly, Co. Clare	Conditional (3 no.) – 24/01/2009	N/A	N/A	N/A

Project Name	Pl. Ref.	Lodged	Description	Location	Local Authority Decision	Appeal	Appeal Outcome	Operational Status
Boolynagleragh Wind Farm, Co. Clare	03/79	23/01/2003	Nineteen wind turbines, each having a rated electrical output of approximately 2000 kilowatts. Each wind turbine will comprise a tower up to 67 metres high, with a diameter of about 4 metres at the base. Three blades of up to 40 metres length will be attached.	Boolynagleragh c. 12.45km south of application site	Conditional (23 no.) – 13/11/2003	3rd Party – Pl03.204912	N/A	N/A
	09/479	11/05/2009	11 wind turbines, each with a nominal rated capacity of approximately 2,500KW. Each wind turbine will comprise a tower up to 80 metres high, with a diameter of about 4 metres at the base. Three blades of up to 45 metres length will be attached.	Boolynagleragh c. 12.45km south of application site	Conditional (20 no.) – 25/02/2010	1st Party - PL03.236376	Permission Modified - 07/12/2010	Operational
	13/681	13/12/2013	Extension to Boolynagleragh Wind Farm. The development will comprise seven wind turbines. Each wind turbine will have an overall maximum dimension of 126 metres, comprising a tower 75 - 80 metres high, with a diameter of about 4 metres at the base, to which three blades of 45 - 51 metres length will be attached.	Boolynagleragh	Refused – 13/10/2014	1st Party - PL03.244095	Conditional (17 no.) – 13/06/2016	Operational
	14/545	12/09/2014	To construct a new 38 kV overhead line connecting the Boolynagleragh wind farm with the existing 110 kV substation at Booltiagh.	Boolynagleragh, Letteragh, Lisroe, Boolyneaska & Booltiagh	Conditional (6 no.) – 31/05/2015	N/A	N/A	N/A

Project Name	Pl. Ref.	Lodged	Description	Location	Local Authority Decision	Appeal	Appeal Outcome	Operational Status
	18/830	18/10/2018	Relocation of 2 no. previously permitted wind turbines at Boolynagleragh Wind Farm. Turbine No.'s 3 and 4 moved approx. 59m and 26m respectively.	Boolynagleragh c. 12.45km south of application site	Conditional (4 no.) – 21/01/2019	N/A	N/A	N/A
Letteragh Wind Farm, Co. Clare	11/361	19/05/2011	The development will consist of the erection of six wind turbines (maximum hub height 90m, maximum blade diameter 93m).	Kilmaley c. 10.8km south of application site	Conditional (20 no.) – 17/11/2011	3rd Party – Pl03.239933	Conditional (16 no.) – 21/02/13	Operational
Glenmore, Wind Farm, Co. Clare	02/2228	17/12/2002	Construction of a wind farm consisting of 14 Wind turbines (75 metres hub height and 75 metres hub height and 80 metres rotor blade diameter).	Glenmore, Boolynamweel & Sorrel Island c. 10km south of application site	Conditional (29 no.) – 29/06/2004	N/A	N/A	N/A
	09/438	01/05/2009	Extend the Period of Validity of Planning Permission P02/2228 by 5 years.	Glenmore, Boolynamweel & Sorrel Island	Unconditional	N/A	N/A	N/A
	14/309	29/05/2014	Extend the Appropriate Period of Planning Permissions P02/2228 and P09/438.	Glenmore, Boolynamweel and Illaunatoo (or Sorrel Island	Unconditional	N/A	N/A	N/A
	14/575	29/09/2014	The provision of a total of up to 12 No. wind turbines, with a maximum overall blade tip height of up to 136.5m. This application is intended to supersede the wind farm development previously permitted on part of this site under Pl. Ref. P02/2228 as extended by Pl Ref. P09/438 and Pl. Ref. P14/309.	Glenmore, Boolynamweel, Boolynaknockaun and Furoor c. 9.9km south of application site	Refused – 30/07/2015	1st Party - PL03.245392	Conditional (27 no.) - 24/10/2016	Operational

Project Name	Pl. Ref.	Lodged	Description	Location	Local Authority Decision	Appeal	Appeal Outcome	Operational Status
Kiltumper Wind Farm, Co. Clare	09/358	14/04/2009	The development will consist of 2 wind turbines.	Kiltumper c. 12.15km south of application site	Conditional (19 no.) – 05/06/2009	3rd Party – Pl03.234010	Conditional (19 no.) – 20/10/2010	Operational
	14/754	10/12/2014	Extension of Duration of Pl Ref. 09/358.	Kiltumper	Unconditional	N/A	N/A	N/A
Cahermurphy Wind Farm, Co. Clare	03/2071	16/10/2003	Erect 6 No. 1 MW wind turbines.	Cahermurphy c. 9.45km south of application site	Refused – 09/12/2003	1st Party - PL03.204911	Conditional (14 no.) – 23/07/2004	N/A
	09/267	19/03/2009	Extension of Duration of Pl Ref. 03/2071.	Cahermurphy	Unconditional	N/A	N/A	N/A
	13/507	04/10/2013	Extension of Duration of Pl Ref. 03/2071 / 09/267.	Cahermurphy	Unconditional	N/A	N/A	N/A
	14/551	15/09/2014	Provision of a total of 4 No. wind turbines, with a maximum ground to top blade tip height of up to 131m. The current proposed development is intended to replace an existing planning permission for a six turbine wind farm development permitted under Pl. Ref. 03-2071.	Cahermurphy	Refused – 25/06/2015	1st Party - PL03.245189	Conditional (20 no.) - 28/07/2016	3no. turbines Operational
	19/159	06/03/2019	Modification of Pl Ref. 14/551 - The proposed development will consist of the provision of a larger wind turbine with a tip height of up to 150m (increase in tip height of 19m from the previously approved 131 m turbine) at the previously permitted location of	Cahermurphy	Conditional (4 no.) – 30/05/2019	N/A	N/A	N/A

Project Name	Pl. Ref.	Lodged	Description	Location	Local Authority Decision	Appeal	Appeal Outcome	Operational Status
			turbine no. 3 and associated site works.					
	20/658	18/09/2020	Construction of up to 10 no. wind turbines with a maximum overall blade tip height of up to 170 metres; meteorological mast; 1 no. 38kV electrical substation; all works associated with the connection of the proposed wind farm to the national electricity grid via an underground cable to the existing Booltiagh 110kV substation; upgrade of existing tracks, roads and provision of new site access roads and hardstand areas; junction access road works; 2 no. borrow pits; 1 no. temporary construction compound; site drainage. forestry felling; all associated and ancillary site development works.	Cahermurphy	Pending	N/A	N/A	N/A
Coor West Wind Farm, Co. Clare	11/360	19/05/2011	The wind farm will comprise 4[4] wind turbines, with a hub height of 85 metres and rotor diameter of 82 metres.	Coor West, Shanavogh East and Shanavogh West c. 4.3km south of application site	Refused – 12/07/2011	1st Party - PL03.239378 (Quashed) / PL03.305972	Decision remains Pending	No

[4] *Revised from 6 turbines to 4 at An Bord Pleanála FI stage*

Project Name	Pl. Ref.	Lodged	Description	Location	Local Authority Decision	Appeal	Appeal Outcome	Operational Status
Crossmore Wind Farm, Co. Clare	09/123	10/02/2009	Seven wind turbines with hub height of 80m and blade diameter of 90m.	Crossmore, Knockalough c. 18km south	Conditional (21 no.) – 22/10/2009	N/A	N/A	No
	19/388	16/05/2019	Extension of Duration of Pl Ref. 09/123.	Crossmore, Knockalough	Unconditional	N/A	N/A	N/A

2.5 Scoping and Consultations

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. This process is conducted by contacting the relevant authorities and Non-Governmental Organisations (NGOs) with interest in the specific aspects of the environment with the potential to be affected by the proposal. These organisations are invited to submit comments on the scope of the EIAR and the specific standards of information they require. Comprehensive and timely scoping helps ensure that the EIAR refers to all relevant aspects of the subject 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 scoping report, providing details of the application site and the subject grid connection, was prepared by MKO and circulated in February 2020 to relevant parties. The scoping report issued provided information on the topics below and is included in this EIAR.

- Description of the Proposed Development Site, including Site Location and Access, Land-Use, Designated Areas and Landscape Policy;
- Planning Context;
- Site Selection;
- Description of the Proposed Development; and
- Scope of the EIAR and Natura Impact Assessment

MKO requested the comments of the relevant personnel/bodies in their respective capacities as consultees with regards to the EIA process.

2.5.1 Scoping Replies

Table 2-5 presents a summary of all scoping responses received. Copies of the scoping responses are included in Appendix 2-1 of this EIAR. The recommendations of the consultees have informed the EIAR preparation process and the contents of the same.

Table 2-5: Scoping Replies

Consultee	Scoping Response Date	Scoping Response	EIAR Chapter
Department of Agriculture, Food and the Marine (DAFM)	19.03.2020	Under section 6.2.4.9 of the EIAR (Hydrology and Hydrogeology), the DAFM notes that it is important the EIA study evaluates the potential impacts of the required changes to the drainage of the site and the potential to cause additional flooding downstream of the site. It is not sufficient to examine just the existing drainage of the site and site specific flood risk.	**Chapter 9** – Hydrology and Hydrogeology
	24.04.2020	If the Proposed Development will involve the felling or removal of any trees, the DAFM states that the developer must obtain a Felling License from this Department before trees are felled or removed. The response further notes that the interaction of proposed works with the environment locally and more widely, in addition to potential direct and indirect impacts on designated sites and water, will need to be assessed. Consultation with relevant environmental and planning authorities may be required where specific sensitivities arise (e.g. local authorities, National Parks & Wildlife Service, Inland Fisheries Ireland, and the National Monuments Service. As this development is within a forest lands, particular attention should be paid to deforestation, turbulence felling and the requirement to afforest alternative lands.	**Chapter 6** – Flora and Fauna **Chapter 12** – Landscape and Visuals
Department of Defence (DoD)	12.03.2020	In all locations where windfarms are permitted, the DoD requires that a condition on the following lighting requirements are met: 1. *Single turbines or turbines delineating corners of a windfarm should be illuminated by high intensity strobe lights (Red).* 2. *Obstruction lighting elsewhere in a windfarm will be a pattern that will allow the hazard to be identified and avoided by aircraft in flights.* 3. *Obstruction lights used should be incandescent or of a type visible to emit light at the near Infra-Red (IR) range of the electromagnetic spectrum specifically at or near 850nanometres (nm) of wavelength. Light intensity to be of similar value to that emitted in the visible spectrum of light. Obstruction lights used should be incandescent or of a type visible to Night Vision Equipment.*	**Chapter 14** – Material Assets

Consultee	Scoping Response Date	Scoping Response	EIAR Chapter
Fáilte Ireland	26.02.2020	Fáilte Ireland issued copy of their '*EIAR Guidelines for the Consideration of Tourism and Tourism Related Projects*' which were recommended to be taken into account in the preparation of the EIAR. It should be noted that the guidelines are non-statutory and act as supplementary advice to the EPA EIAR Guidelines.	**Chapter 5** – Population and Human Health
Geological Survey of Ireland (GSI)	13.03.2020	The GSI set out their input on the Proposed Development under the following headings: Geoheritage – GSI records show that there are no County Geological Sites located in close proximity of the Proposed Development site. There are sites recorded within the 15km radius marked on Drawing 2.2 of the scoping document. The EIA should consider GSI's Geological Heritage data set in this regard. Geotechnical Database Resources – GSI recommends that the Geotechnical Database is consulted as part of the EIA with regard to baseline data for the region and/or within the vicinity of the Proposed Development area. Groundwater – GSI recommends that the National Aquifer and Recharge Map should be consulted with regard to aquifers, karst landscapes and landforms and public and group scheme water supplies. GSI also recommends that other groundwater related data available within their online databases is also used within the EIAR assessment in terms of groundwater wells and springs, aquifer vulnerability, subsoil permeability and drinking water protection areas. Geohazards – GSI recommends that geohazards are taken into consideration, especially when developing areas where these risks are prevalent. To this end, the Applicant should consult the available data on landslides and landslide susceptibility, groundwater flooding and etc. Natural Resources – GSI states that the consideration of mineral resources as a material asset which should be explicitly recognised within the EIA. GSI notes that they provide data, maps, interpretations and advice on matters related to minerals, their use and their development. As such, the EIAR should also consider potential for resource sterilisation as part of the planning process.	**Chapter 8** - Geology and Soils
Health Service Executive (HSE)	26.03.2020	The HSE issued a Consultation Report on the Proposed Development. The HSE provides a general recommendation that the following documents be considered when preparing the EIAR: › Guidelines on the information to be contained in EIS (2002);	**Chapter 2** – Background of the Proposed Development

Consultee	Scoping Response Date	Scoping Response	EIAR Chapter
		› Advice Notes on Current Practice in the preparation of EIS (2003); and › Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment Generally, the HSE states that the EIA should examine all likely significant impacts and provide the following information for each: › Description of the receiving environment; › The nature and scale of the impact; › An assessment of the significance of the impact; › Proposed mitigation measures; and › Residual impacts. It is recommended that the wider determinants of health and wellbeing are considered in a proportionate manner when considering the EIA. This includes positive likely significant impacts, which should be also identified and assessed, in addition to any likely negative significant impacts from the Proposed Development. The Environmental Health Service (EHS) also recommends that the following matters are considered within the EIAR: Public Consultation: The EHS strongly recommends that public consultation with the local community should be carried out to ensure all potentially significant impacts have been adequately addressed. Sensitive receptors and other stakeholders should be identified to ensure all necessary and appropriate mitigation measures are put in place to avoid any complaints about the proposed wind farm development in the future. The EIAR should clearly demonstrate the link between public consultations and how those consultations have influenced the decision-making process in the EIA. Decommissioning phase: The EIAR should detail how the existing turbines will be decommissioned and waste management system for the turbines and associated material. Information should also be provided regarding the proposed methodology to be used for the disposal of the materials forming the foundations of the wind turbines.	› **Chapter 4** – Description of the Proposed Development › **Chapter 5** – Population and Human Health › **Chapter 8** – Land and Soils › **Chapter 9** – Hydrology and Hydrogeology › **Chapter 10** – Air and Climate › **Chapter 11** - Noise › **Chapter 14** – Material Assets › **Chapter 15** – Interaction of the Foregoing

Consultee	Scoping Response Date	Scoping Response	EIAR Chapter
		Siting and location of turbines: The EIAR should include a map and a description of the proposed location of each of the proposed wind turbines. Opportunity for Health Gain: The Proposed Development should be assessed with a view to including opportunities for health gain within the site of the proposed wind farm by including greenways, cycle-paths or walking routes within the development site. Noise & Vibration: The potential impacts for noise and vibration from the construction and operational phases of development arising from the Proposed Development on all noise sensitive locations must be clearly identified in the EIAR. A baseline noise monitoring survey should be undertaken to establish the existing background noise levels. The EIAR must also consider the appropriateness and effectiveness of all proposed mitigation measures to minimise noise/vibration. Shadow Flicker: It is recommended that a shadow flicker assessment is undertaken to identifying all dwellings and sensitive receptors which may be impacted by shadow flicker. The assessment must include all proposed mitigation measures. Air Quality: Due to the nature of the proposed construction works, generation of airborne dust has the potential to have significant impacts on sensitive receptors. A Construction Environmental Management Plan (CEMP) should be included in the EIAR which details dust control and mitigation measures. Surface and Groundwater Quality: The Proposed Development has the potential to have a significant impact on the quality of both surface and ground water. Any potential significant impacts to drinking water sources should be assessed. Details of bedrock, overburden, vulnerability, groundwater flows, aquifers and catchment areas should be considered when assessing potential impacts and any proposed mitigation measures. Geological Impacts: A detailed assessment of the current ground stability of the site for the proposed wind farm development and all proposed mitigation measures should be detailed in the EIAR. The assessment should consider the impact construction work may have on the future stability of ground conditions, extreme weather events, site drainage and the potential for soil erosion.	

Consultee	Scoping Response Date	Scoping Response	EIAR Chapter
		Ancillary Facilities: The EIAR should include details of the location of the site office, construction compound, fuel storage depot, sanitary accommodation and canteen, First Aid facilities, disposal of wastewater and the provision of a potable water supply to the site canteen. Cumulative Impacts: The EIAR should include a detailed assessment of any likely significant cumulative impacts of the Proposed Development.	
Irish Aviation Authority (IAA)	10.03.2020	The IAA states that, in the event that planning permission is granted for the Proposed Development, the applicant should be conditioned to contact the IAA to complete the following requirements: › Agree an aeronautical obstacle warning light scheme; › Provide as-constructed coordinates in WGS84 format together with ground and tip height elevations at each wind turbine; and › Notify the Authority of intention to commence crane operations with a minimum of 30 days prior notification of their erection.	› **Chapter 14** – Material Assets
Transport Infrastructure Ireland (TII)	09.03.2020	TII provided 7 no. general recommendations / guidance for the preparation of the EIAR, which may affect the National Roads network (the area is noted as being c. 5km east of the N67): 1. 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. In relation to the Proposed Development site, the locations of existing and future national road schemes should be noted and proposals developed to safeguard proposed road schemes. Consultations should be had with the local authority/NRDO with regards locations of existing and future national road schemes. 3. In relation to the grid connection and cable routing, proposals should be developed to safeguard proposed road schemes. In the context of existing national roads, alternatives to the provision of cabling along the national road network should be considered in the interests of safeguarding the investment in the potential for future upgrade works to the national road network. The cable routing should avoid all impacts to existing TII infrastructure.	› **Chapter 5** – Population and Human Health › **Chapter 14** – Material Assets

Consultee	Scoping Response Date	Scoping Response	EIAR Chapter
		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. All structures on the haul route should be checked by the applicant/developer to confirm their capacity to accommodate any abnormal load proposed. 5. Where appropriate, subject to meeting the appropriate thresholds and criteria and having regard to best practice, a Traffic and Transport Assessment 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. 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 and Road Safety Impact Assessment. 7. 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 *Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes* (NRA, 2006), (b) *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.	
An Taisce	-	No response received to date	
Bat Conservation Ireland	-	No response received to date	
Birdwatch Ireland	-	No response received to date	
Commission for Regulation of Utilities, Water and Energy	-	No response received to date	
Department of Communications,	-	No response received to date	

Consultee	Scoping Response Date	Scoping Response	EIAR Chapter
Climate Action and the Environment			
Department of Culture, Heritage and the Gaeltacht	26.08.2020	Nature Conservation – Ecological Survey An ecological survey should be carried out of the site of the Proposed Development site including the route of any access roads, pipelines or cables etc. to survey the habitats and species present. Any improvement or reinforcement works required for access and transport anywhere along any proposed haul route(s) should be included in the EIAR and subjected to ecological impact assessment with the inclusion of mitigation measures, as appropriate. Where bridges require strengthening this may involve grouting of crevices which may function as bat roosts. Where ex-situ impacts are possible survey work may be required outside of the development sites. Surveys should be carried out by suitably qualified persons at an appropriate time of the year depending on the species being surveyed for. The EIAR should include the results of the surveys, and detail the survey methodology and timing of such surveys. The EIAR should cover the whole project, including construction, operation and, if applicable, restoration or decommissioning phases. Alternatives examined should also be included in the EIAR. Baseline Data The response noted where information can be found. Impact Assessment The impact of the development on the flora, fauna and habitats present should be assessed. In particular the impact of the Proposed Development should be assessed, where applicable, with regard to: › Natura 2000 sites, i.e. Special Areas of Conservation (SAC) designated under the EC Habitats Directive (Council Directive 92/43/EEC) and Special Protection Areas (SPA) designated under the EC Birds Directive (Directive 2009/147 EC). › Other designated sites, or sites proposed for designation, such as Natural Heritage Areas and proposed Natural Heritage Areas, Nature Reserves and Refuges for Fauna or Flora, designated under the Wildlife Acts 1976 to 2018.	› **Chapter 6** – Biodiversity

Consultee	Scoping Response Date	Scoping Response	EIAR Chapter
		› Species protected under the Wildlife Acts including protected flora. › 'Protected species and natural habitats', as defined in the Environmental Liability Directive (2004/35/EC) and European Communities (Environmental Liability) Regulations, 2008, including Birds Directive – Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur) and Habitats. › Directive – Annex I habitats, Annex II species and their habitats, and Annex IV species and their breeding sites and resting places (wherever they occur). Of particular relevance to this site is that the Birds Directive Annex I species Hen Harrier has been recorded in the area and the Habitats Directive Annex II species Marsh Fritillary has also been recorded in the area, this department expects that these species will be surveyed for at the appropriate times and that any impact of the Proposed Development on them will be assessed. › Important bird areas such as those identified by Birdlife International. › Features of the landscape which are of major importance for wild flora and fauna, such as those with a "stepping stone" and ecological corridors function, as referenced in Article 10 of the Habitats Directive. › Other habitats of ecological value in a national to local context (such as those identified as locally important biodiversity areas within Local Biodiversity Action Plans and County Development Plans). › Red data book species. › Biodiversity in general. Reference should be made to the National Biodiversity Action Plan 2017-2021 and any relevant County Biodiversity Plan, as well as the All Ireland Pollinator Plan 2015-2020. Any losses of biodiverse habitat associated with this Proposed Development (including for example from access roads and cabling) such as blanket bog, heath, woodland, scrub, hedgerows and other habitats should be mitigated for. In particular any impact on water table levels or groundwater flows may impact on wetland sites some distance away. The EIAR should assess cumulative impacts with other plans or projects if applicable. Where negative impacts are identified suitable mitigation measures should be detailed if appropriate.	

Consultee	Scoping Response Date	Scoping Response	EIAR Chapter
		Alien Invasive Species The EIAR should also address the issue of invasive alien plant and animal species, such as Japanese Knotweed, and detail the methods required to ensure they are not accidentally introduced or spread during construction. Hedgerows and Protected Species Badgers are listed on annex III of the Berne Convention and are protected under the Wildlife Acts.. Every effort should be made to retain hedgerows. The EIAR should provide an estimate of the length of hedgerow that will be lost, if any. Where trees or hedgerows have to be removed there should be suitable planting of native species in mitigation. Hedgerows and trees should not be removed during the nesting season (i.e. March 1st to August 31st). Bats Bat roosts may be present in trees, buildings and bridges. Bat roosts can only be destroyed under licence under the Wildlife Acts and a derogation under the Birds and Natural Habitats Regulations and such a licence would only be given if suitable mitigation measures were implemented. Where so called bat friendly lighting is proposed as mitigation then it should be proven to work as mitigation. Lighting in woodlands and ecological corridors should be avoided. Rivers and Wetlands Any watercourse or wetland impacted on should be surveyed for the presence of protected species and species listed on Annexes II and IV of the Habitats Directive. One of the main threats identified in the threat response plan for otter is habitat destruction (see www.npws.ie/sites/default/files/publications/pdf/2009_Otter_TRP.pdf). In addition a 10 m riparian buffer on both banks of a waterway is considered to comprise part of the otter habitat. Therefore any Proposed Development should be located at least 10 m away from the waterway. A suitable riparian habitat should be left along each watercourse. Construction work should not be allowed impact on water quality and measures should be detailed in the EIAR to prevent sediment and/or fuel runoff from getting into watercourses which could adversely impact on aquatic species. Flood plains, if present, should be identified in the EIAR and left undeveloped to allow for the protection of these valuable	

Consultee	Scoping Response Date	Scoping Response	EIAR Chapter
		habitats and provide areas for flood water retention. If applicable the EIAR should take account of the guidelines for Planning Authorities entitled "The Planning System and Flood Risk Management" and published by the Department of the Environment, Heritage and Local Government in November 2009. IFI should be consulted with regard to impacts on fish species. Freshwater Pearl Mussel It is important that the needs of the Freshwater Pearl Mussels are considered in relation to water quality. Where Freshwater Pearl Mussels could potentially be impacted by a Proposed Development, the applicant should have due regard to, and incorporate any measures from, the Freshwater Pearl Mussel sub-basin plans, as appropriate. Water quality Ground and surface water quality should be protected during the construction and operation of the Proposed Development and if applicable the applicant should ensure that adequate sewage treatment facilities are or will be in place prior to any development. The applicant should also ensure that adequate water supplies are present prior to development. Bridges and Flora Masonry bridges are a valuable habitat for a myriad of saxicolous vascular, bryophyte and lichen species. Bird and bat flight paths Wind turbines and associated cables have the potential to impact on bird flight paths, therefore the survey work required should include 2 years of bird data. Survey methodologies should follow best practice and if necessary be modified to reflect the Irish situation. When survey results are being presented in an EIAR and NIS it is important that best practice is followed and that the full survey methodology, including dates and times, is detailed. Results for species need to be referenced back to the overall a species could be considered significant. It is important that bird migration routes are considered as well as routes of birds travelling on a daily basis between roosting and feeding areas. Hen Harrier has been recorded in this area and should be surveyed for during both the breeding and non-breeding seasons. As wind turbines can also impact on bats a bat survey will be required.	

Consultee	Scoping Response Date	Scoping Response	EIAR Chapter
		Monitoring This Department recognises the importance of pre and post construction monitoring, such as recommended in Drewitt et al. (2006), and Bat Conservation Ireland (2012). The applicant should not use any proposed post construction monitoring as mitigation to supplement inadequate information in the assessment. The EIAR process should identify any pre and post construction monitoring which should be carried out. The post construction monitoring should include bird and bat strikes/fatalities including the impact on any such results of the removal of carcasses by scavengers. Monitoring results should be made available to the competent Authority and copied to this Department. A plan of action needs to be agreed at planning stage with the Planning Authority if the results in future show a significant mortality of birds and/or bat species. Turbine specification Should the exact height and rotor diameter of the turbines to be used not be known at EIAR stage then the assessment of impacts must be applicable to a variety of turbine heights and rotor diameters which could be used. This should be made clear in the EIAR. Conservation objectives In order to carry out the appropriate assessment screening, and/or prepare the Natura Impact Statement (NIS), information about the relevant Natura 2000 sites including their conservation objectives will need to be collected. Details of designated sites and species and conservation objectives can be found on www.npws.ie/. Cumulative and ex situ impacts A rule of thumb often used is to include all Natura 2000 sites within a distance of 15 km. It should be noted however that this will not always be appropriate. In some instances where there are hydrological connections a whole river catchment or a groundwater aquifer may need to be included. Similarly where bird flight paths are involved the impact may be on an SPA more than 15 km away. CMPs	

Consultee	Scoping Response Date	Scoping Response	EIAR Chapter
		Complete project details including outline construction management plans (CMPs) need to be provided in order to allow an adequate appropriate assessment to be undertaken. Applicants need to be able to demonstrate that CMPs and other such plans are adequate and effective mitigation, supported by scientific information and analysis, and that they are feasible within the physical constraints of the site. The positions, locations and sizes of construction infrastructure and mitigation, such as settlement ponds, disposal sites and construction compounds, may significantly affect European sites, designated sites, habitats, and species in their own right and could have an effect for example on drainage, water quality, habitat loss, and disturbance. If these are undetermined at time of the assessment, all potential effects of the development on the site are not being considered. If applicants are not in a position to decide the exact location and details of these at time of application, then they need to consider the range of options that may be used in their assessment so that all issues are covered. The CMP should also include methods to ensure invasive alien species are not introduced or spread. This Department understands that it may not be possible to have final cable route details until a grid connection agreement is given. However, if applicants are not in a position to decide the exact location and details at time of application, then they need to consider the range of options that may be used in their assessment so that all issues are covered. <u>Licences</u> Where there are impacts on protected species and their habitats, resting or breeding places, licenses may be required under the Wildlife Acts or derogations under the Habitats Regulations. In order to apply for any derogations the results of a survey should be submitted to the National Parks and Wildlife Service of this Department. Such surveys are to be carried out by appropriately qualified person/s at an appropriate time of the year. Details of survey methodology should also be provided. Such licences should be applied for in advance of planning to avoid delays and in case project modifications are necessary. Should this survey work take place well before construction commences, it is recommended that an ecological survey of the development site should take place immediately prior to construction to ensure no significant change in the baseline ecological survey has occurred. If there has been any significant change mitigation may require amendment and where a licence has expired, there will be a need for new licence applications for protected species.	

Consultee	Scoping Response Date	Scoping Response	EIAR Chapter
Department of Transport, Tourism and Sport	-	No response received to date	
EirGrid	-	No response received to date	
Forest Service	-	No response received to date	
Iarnród Éireann	-	No response received to date	
Inland Fisheries Ireland	-	No response received to date	
Irish Peatland Conservation Council	-	No response received to date	
Irish Red Grouse Association	-	No response received to date	
Irish Water	-	No response received to date	
Irish Wildlife Trust	-	No response received to date	
Irish Raptor Study Group	-	No response received to date	
Office of Public Works	-	No response received to date	
Shannon Airport Authority DAC	-	No response received to date	
Sustainable Energy Authority of Ireland	-	No response received to date	

2.5.2 Other Consultations - Telecommunications

As part of the early constraints study undertaken in the early design stages, telecommunications bodies were contacted, and the responses set out in Table 2-6 below received. Further analysis on Telecommunications in the context of the proposed Slieveacurry development is provided in Chapter 14 (Material Assets).

Table 2-6: Telecommunications Scoping Responses

Consultee	Date of response	Response received
Airspeed Communications	23.06.2020	Confirmed that the Proposed Development will have no impact on the Airspeed Communications network.
Broadcasting Authority of Ireland	24.02.2020	BAI are not aware of any issues from existing wind farms impacting on FM networks. The proposed wind farm is not located within proximity of any existing or planned FM transmission sites.
BT Communications Ireland	21.02.2020	The development will have no impact on the BT Ireland microwave network.
Commission for Communications Regulation (CCR)	21.02.2020	The CCR provided a list of operators within 20km radius of the Proposed Development. All 14 no. operators were contacted as part of the EIA.
Eir	25.02.2020	The development will have no impact on the Eir transmission service network.
ESB Telecoms	06.03.2020	The development will have no impact on the ESB Telecoms infrastructure or service network.
Imagine Group (IG)	21.02.2020	IG confirms that there are no active or planned links in the study area.
Lightnet	24.02.2020	Lightnet confirms that they do not have any point-to-point links crossing the general setting of the Proposed Development. Response references that there is a transmission site to the north of the study area, outside Ennistimon and to the west in Miltown Malbay.
2RN (formerly RTE Transmission Network Ltd)	21.02.2020	The development will have no impact on RTE infrastructure or transmission network.
Tetra Ireland Communications Ltd.	02.03.2020	The development will have no impact on the Tetra service network.
Three Ireland	21.02.2020	Three confirms that there are no telecommunication links that traverse the study area; specifically, the closest site is 2.05km east of the study area but does not have any links that would be affected by the development. There is a new planned link in the region but this will not be affected by the proposed wind energy infrastructure.
Towercom	11.03.2020	The development will have no impact on Towercom infrastructure / sites or transmission network.
Viatel Ireland Ltd	28.02.2020	The development will have no impact on Viatel infrastructure / sites or transmission network.
Virgin Media Ireland	24.02.2020	The development will have no impact on Virgin Media infrastructure / sites or microwave network.
Vodafone Ireland Ltd	25.02.2020	The development will have no impact on Vodafone infrastructure / sites or transmission network.

Consultee	Date of response	Response received
BBnet	-	No response received to date.
Ripplecom	28.02.2020	No response received to date on potential impacts on their service network arising from the Proposed Development.

2.5.3 Community Engagement

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

The Wind Energy Development Guidelines (2006) state that:

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

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

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

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

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

The report, included at Appendix 2-2 of this EIAR, outlines the consultation and community engagement initiatives undertaken by Slieveacurry Ltd. prior to the submission of the planning application. It also outlines the main issues identified during this process, how the final proposal reflects community consultation and the steps taken to ensure that the Proposed Development will be of enduring economic benefit to the communities concerned.

The project benefits from a dedicated Community Liaison Officer; dedicated contact phone number, email address and postal address; and project website (www.slieveacurryinfo.ie). Consultation with the local community included community interactions which included dedicated house calls, and most recently a public exhibition held in the local Community Hall in Miltown Malbay.

2.5.4 Previous Planning Applications

There have been previous planning applications for a renewable energy development lodged for the consideration of the Planning Authority on this site. These applications have been for broadly similar forms of development and where lodged under Pl. Ref. 20/806 (November 2020) and Pl. Ref. 21/370 (April 2021). The initial 20/806 application was subject to legal proceedings being taken against Clare County Council regarding the validation of the application. The court ruled to put a stay on any decision pending the outcome of the legal case. Due to the uncertainty associated with the timing of a decision on the legal proceedings, it was decided to withdraw that planning application and submit a new one which addressed insofar as practicable any issues that had been raised. The second application (Pl. Ref. 21/370) included updated planning documentation, taking into consideration a range of third party and statutory body submissions which were made in relation to the initial proposal. The second application was adjudicated on by the Planning Authority who recommended that permission be refused for four reasons on the basis of the perception that the Proposed Development would have an adverse impact on (1) visual amenity, (2) residential amenity (3) Hen harrier, (4) Peat stability/hydrology. The reasons for refusal recommended by the Planning Authority were subject to a detailed Grounds of Appeal which was lodged with An Bord Pleanála under their reference ABP-310707-21. In October 2021, Slieveacurry Ltd. withdrew the planning appeal case to facilitate the lodging of a revised application which considers the findings of the High Court judgment issued in the judicial review of the Derryadd Wind Farm. This EIAR and application documentation addresses the findings of the Derryadd judgment by clearly articulating (and assessing within this EIAR) the limited range of turbine parameters for which planning permission is sought. As the current Proposed Development is broadly similar to the previous proposal the various submissions on Pl. Ref. 21/370 have been reviewed and considered in the current application documentation (including NIS and this EIAR). The previous submissions from third parties and statutory bodies as well as the Planning Authority's refusal reasons have accordingly been drawn upon to inform additional consideration and assessment where necessary. A summary of matters raised on the previous planning application are set out in Table 2 7 below:

Table 2-7: Summary of Matters Raised in Relation to Application Ref: 21/370

Matters Raised	Comment
Clare County Council Pl. Ref. 21/370 Refusal Reason no. 1	The first refusal reason raised concern that the proposed development would have an adverse impact on the Amenities of the area notwithstanding the areas designation as an area which is "Strategic" for wind farm development. This issue is dealt with in full in Chapter 12 – Landscape and Visual of this EIAR, and specifically Section 12.9 refers
Clare County Council Pl. Ref. 21/370 Refusal Reason no. 2	The second refusal reason raised concern that the proposed development would have an adverse impact on Residential Amenities of the area due to potential noise and landscape impacts and could be considered to be contrary to Objective CDP 8.40 of the County Development Plan. The landscape concerns raised are dealt with in full in Chapter 12 of this EIAR which demonstrates that the Proposed Development can be accommodated within the landscape without significant adverse effect. Noise is dealt with in full in Chapter 11, Noise and Vibration, and considers potential for cumulative effects. The Noise assessment concludes that the predicted operational noise levels will be within best practice noise limits; therefore, it is not considered that a significant effect is associated with the Proposed Development.
Clare County Council Pl. Ref.	The third refusal reason raised concern that the proposed development could give rise to adverse impacts on the Hen Harrier. This matter is considered in detail in Chapter 7, Ornithology, which considers the potential impacts that

Matters Raised	Comment
21/370 Refusal Reason no. 3	could arise across a number of relevant bird species. Hen harrier is specifically dealt with in Sections 7.3.6, 7.3.7, 7.4.2, 7.5.2, and 7.8.2.1. With Section 7.2.4.5 setting out Hen Harrier Roost Surveys. Appendix 7-7 provides a Hen Harrier Enhancement plan. It is noted that no significant cumulative effects were identified in relation to Hen Harrier. Therefore significant negative cumulative effects are not predicted.
Clare County Council Pl. Ref. 21/370 Refusal Reason no. 4	The fourth refusal reason related to concern in relation to the peat management on site in particular with respect to access roads and forestry felling as well as concerns in relation to hydrological. These matters are dealt with in full in Chapter 9 Hydrology and Hydrogeology of the EIAR with particular reference to Section 9.5.2.12 – Effects of Tree Felling and Construction Works on the WFD Status of Downstream Waterbodies In relation to peat management, a Peat and Spoil Management Plan is included as Appendix 4-2 and in relation to peat stability a comprehensive Geotechnical and Peat stability assessment report is included as Appendix 8-1. These provide comprehensive details demonstrating that there will be no significant adverse impacts arising in relation to peat stability and spoil management.

2.5.5 Pre-Planning Meetings

2.5.5.1 An Bord Pleanála

The Applicant engaged with An Bord Pleanála in August 2020 with regards the extension to the existing Slievecallan substation (as granted planning permission under Ref: P10/09, and An Bord Pleanála Ref: PL03.237524, and revised under Ref: 13/558) as proposed under this application. The proposal comprises the provision of additional 110kV infrastructure to extend and expand the existing substation to accommodate connection to the Proposed Development.

A determination from the Board was sought under Section 182A of the Planning and Development Act, 2000, as amended as to whether the proposed extension constituted Strategic Infrastructure Development (SID).

Following statutory engagement with the Board on the matter, the Board concluded on 10th November 2020 that the proposed extension did not come within the scope of Section 182A of the Planning and Development Act, 2000, as amended and as such an application for planning permission for the proposed development should be made to the local planning authority.

2.5.5.2 Clare County Council

There have been no specific pre-planning meetings held with the Planning Authority in relation to the current application, however, pre-planning discussions did arise prior to the lodgement of the previous planning application for a renewable energy development on this site under Pl. Ref. 21/370.

That pre-application meeting was arranged with the Planning Authority for the 10th March 2021, taking place virtually via MS Teams due to ongoing COVID 19 restrictions. The virtual meeting was attended by:

- H. Quinn (Acting Senior Planner Clare County Council)
- G,Ruane (Acting Senior Executive Planner)
- J. Green, MKO Planning
- E.O'Sullivan, MKO Environment

- M. Crowe, MKO Planning
- W.O'Connor on behalf of Slieveacurry Limited

A powerpoint presentation was prepared by MKO and shared on screen which noted:

- The previous Slieveacurry Wind Farm planning application (ref: 20/806) was withdrawn on the 18th January 2021 following judicial review proceedings against Clare County Council.
- Matters raised in the JR were not raising project specific concerns or issues but were focused primarily on how the application documentation was being processed and displayed.
- The Applicant was taking the opportunity to review the Proposed Development in light of third-party submissions lodged to the previous application.
- Applicant was also taking the opportunity to revise the presentation of some application documentation to address insofar as is practicable any items raised in the JR proceedings.
- Alterations incorporated within the updated application included:
  - Revised arrangements at county road junction to facilitate turbine delivery Minor re-siting of turbines no.7 – approx. 75 metres to the southeast; turbine no.8 – approx. 150 metres to the northwest. Slight road re-alignment to facilitate access to turbine no. 8
- Relocation of met mast to construction compound location, in the southwest of the site and reduction in met mast height to 30 metres

MKO confirmed that a review of submissions to the 2020 planning application had taken place in the preparation of the new planning application, and included matters relating to noise emissions, shadow flicker, the assessment of cumulative impacts with regards birds, and landscape and visual impacts of the proposed wind farm.

During the review of the previous application, the Planning Authority had considered the public submissions in respect of the application and noted it was evident that there were several objections to the continued development of wind energy in this general location. It was noted that within the Development Plan Wind Energy Strategy (2009), the application site is deemed to be in a Strategic Area for wind energy. The Planning Authority commented that this Strategy was not scheduled to be updated until after the new Wind Energy Guidelines are issued by the Department.

Matters discussed with the Planning Authority at the pre-application meeting included:

- Landscape and Visual Impact (including turbine heights)
- Policy 8.40 of the Development Plan (Renewable Energy)
- Peat management and stability
- Ornithology - It was agreed that a stand-alone planning report setting out the suitability of the site and considering the items raised by the Planning Authority would be prepared and lodged with any future application.

The Planning Authority also noted that any future application would benefit from the provision of a planning report to set out the various considerations in relation to the project in the context of the planning policy and the receiving environment. In response to this issue a planning assessment report has been prepared and is included within the planning application documentation.

In the interests of clarity a copy of the minutes of this pre-planning meeting which was held prior to the lodgement of the previous application (Pl. ref. 21/370) are included as Appendix 2-3. There was no further specific pre-planning meeting with the Planning Authority in relation to the current application.

2.6 Cumulative Impact Assessment

The EIAR Directive and associated guidance documents state that as well as considering any direct, indirect, secondary, transboundary, short-, medium-, and long-term, permanent and temporary, positive and negative effects of the project (all of which are considered in the various chapters of this EIAR), the description of likely significant effects should include an assessment of cumulative impacts that may arise. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project. The factors to be considered in relation to cumulative effects include population and human health, biodiversity, land, soil, water, air, climate, material assets, landscape, and cultural heritage as well as the interactions between these factors.

To gather a comprehensive view of cumulative impacts on these environmental considerations and to inform the EIAR process being undertaken by the consenting authority, each relevant chapter within this EIAR includes a cumulative impact assessment where appropriate.

The potential for cumulative impacts arising from other projects has therefore been fully considered within this EIAR.

2.6.1 Methodology for Cumulative Assessment of Projects

The potential cumulative impact of the proposed Slieveacurry renewable energy development combined with the potential impact of other projects has been carried out with the purpose of identifying what influence the Proposed Development will have on the surrounding environment when considered collectively with approved and existing projects in the vicinity of the proposed site location.

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

1. To establish the range and nature of existing and/or approved projects and applications within the cumulative impact study area of the Proposed Development;
2. To summarise the relevant projects which have a potential to create cumulative impacts; and
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 nor indirectly contribute to cumulative impacts.

Assessment material for the cumulative impact assessments carried out within this EIAR was compiled in relation to the relevant infrastructure developments within the vicinity of the Proposed Development from which there may be potential for cumulative impacts to arise. The material gathered comprised EIAR/ EIS's, planning application details and planning drawings and served to identify current and future projects, their activities and their environmental impacts.

2.6.2 Projects Considered in Cumulative Assessment

The projects considered in relation to the potential for cumulative impacts, and for which all relevant data was reviewed (e.g. individual EIS/EIAR's, layouts, drawings etc), include those listed previously above in Section 2.4 and all associated works, where relevant. Other developments considered within the cumulative assessment include the categories listed below:

2.6.2.1 Forestry and Replanting

The Proposed Development site is partially used for commercial forestry. This land-use will continue in conjunction with the Proposed Development. A total of 26.59 hectares of forestry will be permanently felled within and around the footprint of the Proposed Development. Additional temporary felling of trees will also be required. Figure 4-15 of Chapter 4 shows the extent of the areas to be temporarily and

permanently felled as part of the Proposed Development. The felling of trees as part of the Proposed Development will be carried out under felling licence from the Forest Service, and replanting will be a required. Full details regarding the area to be felled are outlined in Chapter 4 of this EIAR in conjunction with the replanting assessment included as Appendix 4-3. Furthermore the ongoing regular felling operations in the area outside of that related to the Proposed Development have also been considered.

The potential for cumulative effects during the construction, operational and decommissioning phases of the Proposed Development in relation to forestry and replanting have therefore been assessed.

2.6.2.2 Other Wind Turbines

There are a number of wind farms located within a 20-kilometre radius of the proposed Slieveacurry renewable energy development site, as identified previously in Sections 2.4.2 of this Chapter. Any cumulative affects arising from these installations are considered in the relevant chapters of this EIAR.

2.6.2.3 Other Developments/Land uses

In preparing this EIAR, the Clare County Council planning register has been reviewed and all relevant general development planning applications/permissions and projects in the vicinity of the Proposed Development have been noted and considered. As discussed in Section 2.4.1, 46 no. valid applications were lodged to Clare County Council within 2 km of the proposed Slieveacurry renewable energy development with the majority (29 no.) lodged pre-2010. The majority of these applications relate to the provision and/or alteration of residential development and agricultural infrastructure. These applications have been taken into 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 present land uses in the vicinity of the Proposed Development , including on-going agricultural and forestry practices.

The Proposed Development has been designed to mitigate impacts on the environment and a suite of mitigation measures is set out within the EIAR. The mitigation measures set out in this EIAR and accompanying application material (e.g. Construction and Environmental Management Plan) have been developed to ensure that significant cumulative affects do not arise during the 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 to manage same are set out within each of the relevant chapters of this EIAR.