

## 2. BACKGROUND TO THE PROPOSED DEVELOPMENT

This section of the Environmental Impact Assessment Report (EIAR) presents information on renewable energy and climate change policy and targets, the strategic planning context for the proposed development, a description of the proposed development site and planning history, scoping and consultation, and the cumulative impact assessment process.

### 2.1 Introduction

This section of the EIAR presents the various policies and targets which have been put in place at the various scales in relation to renewable energy. The details below set out the need for the proposed development to aid in Ireland meeting its national targets and European commitments in relation to climate change and decarbonisation. As is discussed throughout this chapter all of the latest projections have shown that Ireland is not set to meet its 2020 targets. Within this chapter the information is presented and assessed under the following:

- Renewable Energy Resources,
- EU Legislation,
- Progress on Targets, and,
- National Energy Projections.

The proposed development comprises the provision of a wind farm which will generate renewable energy and provide it for use onto the national grid. The need to decarbonise the economy and reduce emissions has always been imperative, however, in recent years the urgency involved has become clearer to all stakeholders. The Climate Action Plan published by the Government in 2019 has clearly identified the need for and urgency of change, it states:

*“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.”*

The primary driver behind the proposed development is the need to provide additional renewable energy to offset the use of fossil fuels within the electricity generating sector. Increasing electricity generation from wind power represents the most economical renewable option to reduce emissions within the power generation sector and is the most mature technology available to achieve national targets that have been established for decarbonisation. The current proposal represents the provision of a significant wind energy proposal (as acknowledged by its classification as a Strategic Infrastructure Development under the Planning and Development Act, 2000 (as amended)) and will contribute towards Ireland satisfying its 2030 renewable energy targets.

### 2.2 Renewable Energy Resources

Renewable energy resources include wind, solar, 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.

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.

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 €5 billion. 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.

## 2.3 EU Legislation

The European Union (EU) Directive on the Promotion of the Use of Energy from Renewable Sources (Directive 2009/28/EC) (hereafter referred to as the Renewable Energy Directive) was adopted on 23<sup>rd</sup> April 2009 and was transposed into Irish law by the European Union (Renewable Energy) Regulations 2014 (S.I. No 483 of 2014). The Directive establishes 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.

The Renewable Energy Directive legally obliges each Member State to:

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

These targets represent 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 (please refer to Section 2.3.2). 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.

The achievement of the above ‘20-20-20’ targets will ultimately require ‘safe, secure, sustainable and affordable energy’ in order to accommodate the transition to a low-carbon economy. Failure to meet EU targets on the use of energy from renewable sources could result in substantial EU sanctions.

Ireland’s mandatory target under the Directive is for renewable resources to account for 16% of total energy consumption by 2020. This will be met by 40% from renewable electricity, 12% from renewable heat and 10% from the renewable transport sector.

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

The Framework sets three key targets for the year 2030:

- A binding commitment at EU level of at least 40% domestic 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) which is discussed in Section 2.2.3.2 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 27<sup>th</sup> of June 2018 EU ambassadors endorsed the provisional agreement reached by the Bulgarian Presidency on the revision of the renewable energy directive. The new regulatory framework is expected to pave the way for Europe's transition towards clean energy sources such as wind, solar, hydro, tidal, geothermal, and biomass energy. The agreement sets a headline target of 32% energy from renewable sources at EU level for 2030. Other key elements of the agreement include:

- The design of support schemes will provide for a possibility of technology specific support, aligned with state aid guidelines. The opening of renewable support towards neighbouring member states will be voluntary, at an aspirational pace of at least 5% between 2023 and 2026 and 10% between 2027 and 2030. Except for certain cases, member states will be obliged to issue guarantees of origin.
- Permit granting procedures will be simplified and streamlined with a maximum of two years for regular projects and one year in case of repowering, both extendable for an additional year in case of specific circumstances and notwithstanding environmental and judicial procedures. For small-scale projects below 10.8kW simple notification procedures will apply. Each member state may choose to apply simple notification procedures also to projects up to 50kW.
- The annual increase of energy from renewable sources in heating and cooling will be 1.3 percentage points indicatively, or 1.1 percentage points if waste heat is not taken into account.
- Via obligations on fuel suppliers, renewables will reach a level of at least 14% in transport by 2030, supplemented by a set of facilitative multipliers to boost renewables in different sectors.

Based on the SEAI National Energy Projections 2019 it was expected that Ireland will fall short of its mandatory European target for an overall 16% renewable energy share by 2020, with overall achievement reaching approximately 13%.

### 2.3.1 Progress on Targets

The overall share of renewables in primary energy stood at 11.1% in 2018 which is up from the 2017 figure of 9.3% and 7.9% in 2016. As per the EU Renewable Energy Directive, the target for Ireland is set at 16% share of renewable energy in gross final consumption (GFC) by 2020. As per the report, the contribution from renewables in 2005 was 2.8%, which as of 2017, has risen to 10.6% of the GFC. According to the SEAI's report the share of electricity from renewable energy has increased fourfold between 2005 and 2017 – from 7.2% to 30.1% – an increase of 23 percentage points over 12 years. In absolute terms, there has been a fivefold increase in the volume of renewable electricity generated from 1,873 GWh in 2005 to 8,877 GWh in 2017. Of this, it was noted that Wind energy accounted for 84% of the renewable electricity in 2017.

The June 2018 'Off Target Report' published by the Climate Action Network (CAN) Europe, which ranks EU countries ambition and progress in fighting climate change, listed Ireland as the second worst

performing EU member state in tackling climate change. It also stated that Ireland is set to miss its 2020 climate and renewable energy targets and is also off course for its unambitious 2030 emissions target. The report states:

*“Ireland has failed to prepare effective policies to align near-term climate action with EU and Paris Agreement commitments. Without new, immediate and substantive efforts to cut emissions, Ireland faces annual non-compliance costs of around €500 million.”*

The Department of Climate Change, Action & Environment (DCCA) reported in their ‘*Fourth Progress Report on the National Renewable Energy Action Plan*’ December 2017 that Ireland will achieve 13% of its 16% RES target by 2020. SEAI in their report ‘*Ireland’s Energy Targets – Progress, Ambition & Impacts*’ (April 2016) estimates that Ireland’s inability to achieve its 2020 renewable energy targets will result in fines of between €65 million and €130 million per percentage shortfall on its overall binding target after 2020 until it meets its targets.

The Climate Change Advisory Council similarly notes within their *2019 Annual Review* that while the share of renewable electricity generation, (particularly wind), is increasing in Ireland, the overall pace of the decarbonisation of the electricity generation sector is not compatible with a low-carbon transition to 2050. As such, Ireland can continue to ‘comply’ with EU targets by purchasing emission allowances; however, the expenditure of public funds to do so would not result in any domestic benefit, and furthermore, would result in a more difficult and expensive challenge for the country 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.

Figure 2.1 shows the latest data available for the share of renewable energies in gross final energy consumption according to the Eurostat online data and the targets that have been set for 2020. The share of renewables in gross final energy consumption stood at 18.0% in the EU-28 in 2018. The data shows that twelve member states have reached a share equal to or above their 2020 target. This is not the case with Ireland who, as evident in Figure 2.1, are still considerably below meeting its 2020 target. Per the 2018 data Ireland were at 11.1% of its 16% target.

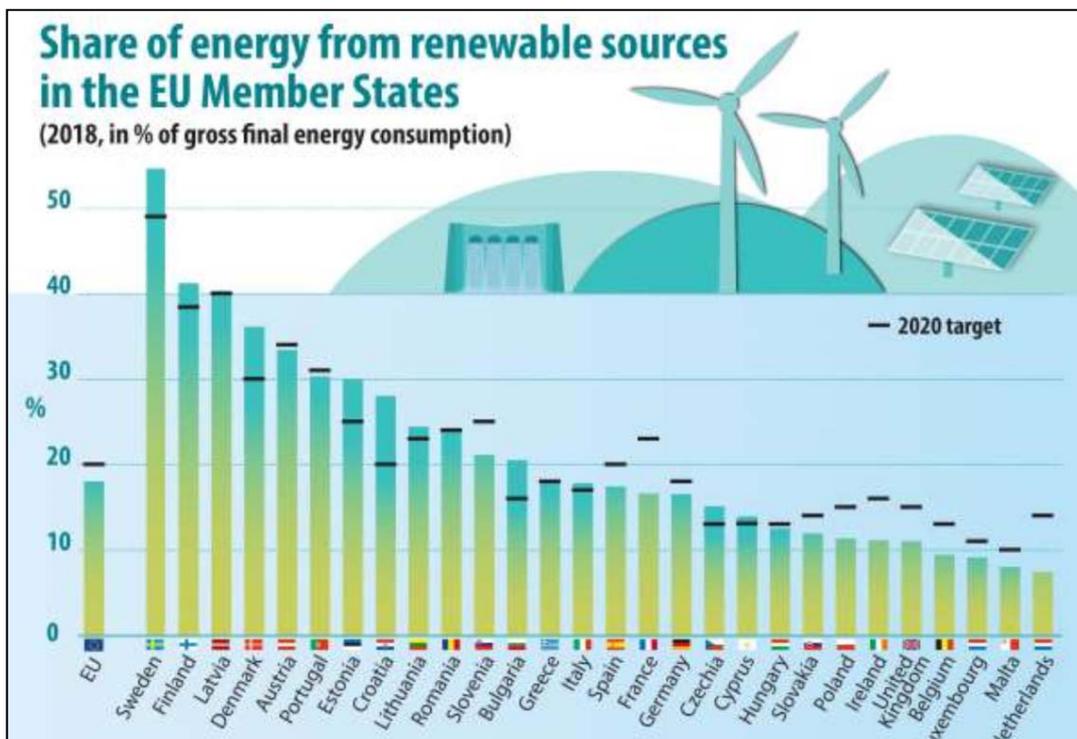


Figure 2.1 Share of energy from renewable sources, 2018

EirGrid in their ‘All Island Generation Capacity Statement 2019 - 2028’ (September 2019), state that, in the absence of the National Energy and Climate Plan 2021 – 2030, it is assumed that renewable targets will be achieved largely through the deployment of additional wind powered generation in Ireland. New wind farms commissioned in Ireland in 2018 brought the total wind capacity to over 3666 MW, contributing to the increase in overall RES-E percentage to 32.5%, with wind energy accounting for 27.6%. EirGrid estimates that between 3.9 – 4.4 Gigawatts (GW) of wind may be required to meet the 2020 Renewable Energy Supply - Electricity (RES-E) target of 40%. The most likely scenario for installed wind capacity in 2020 is expected to be 4200 MW which would imply an average build-out of approximately 330 MW per year until the end of 2020 to achieve targets.

It is noted by EirGrid within their 2019 – 2028 statement that, at a median demand level, Ireland does not have adequate generation capacity to meet demand from 2026 once Moneypoint closes, and should any other plant close prior to this, earlier deficits may arise. This is especially pertinent with regard to the recent announcement that the Electricity Supply Board intends to close the peat fired Shannonbridge and Lough Ree Power Stations at the end of 2020.

It is noted that the key driver for electricity demand in Ireland for the next number of years is the connection of new large energy users, such as data centres. Specifically, there is currently 1000 MVA demand capacity that is contracted to data centres and other large energy users. This statement notes that ‘*Large industrial connections normally do not dominate a country’s energy demand forecast but this is the case for Ireland at the moment*’. EirGrid analysis shows that demand from data centres could account for 29% of all demand by 2028 in a median demand scenario (accounts for the connection of all 1400MVA of potential demand in the connection process). The median demand scenario is now higher than for last year’s forecast for high demand, indicating the progression of many of the data centre projects. It should be noted that each MW of additional data centre load will add at least 1 MW of wind to the 40% RESE 2020 target. Alternatively, 3 MW of wind could be required per MW of data centre electricity demand, if the data centre wants to commit to being powered by 100% renewable energy. Many data centres have made such commitments and have well-publicised company policies to use only renewable electricity for their power needs.

In October 2015, the Irish Wind Energy Association (IWEA) commissioned a study titled ‘*Data-Centre Implications for Energy Use in Ireland*’ and concluded that an additional 1 GW of electricity demand may be required in Ireland by 2020 due to growth in data centres.

### 2.3.2 SEAI National Energy Projections 2019

The SEAI National Energy Projections 2019 were published in May 2019 and outlines there has been a significant increase in renewable energy share in Ireland over the past number of years. The report details that in 2005, 5% of Ireland’s energy came from renewable sources, and in 2019, it is estimated that approximately 13% of Ireland’s energy will be generated by renewable sources which is below the required 16% target. The report details that there is still a significant way to go to achieving our European target of 16% and Ireland will not meet EU 2020 targets. Compared to other European countries, Ireland was 22<sup>nd</sup> out of the EU-28 for overall renewable energy share and 26<sup>th</sup> out of the EU-28 for progress towards overall 2020 renewable energy target.

- 38.9% renewable electricity by 2020 (target is 40%);
- 9.8% renewable heat by 2020 (target is 12%); and
- 10.8% renewable transport by 2020 (target is 10%).

It is assumed that the 20-20-20 renewable targets and future commitments will be achieved largely through the deployment of additional wind powered generation. Over 500 MW of wind generation was installed which resulted in wind generation accounting for 25.2% of the electricity generated. Wind generation is now the second largest source of electricity generated after natural gas.

In the context of climate change the report details that:

*“Climate change is now recognised as the biggest threat to life on earth, and it is now urgent that we take immediate action to reduce anthropogenic emissions of greenhouse gases to limit its damaging effects.”*

With regards to the production of electricity, it is noted that while Ireland has had considerable success in increasing the share of renewables in electricity generation that there is a need to continue to achieve in this sector and take full advantage of the country’s abundant resources. It continues to detail that as per the latest EirGrid Generation Capacity Statement, there is a prediction of an increase of demand in the short terms with 3% to 5% per year listed.

The Renewable Energy Support scheme aims to increase the deployment rate, support up to 4,500 megawatts of additional renewable electricity by 2030 and diversify the renewable electricity portfolio. Policy measures that could help to meet the Government increased ambition include:

- Expediting the adoption of clear, and timebound, licensing and consenting procedures for offshore renewable energy development;
- Addressing technical grid challenges to incorporating very high levels of asynchronous renewables, for example via EirGrid’s Delivering a Secure, Sustainable Electricity System (DS3) programme;
- Creating a clear, and timely, grid connection access and concession regime for offshore and new onshore renewable energy development, with due regard for methods by which the State can most cost effectively reduce or manage risk;
- Creating markets for grid services such as energy storage and other services supporting high levels of renewables on-grid;
- Supporting onshore wind farms reaching end of life, by providing clarity for re-powering investment decisions intertwined with new wind guidelines;
- Assisting the timely delivery of increased interconnection;
- Establishing corporate power purchase agreements mechanisms with mandated minimum renewable energy purchases or self-generation for large electricity demand users to leverage private investments in renewable electricity;
- Encouraging prosumers by consideration of communication methods, market mechanisms, market rules, frameworks and setting a price for export to the grid from point source generation, in line with the ambitions outlined in the Clean Energy Package; and
- Developing community energy and small-scale renewable generation projects to enable a shift to a more distributed generation system with demand response capabilities.

Section 9 of the report details the effort which must be made for closing the gaps to targets. It is detailed that *‘given the cumulative nature of emissions, an immediate acceleration of emissions reductions is required to put Ireland on the committed long-term trajectory’*. Included as part of this is the country’s commitments under the Paris Agreement. Further to this:

*“Increased ambition and delivery targets supporting a sustainable energy transition are anticipated to be included in the upcoming All of Government Climate Action Plan being produced by DCCAE.”*

In the context of the above the Climate Action Plan was published by the Department of Communications, Climate Action and Environment in August 2019. Please refer to Section 2.4.7.5 of this report.

The SEAI National Energy Projections Report notes that to achieve the level of ambition set for 2020 and 2030 the country will be dependent on:

- Increased deployment rates of sustainable energy technologies and practices across the entire economy;

- The development of a national training and skills strategy to support growth of the clean energy technology sector;
- Support for changes in business models, nascent clean energy technology supply chains and the addressing of existing market failures;
- Early resolution of planning and regulatory barriers, including continued public engagement, and the development of appropriate market structures – especially for electrification of heat and transport supported with high levels of renewable electricity;
- Significant mobilisation of private investment in renewable energy and energy efficiency – additional spend on efficiency is known to achieve multiple benefits including warmer, healthier and more cost-effective buildings;
- The acceleration of innovation and technology adoption, especially in the area of electricity demand response, grid flexibility and storage;
- The exploitation of advances in ICT and national strengths in this field to advance renewables and energy efficiency, particularly in relation to passenger mobility solutions;
- Aggressively adopting the ‘avoid, shift and improve’ transport energy policy principles – this involves managing mobility demand to avoid trips or a shift to the most efficient modes, plus improving the energy efficiency of vehicles as well as reducing the carbon intensity of fuels;
- Taking in the ethical cost of carbon consideration in all aspects of public and private enterprise planning, involving the enforcement of the polluter pays principle by including the negative external costs associated with emissions such as healthcare or environmental repair costs;
- An approach to carbon neutrality in the agriculture and land-use sector, including forestry, that does not compromise capacity for sustainable food production; and
- The promotion of an environmentally aware and concerned citizen and community ideology to combat climate change, including recognition of the impact of diet and consumerism on climate change.

### 2.3.3 SEAI Energy in Ireland 2019 Report

In December 2019 SEAI produced the Energy in Ireland 2019 report, which provides the most up to date figures available (from 2018) in relation to energy production and consumption in Ireland. The report found that despite the increase in energy demand energy-related CO<sub>2</sub> emissions fell slightly mainly due to (a) a reduction in the amount of coal used for electricity generation (arising from a technical fault at Moneypoint – Irelands only coal-fired electricity generation plant) combined with (b) increased contributions from wind generation. In relation to renewable energy targets, the 2019 report found that:

- The share of electricity generated from renewable sources increased by 3.1 percentage points in 2018, to 33.2%. The 2020 target being 40%.
- The share of energy used for transport from renewable energy resources decreased from 7.4% in 2017 to 7.2% 2018. The 2020 target is 10%.
- The share of energy used for heat from renewable resources decreased from 6.7% in 2017 to 6.5% in 2018. The 2020 reduction target is 12%.

Furthermore the 2019 report also found that wind generation accounted for 28.1% (normalised) of all electricity generated. It was the second largest source of electricity generation in 2018 after natural gas. Wind energy accounted for 84% of the renewable energy generated in 2018. At the end of 2018 the installed capacity of wind generation reached 3,676MW, and during 2018 358MW of wind capacity was installed. The SEAI 2019 report also makes the following statements:

*“EirGrid and ESB Networks note that as of 2019 there is 1,873 MW of additional wind generation planned, either with connection contracts in place or applications for connection underway. Historically, there has been a maximum of just over 500 MW installed in any one year since 2005 and on average the installation rate has been 200 MW.”*

*“In relation to the displacement of fossil fuels by renewable energy, it is estimated that in 2018 approximately €623 million in fossil fuel imports were avoided, of which €432 million was avoided by wind generation.”*

In relation to the findings of this December 2019 SEAI report it is clear that wind energy represents the strongest and most deployable renewable energy resource available to reduce dependence on fossil fuels in Ireland. While it is clear that additional deployment is on-going, it is also apparent that it is unlikely that the 2020 targets for renewable electricity generation will be met. Achieving targets becomes even more challenging in the context of increasing electricity demand.

The proposed development represents an opportunity to bring forward an additional renewable energy source which will contribute towards achieving further decarbonisation of the electricity generation sector.

## 2.3.4 National Policy

### 2.3.4.1 Introduction

This section of the EIAR provides a breakdown of national policy with regards to the proposed development. Under the national policy section the following are discussed:

- Irelands Energy Policy Framework 2007-2020,
- National Renewable Energy Action Plan,
- White Paper on Energy Policy in Ireland 2015-2020,
- Strategy for Renewable Energy 2012-2020, and,
- National Strategy for Intensifying Wind Energy Development 2000.

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

### 2.3.4.2 Ireland’s Energy Policy Framework 2007-2020

The Government White Paper entitled ‘*Delivering a Sustainable Energy Future for Ireland: The Energy Policy Framework 2007 – 2020*’ was published by the Department for Communications, Marine and Natural Resources in 2007. Currently approximately 67% of Irish energy requirements are imported, as described in Section 2.1.1 above. Combined with our peripheral location, this situation leaves Ireland vulnerable to supply disruption and imported price volatility, as stated in the White Paper. The primary objectives of the Government’s energy policy are security of supply, environmental sustainability and economic competitiveness. The Framework sets out clear actions, targets and timeframes for meeting these interlinked objectives.

Ireland’s energy policy priorities are framed in the context of the European Union. Directive 2009/28/EC (hereon referred to as the Renewable Energy Directive) on the Promotion of the Use of Energy from Renewable Sources sets a target for Ireland for 16% of energy consumption to come from renewable sources by 2020. The 2007 Government White Paper sets a more ambitious target of 33% for energy consumption from renewable sources by 2020. This target was further increased to 40% by the Minister for Communications, Energy and Natural Resources, in 2008 as part of the Government’s strategy to make the “green economy” a core component of its economic recovery plan.

In Ireland, it is widely acknowledged that the vast majority of the renewable electricity requirement is expected to be met through the development of indigenous wind power, as Ireland has a strong wind

resource potential, with one of the best onshore wind speed averages in Europe ('The Value of Wind Energy to Ireland', Póry, 2014). In 2015, wind energy accounted for 84% of renewable electricity generation. 2016 was less windy than 2015 and electricity generated from wind fell by 6.5% but still accounted for 82% of renewable electricity ('Energy in Ireland 1990 – 2016', Sustainable Energy Authority of Ireland, 2017). Further, the SEAI Energy In Ireland 2019 Report (December 2019) confirms that most of the growth in renewable energy has come from wind. Wind provided 84% of all renewable energy generated in 2018.

The Energy White Paper 2007 states that renewable energy will be a critical and growing component of Irish energy supply to 2020 and beyond. The Government's strategic goals for sustainable energy include addressing climate change by reducing energy-related greenhouse gas emissions and accelerating the growth of renewable energy sources. Renewable energy and enhanced efficiency in power generation are integral to the Government's strategy to deliver Ireland's climate change targets under the Kyoto Protocol. The Paper states:

*“Renewable energy is an integral part of our climate change strategy and sustainability objectives. The additional diversity which renewables bring to Ireland's energy demand will also make a direct contribution to our goal of ensuring secure and reliable energy supplies.”*

### 2.3.4.3 National Renewable Energy Action Plan

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

The NREAP sets out the Government's strategic approach and planned measures to deliver on Ireland's 16% target under the Renewable Energy Directive. In relation to wind energy, the NREAP states:

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

### 2.3.4.4 White Paper on Energy Policy in Ireland 2015-2030

On 12<sup>th</sup> May 2014, 'The Green Paper on Energy Policy in Ireland' was launched, opening the way for a public consultation process on the future of energy policy in Ireland for the medium to long-term. The paper acknowledged that energy is an integral part of Ireland's economic and social landscape; and that a secure, sustainable and competitive energy sector is central to Ireland's ability to attract and retain Foreign Direct Investment and sustain Irish enterprise. The three key pillars of energy policy are to focus on security, sustainability and competitiveness.

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

The 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 greenhouse gas (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 and will involve amongst many things, generating electricity from renewable sources of which there are plentiful indigenous supplies and increasing the use of electricity and bio energy to heat homes and fuel transport.

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

*“Onshore wind continues to be the main contributor (18.2% of total generation and 81% of RESE 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.”*

### 2.3.4.5 Strategy for Renewable Energy 2012-2020

The then Department of Communications, Energy and Natural Resources publication, *Strategy for Renewable Energy 2012 – 2020*, outlines the strategic goals which underpin the Government’s energy and policy objectives. The Strategy articulates the key actions to be undertaken to support the development of each of the renewable energy sectors to deliver on Ireland’s binding 2020 targets under the Renewable Energy Directive. It acknowledges the national importance of developing renewable energy and confirms the Government’s commitment to this.

The Strategy sets out five strategic goals, the first of which is as follows:

*“Strategic Goal 1 - Progressively more renewable electricity from onshore and offshore wind power for the domestic and export markets.”*

The proposed wind farm will produce electricity for the domestic market only.

In order to achieve the above goal, the Strategy sets out a number of key actions, including the following:

- Support delivery of the 40% target for renewable electricity through the existing GATE processes. A further targeted Gate may be developed, if necessary, following a review of the take-up of Gate 3 offers, while developing a next phase plan led approach for additional onshore capacity in future;
- Review with the Department of Environment and CER the scope for further streamlining authorisation and planning processes for renewable energy projects;
- Implement REFIT 2 for onshore renewable energy and maintain a predictable; and transparent REFIT support framework for onshore wind which is cost competitive.

The Strategy highlights the economic benefits onshore wind projects can have on the Irish economy:

*“Further strategic deployment of onshore wind projects will develop a base of indigenous and foreign companies and create employment in the short-term in wind farm construction, possible turbine component manufacturing and servicing, the opportunity to capture international supply chain opportunities and the manufacture of niche onshore renewable energy generating equipment”.*

As is highlighted in Section 2.3.2 of this chapter, based on the SEAI’s National Energy Projections 2019 there is still a significant way to go towards achieving the European targets and it was concluded that Ireland will not meet its EU 2020 targets.

## 2.3.4.6 National Strategy for Intensifying Wind Energy Development 2000

The Strategy for Intensifying Wind Energy Development was published in 2000 by the Renewable Energy Strategy Group as part of the Department of Communications, Energy and Natural Resources. The main aim of the Group was to develop a strategy for the increased contribution of onshore wind energy to electricity generation. During the initial six-month period of the preparation of the strategy, the Group examined many aspects of, and constraints to, the further development of wind energy.

The principal conclusion of the Renewable Energy Strategy Group was that three key elements: Electricity Market, Electricity Network and Spatial Planning, needed to be integrated into a plan-led approach to wind energy deployment. The recommended strategy, arising from this approach, has been designed to meet the targets set for deployment of renewable energy at least cost.

The recommended plan-led approach as described in the Strategy sees spatial planning considerations as crucial in determining suitable areas where wind farms may be accommodated. It states that these decisions should be informed by the availability of the resource (wind), the strength of the electricity networks, and landscape and other planning considerations.

## 2.4 Climate Change Policy and Targets

### 2.4.1 Introduction

This section of the EIAR presents the various policies and targets which relate to climate change. The below headings and sub-headings explore climate change in the context of EU and national policy and are broken down into the following sections:

- Impacts on Climate Change
  - Water Resource Management
  - Agriculture
  - Biodiversity and Natural Ecosystems
- International Policy
  - United Nations Framework Convention on Climate Change
- Kyoto Protocol Targets
  - Doha Amendment to the Kyoto Protocol
  - COP21 Paris Agreement
  - Progress on Targets
  - Emissions Projections
- National Policy
  - National Climate Change Adaptation Framework 2012
  - National Adaptation Framework - Planning for a Climate Resilient Ireland 2018
  - National Policy Position on Climate Action and Low Carbon Development, 2014
  - Climate Action and Low Carbon Development Act 2015
  - National Mitigation Plan
  - Report of the Joint Committee on Climate Action Climate Change: A Cross-Party Consensus for Action, March 2019
  - Climate Action Plan, 2019

International and national policy consistently identifies the need to reduce greenhouse gas (GHG) emissions and stressed the importance of reducing global warming. The context of international policy has altered over the last 30 years to 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, it is in broad compliance with national and international climate change policy and targets.

## 2.4.2 Impacts on Climate Change

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

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

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

Future precipitation changes are less certain to project than temperature but constitute the most important aspect of future climate change for Ireland. The study projects that winter rainfall in Ireland by the 2050's will increase by approximately 10%, while summer rainfalls will reduce by 12 – 17%. Lengthier heatwaves, much reduced number of frost days, lengthier rainfall events in winter and more intense downpours and an increased propensity for drought in summer are also projected. The STRIVE report on climate change impacts states that Ireland can and must adapt to the challenge of climate change.

## 2.4.3 International Policy

### 2.4.3.1 United Nations Framework Convention on Climate Change

In 1992, the United Nations Framework Convention on Climate Change (UNFCCC), was adopted as a framework for international efforts to combat the challenge posed by climate change. The UNFCCC has over 197 signatory countries and has almost universal membership from the international community. The UNFCCC seeks to limit average global temperature increases and the resulting climate change. In addition, the UNFCCC seeks to cope with impacts that are already inevitable. It recognises that the climate system is a shared resource whose stability can be affected by industrial and other emissions of carbon dioxide and other greenhouse gases. The framework set no binding limits on greenhouse gas emissions for individual countries and contains no enforcement mechanisms. Instead, the framework outlines how specific international treaties (called "protocols" or "Agreements") may be negotiated to set binding limits on greenhouse gases.

## 2.4.4 Kyoto Protocol Targets

Ireland is a Party to the Kyoto Protocol, 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.

#### 2.4.4.1 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.

#### 2.4.4.2 COP21 Paris Agreement

COP21 was the 21st session of the Conference of the Parties (COP) to the UNFCCC. Every year since 1995, the COP has gathered the 196 Parties (195 countries and the European Union) that have ratified the Convention, to evaluate its implementation and negotiate new commitments.

COP21 closed with the adoption of the first international climate agreement (concluded by 195 countries and applicable to all). It 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.

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

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

*“...the initial national climate pledges (Nationally Determined Contributions, or NDCs) made under the Paris Agreement are inadequate. Pathways reflecting countries’ current climate plans imply global warming of about 30°C by 2100, with warming continuing afterwards. In addition, 2015-2019 has seen a continued increase in CO<sub>2</sub> levels and other key greenhouse*

*gases (GHG) in the atmosphere to new records, with CO<sub>2</sub> growth rates nearly 20 percent higher than the previous five years. This trend is not estimated to begin reversing by 2030, let alone 2020.”*

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

The Climate Action Summit reinforced 1.5°C as the socially, economically, politically and scientifically safe limit to global warming by the end of this century, and net zero emissions by 2050 as the global long-term climate objective for all. Countries need to urgently accelerate work to define what this entails for the short-term (2020) and mid-term (2030) commitments that will be captured in their Nationally Determined Contributions and ensure the alignment of strategies to meet those commitments. The Secretary General’s report stated that:

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

#### 2.4.4.3 Progress on Targets

The ‘Europe 2020 Strategy’ is the EU’s agenda for growth and jobs. The Europe 2020 Strategy targets on climate change and energy include:

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

The ‘Europe 2020 indicators – climate change and energy’ report provides a summary of recent statistics on climate change and energy in the EU, with reference to the progress of Member States in meeting the required targets. In 2016, EU greenhouse gas emissions, including emissions from international aviation and indirect carbon dioxide (CO<sub>2</sub>) emissions, were down by 22.4% when compared with 1990 levels. The EU is therefore expected to exceed its Europe 2020 target of reducing GHG emissions by 20% by 2020. In 2016, renewable energy provided 17.0 % of gross final energy consumption in the EU, up from 9 % in 2005.

However, regarding the progress of individual Member States, and Ireland in particular, the Europe 2020 indicators include the following statements:

- 24 countries are on track to meet their GHG targets, except Austria, Belgium, Ireland and Luxembourg;
- Luxembourg emitted the most GHG per capita in the EU in 2014 followed by Estonia, Ireland, the Czech Republic and the Netherlands; and
- All EU countries have increased their renewable energy share between 2005 and 2014. Twelve have more than doubled their share, albeit from a low base. Nine have already met their 2020 targets. In 2014, France, the Netherlands, the United Kingdom and Ireland were farthest from reaching their national targets.

While the EU as a whole is projected to exceed its 2020 target of reducing GHG emissions by 20%, Ireland is currently one of the countries projected to miss its national targets. The Europe 2020 report emphasises the importance of continued action on climate change:

*“Despite the EU’s shrinking share in global CO<sub>2</sub> emissions, recent findings on the potentially catastrophic impacts of climate change confirm the ongoing importance of its climate and energy goals. EU emission cuts alone cannot halt climate change, but if it can show that a low-*

*carbon economy is feasible, and can even increase innovation and employment, it will serve as a role model to other regions. Continuous investment in advanced low-carbon technologies can also help the EU uphold technological leadership and secure export markets. A successful transformation of the energy sector... is pivotal in this respect.”*

The European Commission report ‘Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions’ was published in February 2017. This report provides a comprehensive overview of renewable energy deployment in the EU and progress towards meeting the 2020 targets. The report states that the vast majority of Member States are “well on track in terms of renewable energy deployment”. Four Member States –Ireland, Luxembourg, the Netherlands and the United Kingdom are currently projected not to meet their national binding targets. The United Kingdom’s expected gap is however very short (approximately 0.2%) so it is expected that Ireland will be one of only three Member States projected to not meet their national binding 2020 targets.

While official figures have been released to date, the 2019 SEAI National Energy Projections Report, published last year (2019) acknowledges that Ireland will fall short of its 2020 targets, it states “...it is expected that Ireland will fall short of its mandatory European target for an overall 16% renewable energy share by 2020, with overall achievement approximately 13%.”, The report goes on to confirm “Compared with other European Countries Ireland was 22<sup>nd</sup> out of the EU28 for overall renewable energy share and 26<sup>th</sup> out of the EU-28 for progress towards overall 2020 renewable energy target.”

#### 2.4.4.4 Emissions Projections

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

Greenhouse gas emissions are projected to 2020 using two scenarios; ‘With Existing Measures’ and ‘With Additional Measures’. The ‘With Existing Measures’ scenario assumes that no additional policies and measures, beyond those already in place by the end of 2017 are implemented. The ‘With Additional Measures’ scenario assumes implementation of the ‘With Existing Measures’ scenario in addition to further implementation of Government renewable and energy efficiency policies and measures, as set out in the NREAP and the National Energy Efficiency Action Plan (NEEAP).

The EPA Emission Projections Update notes the following key trends:

- 2019 greenhouse gas emission projections show total emission increasing from current levels by 1% and 6% by 2020 and 2030, respectively, under ‘With Existing Measures’ scenario. Under ‘With Additional Measures’, emissions are estimated to decrease by 0.4% and 10% by 2020 and 2030, respectively;
- Under the ‘With Existing Measures’, emissions from Energy Industries are projected to increase by 31% between 2018 and 2030 to 15.4 Mt CO<sub>2</sub>eq. Under the ‘With Additional Measures’, emissions between 2018 and 2030 are predicted to decrease by 27% to 8.6 Mt CO<sub>2</sub>eq;
- Under ‘With Existing Measures’, approximately 41% of electricity generation is projected to come from renewable energy sources by 2030. In the ‘With Additional Measures’ scenario, it is estimated that renewable energy generation increases to approximately 54% of electricity consumption;
- Agriculture and transport dominate non-ETS sector emissions accounting for 75% and 80% of emissions in 2020 and 2030, respectively. In 2020, the sectors with the largest contribution of emissions are Agriculture, Transport and Energy Industries with 34%, 21%

and 20% share in total emissions, respectively, under the With Additional Measures scenario. In 2030, this is projected to change to 38%, 22% and 16% for these sectors, respectively, which reflects the growth in emissions from agriculture and reduction of emissions from power generation; and

- Ireland has exceeded its annual binding limits in 2016 and 2017. However, even using this mechanism, Ireland will still be in non-compliance according to the latest projections.

The 2019 EPA report states that *“A significant reduction in emissions over the longer term is projected as a result of the expansion of renewables (e.g. wind), assumed to reach 41-54% by 2030, with a move away from coal and peat”*. Over the period 2013 – 2020, Ireland is projected to cumulatively exceed its compliance obligations by approximately 10.3 Mt CO<sub>2</sub> (metric tonnes of Carbon Dioxide) under the “With Existing Measures” scenario and 9.2 Mt CO<sub>2</sub> under the “With Additional Measures” scenario.

## 2.4.5 National Policy

### 2.4.5.1 National Climate Change Adaptation Framework 2012

Ireland’s first National Climate Change Adaptation Framework (NCCAF), which was published in December 2012, aims to ensure that adaptation actions are taken across key sectors and also at local level to reduce Ireland’s vulnerability to climate change. The NCCAF requires the development and implementation of sectoral and local adaptation plans which will form part of the national response to the impacts of climate change. Each relevant Government Department (or State Agency, where appropriate) are required to prepare adaptation plans for their sectors. Twelve sectors were identified in total including Transport, Flood Defence, Agriculture and Energy. The Climate Action and Low Carbon Development Act 2015 (No. 46 of 2015) puts the development of National Climate Change Adaptation Frameworks and Sectoral Adaptation Plans on a statutory basis.

The Act states that following Government approval of the first statutory National Climate Change Adaptation Framework it must be reviewed at least every 5 years after that.

### 2.4.5.2 National Adaptation Framework - Planning for a Climate Resilient Ireland 2018

Ireland’s first statutory National Adaptation Framework (NAF) was published on 19 January 2018. The NAF sets out the national strategy to reduce the vulnerability of the country to the negative effects of climate change and to avail of positive impacts. The NAF was developed under the Climate Action and Low Carbon Development Act 2015. The NAF builds on the work already carried out under the National Climate Change Adaptation Framework (NCCAF, 2012). It is detailed that under the NAF *‘a number of Government Departments will be required to prepare sectoral adaptation plans in relation to a priority area that they are responsible for’*. The NAF can be broken down as follows:

Chapter 1 provides a summary of observed and projected global climate change and the international and European policy drivers for adaptation to climate change. It also contains a summary of observed and projected climate change impacts in Ireland. The following are detailed under the NAF:

- Warming of the global climate system is unequivocal and it is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century.
- Observations show that global average temperatures have increased by 0.85 °C (in the range 0.65 to 1.06 °C) since 1850.
- In recent decades, changes in climate have caused impacts on natural and human systems on all continents and across the oceans.
- Increasing magnitudes of warming increase the likelihood of severe, pervasive and irreversible impacts.

- 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.
- The impacts and risks of climate change can be reduced and managed through mitigation and adaptation actions.
- Adaptation actions must be risk based, informed by the vulnerabilities of exposed societies and systems and an understanding of projected climate change.
- Changes in Ireland’s climate are in line with global trends. Temperatures have increased by about 0.8°C since 1900, an average of about 0.07°C per decade over that period, and changes in precipitation regimes, sea level rise and extreme events (storms, flooding, sea surges and flash floods) are also being observed.
- 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.
- The overall trend in Ireland is consistent with global patterns of change, with a high degree of climate variability and associated uncertainties in relation to extreme events.
- Sufficient robust information exists nationally to further progress the process of implementing adaptation actions and increasing social, economic and environmental resilience to climate change.

The Framework continues to detail that as per the Intergovernmental Panel on Climate Change (IPCC, 2013) it was concluded with 95% probability that the global warming of the last 50 years is a result of human activities, with the main contribution to this warming coming from the burning of fossil fuels. With regards to climate impacts for 2050 and beyond

Chapter 2 sets out the progress to date on climate change adaptation planning in Ireland, including work undertaken at sectoral and local government level and initiatives involving civil society and the research community.

Chapter 3 provides a number of guiding principles for adaptation at national level. It includes steps for creating an enabling environment for adaptation planning. It sets out the sectors for which adaptation plans under the NAF are to be prepared, along with proposals for local authority or regional level adaptation strategies. Regardless of how successful efforts to mitigate GHG emissions prove to be, the impact of climate change will continue over the coming decades because of the delayed impacts of past and current emissions. There is no choice, therefore, but to take adaptation measures to deal with the unavoidable impacts of climate change and associated economic, environmental and social costs. This is recognised at International, European Union and National level. It is detailed 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.”*

Chapter 4 outlines how the Framework will be implemented with revised Governance and reporting arrangements as well as actions and supporting objectives that are to be progressed.

### 2.4.5.3 National Policy Position on Climate Action and Low Carbon Development, 2014

The National Policy Position on Climate Action and Low Carbon Development, published by the Department of Environment, Community and Local Government in April 2014, provides a high-level policy direction for the adoption and implementation by Government of plans to enable the State to

move to a low-carbon economy by 2050. The position paper acknowledges that the evolution of climate policy in Ireland will be an iterative process, based on the adoption by Government of a series of national plans over the period to 2050. Statutory authority for the plans is set out in the Climate Action and Low Carbon Development Act 2015.

#### 2.4.5.4 Climate Action and Low Carbon Development Act 2015

The Climate Action and Low Carbon Development Act 2015 (No. 46 of 2015) was signed into law on 10th December 2015. The Act provides for the establishment of a national framework with the aim of achieving a low carbon, climate resilient, and environmentally sustainable economy by 2050, referred to in the Act as the “national transition objective”.

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

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

#### 2.4.5.5 National Mitigation Plan

Ireland’s first statutory National Mitigation Plan (NMP), published in July 2017, (as required under section 4 of the Climate Action and Low Carbon Development Act 2015) represents a landmark national milestone in the evolution of climate change policy in Ireland and provides for the statutory basis for the transition to a low carbon, climate resilient and environmentally sustainable economy by 2050.

The NMP reaffirms Ireland’s commitment to concerted and multilateral action to tackle climate change following the adoption of the legally binding Paris Agreement of which Ireland is a co-signatory. Under the Paris Agreement and as noted previously, the EU is committed to reducing greenhouse gas emissions by at least 40% by 2030, compared with 1990 levels. The Paris Agreement represents a landmark accord in tackling climate change, which is recognised by all parties as the defining global issue of this generation.

The NMP outlines a range of measures to lay the foundations for transitioning Ireland to a low-carbon, climate-resilient and environmentally sustainable economy by 2050. The Plan reaffirms Ireland’s commitment to action on climate change following the adoption of the legally binding Paris Agreement.

The NMP reiterates that the objective of a low-carbon future will involve radically changing our behaviour as citizens, industry and Government and becoming significantly more energy-efficient. In this regard, the NMP has made it clear that Ireland has abundant, diverse and indigenous renewable energy resources, which will be critical to decarbonising our energy system, including electricity generation. Onshore wind has, to date, been the most cost-competitive renewable electricity technology in Ireland, accounting for 22.8% of overall electricity generation in 2015.

The NMP addresses the role of local authorities in facilitating the transition towards a low-carbon economy and recognises that this requires engagement from all levels of Government and that a bottom-up approach is also essential to promote awareness and engagement within individual communities across Ireland.

The NMP further states that *there “is also recognition within the Local Authority sector of the need for the sector to assume a leadership role within their local communities to encourage appropriate behavioural change”*. Moreover, the Plan emphasises that local authorities also have a key role to play *“in addressing climate change mitigation action and are well placed to assess, exploit and support opportunities within their administrative areas, in cooperation with each other and with national bodies, and through the involvement and support of local communities”*.

In specific relation to wind energy and meeting targets, the National Mitigation Plan notes the following:

*“To date, wind energy has been the largest driver of growth in renewable electricity. The total amount of renewable generation connected to the grid at December 2016 was 3,120MW, of which wind generation was approximately 2,796MW, hydro was 238MW and biomass was 86MW. EirGrid estimates that a total of between 3,900MW and 4,300MW of onshore renewable generation capacity will be required to allow Ireland to achieve 40% renewable electricity by 2020. This leaves a further requirement of between 780MW and 1,180MW to be installed by 2020 if the 2020 electricity target is to be reached, requiring an increased rate of installation.”*

#### 2.4.5.6 Report of the Joint Committee on Climate Action Climate Change: A Cross-Party Consensus for Action, March 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 *“Ireland’s performance in meeting international obligations has to date been poor”*. The Committee places concern that predictions of emissions indicate that the state is off track in meeting its 2020 and 2030 targets under the Kyoto protocol and the EU Directives.

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

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

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

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

Under its recommendations, the Committee encourages the upgrading of existing onshore wind turbines where this will yield additional potential. While acknowledging that there are challenges in relation to securing additional on-shore wind generated renewable energy the Report fully supports the

increased provision of on-shore wind farm development at appropriate locations (such as that of the current proposal) and acknowledges that on-shore wind has a pivotal role to play in achieving climate action targets.

#### 2.4.5.7 Climate Action Plan 2019

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

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

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

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

Figure 2.2 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:

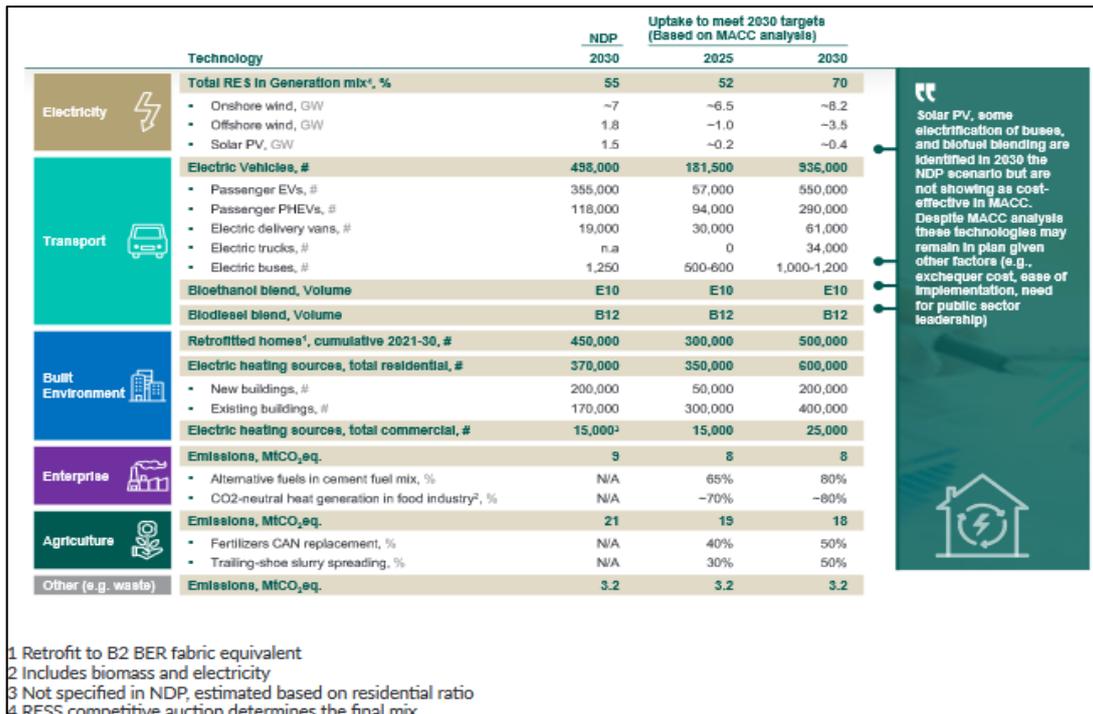


Figure 2.2 Ireland's Decarbonisation Pathway Dashboard to 2030

Chapter 7 of the CAP details the views surrounding electricity. The CAP notes that as of 2017 electricity accounted for 19.3% of Ireland's greenhouse gases which was down from the 2016 figure of 20.4%. With regards to electricity the following is detailed:

*“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 Ireland, in 2017 a total of 30.1% of electricity produced came from renewable sources, 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, this rising demand makes meeting our 2020 target even more challenging and latest forecasts indicate we may miss this target by 3 to 4 percentage points’. Further to this while decarbonising electricity is a key aspect of the strategy it is noted that this is against the background of rapid projected growth in electricity demand. The CAP notes that it is expected that demand for electricity is forecast to increase by 50% above existing capacity in the next decade. The CAP recognises that:

*“Ensuring we build renewable, rather than fossil fuel, generation capacity to help meet this demand is essential.”*

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

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

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

- Reduce CO2 eq. emissions from the sector by 50–55% relative to 2030 Pre-National Development Plan (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 comprising:
  - at least 3.5 GW of offshore renewable energy;
  - up to 1.5 GW of grid-scale solar energy; and
  - up to 8.2 GW total of increased onshore wind capacity.
- Meet 15% of electricity demand by renewable sources contracted under Corporate PPAs.

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

Section 7.2 of the CAP notes the ‘Measures to deliver targets’ in which efforts to meet the 2030 ambitions which includes increased harnessing of renewable energy. As seen in Figure 2.3 below, CAP identifies a need for 8.2GW of onshore wind generation and states that in 2017 there was 3.3GW in place, therefore Ireland needs to more than double its installed capacity of wind generation. Accordingly, the 2019 CAP presents clear and unequivocal support for the provision of additional renewable energy generation and presents yet further policy support for increased onshore wind energy.

Key Metrics	2017	2025 Based on MACC	2030 Based on NDP	2030 Based on MACC
Share of Renewable Electricity, %	~30% <sup>20</sup>	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 2.3 Potential Metrics to Deliver Abatement in Electricity

#### 2.4.5.8 Introduction

This section of the EIAR Provides the strategic planning context of the proposed development. As is examined below, the proposed development is in line with national, regional and local policies, frameworks, guidelines and plans. This section has been broken down to the following sections:

- National Planning Framework 2018,
  - Key Sustainability Elements of National Planning Framework
- Draft Renewable Electricity Policy and Development Framework, 2016
- Regional Policy
  - Eastern and Midland Regional Assembly - Regional Spatial and Economic Strategy
- Local Policy
  - Offaly County Development Plan 2014-2020
  - Offaly County Council Wind Energy Strategy
- Other Relevant Guidelines

- Interim Guidelines for Planning Authorities on Statutory Plans, Renewable Energy and Climate Change 2017
- DoEHLG Wind Energy Guidelines 2006
- Department Circular PL5/2017
- Draft Revised Wind Energy Development Guidelines 2019
- IWEA Best Practice Guidelines for the Irish Wind Energy Industry 2012
- IWEA Best Practice Principles in Community Engagement and Community Commitment 2013
- Code of Practice for Wind Energy Development in Ireland - Guidelines for Community Engagement 2016
- IWEA Community Engagement Strategy 2018
- Commission for Regulation of Utilities: Grid Connection Policy
- Renewable Energy Support Scheme (RESS)
- Forest Service Guidelines

As a renewable energy project the current proposal is broadly consistent with the overall national policy objectives to increase penetration and deployment of renewable energy resources and has been designed in the context of the relevant wind energy and other guidelines. The specific compliance with the County Development Plan provisions are dealt with in detail in the County Development Plan section below.

#### 2.4.5.9 National Planning Framework, 2018

The National Planning Framework (NPF), published in February of 2018, aims to shape and guide the future growth and development of Ireland up to 2040. The NPF will supersede the National Spatial Strategy 2002-2020 (NSS) and will include a focus on economic development and investment in housing, water services, transport, communications, energy, health and education infrastructure. The new framework sets out five strategic actions:

- 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 forms the top tier of the national planning policy structure, accordingly, establishing the policy context for the Regional Spatial and Economic Strategies and local level development plans. In an effort to move away from developer led development to one informed by the needs and requirements of society, a number of objectives and policies have been put in place in order for the country to grow and develop in a sustainable manner.

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

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

The Framework notes that while the overall quality of the country’s environment is good, it is not without challenges. The NPF notes the manner in which we plan is important for the sustainability of our environment and states the following.

*“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 waste water, 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.”*

The NPF seeks to achieve ten strategic priorities surrounding:

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

Relevant to the proposed development, the **National Strategic Outcome 8** (Transition to Sustainable Energy), notes that in creating Ireland’s future energy landscape, new energy systems and transmission grids will be necessary to enable a more distributed energy generation which connects established and emerging energy sources, i.e. renewables, to the major sources of demand. Ireland’s national energy policy under **Objective 55** aims to ‘*promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050*’. Through this, it is noted that there are three pillars of focus which must be considered:

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

The NPF highlights the important role which the regions will have in promoting a sustainable renewable energy supply and have been noted as a key future planning and development priority. It notes that ‘*harnessing the potential of the regions in renewable energy terms across the technology spectrum from wind and solar to biomass and where applicable, wave energy, focusing in particular on the extensive tracts of publicly owned peat extraction areas in order to enable a managed transition of the local economies of such areas in gaining the economic benefits of greener energy*’. The government recognise that they must reduce greenhouse gas emissions which come from the energy sector by at least 80% by 2050 when compared to 1990 levels while ensuring a secure supply of energy.

A key aspect of the NPF surrounds the long-term sustainability of the environment, it aims to ensure that decisions that are made today meet our future needs in a sustainable manner.

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

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

- Sustainable Land Management and Resource Efficiency;
- Low Carbon Economy;

- Renewable Energy; and
- Managing Waste.

In order to meet legally binding targets agreed at EU level, it is a national objective for Ireland to make a transition and become a competitive low carbon, economy by the year 2050. To aid in meeting these targets the NPF notes that the Government will aim to support the following objectives:

- Integrating climate considerations into statutory plans and guidelines. In order to reduce vulnerability to negative effects and avoid inappropriate forms of development in vulnerable areas.
- More energy efficient development through the location of housing and employment along public transport corridors, where people can choose to use less energy intensive public transport, rather than being dependent on the car.

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.

#### 2.4.5.9.1 *Key Sustainability Elements of National Planning Framework*

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

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

In relation to energy production, the NPF emphasises that rural areas have a strong role to play in securing a sustainable renewable energy supply for the country and acknowledges that *“rural areas have significantly contributed to the energy needs of the country and continue to do so”*. In this regard, the NPF states:

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

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

Key features identified in the NPF to facilitate the transition towards a low carbon energy future include:

- A shift from predominantly fossil fuels to predominantly renewable energy sources.
- Increasing efficiency and upgrades to appliances, buildings and systems.
- Decisions around development and deployment of new technologies relating to areas such as wind, 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 reiterates that the *“transition to a low carbon economy from renewable sources of energy is an integral part of Ireland’s climate change strategy and renewable energies are a means for reducing our reliance on fossil fuels”*. This position is cemented in National Policy Objective 55 of the NPF which seeks to:

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

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

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

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

#### 2.4.5.10 Draft Renewable Electricity Policy and Development Framework, 2016

The Renewable Electricity Policy and Development Framework has been formulated to ensure Ireland meets its future needs for renewable electricity in a sustainable manner compatible with environmental and cultural heritage, landscape and amenity considerations.

The Framework will contribute toward meeting Ireland’s future energy needs, particularly up to 2030 and beyond, as informed by national and European policy, and be reviewed at five-yearly intervals. The Policy and Development Framework will be primarily for the guidance of An Bord Pleanála, planning authorities, other statutory authorities, the general public and persons seeking development consent in relation to large scale projects for the generation of renewable electricity on land. It will set out policy in respect of environmental considerations, community engagement and in relation to potential, future export of renewable electricity. It will seek to broadly identify suitable areas in the State, where large-scale renewable electricity projects can be developed in a sustainable manner. The existing system for planning permission applications to local authorities or An Bord Pleanála will remain unchanged in respect of renewable electricity projects. These will still require planning permission, including environmental impact assessment where appropriate. It is proposed that the Policy and Development Framework will be focused on providing for renewable electricity projects of large scale. It is considered that a threshold of 50 MW and upwards would be appropriate, having regard to the provisions of the strategic infrastructure development legislation.

In July 2018 tenders for the provision of consultancy services for Strategic Environmental Assessment (SEA), Appropriate Assessment (AA) and related services including spatial planning, landscape and visual assessment in relation to the framework were requested. The tender documentation circulated has indicated that the updated REPDF will have the following objectives:

- To maximise the sustainable use of renewable electricity resources in order to develop progressively more renewable electricity for the domestic and potentially, for future export markets.

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

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

## 2.4.6 Regional Policy

### 2.4.6.1 Eastern and Midland Regional Assembly - Regional Spatial and Economic Strategy

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

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

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

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

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

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

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

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

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

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

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

The following RPO's have also been listed within the RSES:

- **RPO 7.35:** EMRA shall, in conjunction with local authorities in the Region, identify Strategic Energy Zones as areas suitable for larger energy generating projects, the role of community and micro energy production in urban and rural settings and the potential for renewable energy within industrial areas. The Strategic Energy Zones for the Region will ensure all environmental constraints are addressed in the analysis. A regional landscape strategy could be developed to support delivery of projects within the Strategic Energy Zones.

- **RPO 7.36:** Planning policy at local authority level shall reflect and adhere to the principles and planning guidance set out in Department of Housing, Planning and Local Government publications relating to ‘Wind Energy Development’ and the DCCA Code of Practice for Wind Energy Development in Ireland on Guidelines for Community Engagement and any other relevant guidance which may be issued in relation to sustainable energy provisions.

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

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

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

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

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

## 2.4.7 Local Policy

### 2.4.7.1 Offaly County Development Plan 2014-2020

The Offaly County Development Plan 2014-2020 (CDP) is the principal instrument that is used to manage change in land use in the County. The Plan sets out the Council's strategic land use objectives and policies for the overall development of the County up to the year 2020 and beyond. The plan recognises that Offaly has had a long history of energy production, predominantly related to the commercial exploitation of peatlands. It has been identified that the energy market is changing and moving to a greater reliance on various forms of renewable energy. It is highlighted that there *'must be a renewed emphasis on energy efficiency to reduce the influence of the markets for carbon based fuel on our economic prosperity'*. A core strategy of the plan surrounds the need for adapting to climate change, it is stated that:

*"To ensure that development promoted, supported or facilitated by the Development Plan provides for the adaptation to climate change and the promotion of renewable energy where possible including the increased risk of flooding."*

The Plan, through its inclusion of an Energy Strategy, acknowledges the importance of energy to the local economy ensuring that the County is positioned in order to compete for future investment in generation capacity. The main developments in the energy industry over the lifetime of the Offaly County Development Plan 2014-2020 will be in generation, in particular the plan finds this will involve the migration from non-renewables to renewables.

The Council recognises the importance which cutaway bogs may have in relation to the provision of renewable energy within the county; they are described as a major natural and archaeological resource that are also have a critical role in employment provision in the county. Of Offaly's estimated land extent of 493,985 acres the plan states that approximately one fifth of the county comprises peatlands. The CDP highlights that *'the reuse of cutaway bog will present significant opportunities in the energy sector'*. In terms of their potential use the council state that:

*"Cutaway bogs have potential land uses that can enhance both the employment and tourism sectors of the county as well as providing a potential habitat as much of the area will return to wilderness and contribute to the green infrastructure network."*

Section's 2.3.2 and 2.4.5 of the County Development Plan recognise that there is the potential for peatlands to accommodate large scale energy developments including in the form of wind farms. The County Development Plan 2014-2020 sets a number of objectives in relation to energy/renewable energy which include the following:

- RDP-08: It is Council policy to support the development of renewable energy in rural areas, where it is considered appropriate i.e. where it is demonstrated that such development will not result in significant environmental effects. Such development will be assessed on a case-by-case basis.
- RDP-09: It is Council policy to encourage and facilitate the development of local and community based renewable energy projects in the county, notwithstanding their suitability and additional considerations such as location, nature of use, compliance with relevant guidelines and scale, where it can be demonstrated that such proposals are feasible.
- RDP-11: It is Council policy to encourage expansion and employment in industries such as agriculture, horticulture, forestry, peatlands, food, crafts, tourism and energy.

The proposed development which constitutes the provision of a renewable energy project on cutover bog is broadly compliant with the overall objectives of the County Development Plan. Furthermore the

proposal has been designed to minimise environmental impacts and accordingly is in accordance with the proper planning and sustainable development of the area.

Section 3.5 of the County Development Plan 2014-2020 details the council’s strategic plans surrounding the development of wind energy throughout its lifetime. In recent years, through the further improvement of wind energy technology and the development of larger turbines (which have the ability to take advantage of lower wind speeds) it opens the opportunity for the development of renewable wind energy production. It makes the development of wind energy in Offaly where wind speeds are as low as 7m/s at 100m fully possible.

The Wind Energy Strategy for the county provides designations in an effort to guide the development of Wind Farms to appropriate locations. Figure 2.2.6.1 of the Wind Energy Strategy shows the areas which are considered to be ‘areas suitable for wind farm development’. In all other areas, the plan states that Wind Energy Developments shall not normally be permitted except as provided under exemption provisions and as described in Section 5.4 of the Wind Energy Strategy referring to single turbines. The Wind Energy Strategy is discussed in further detail below.

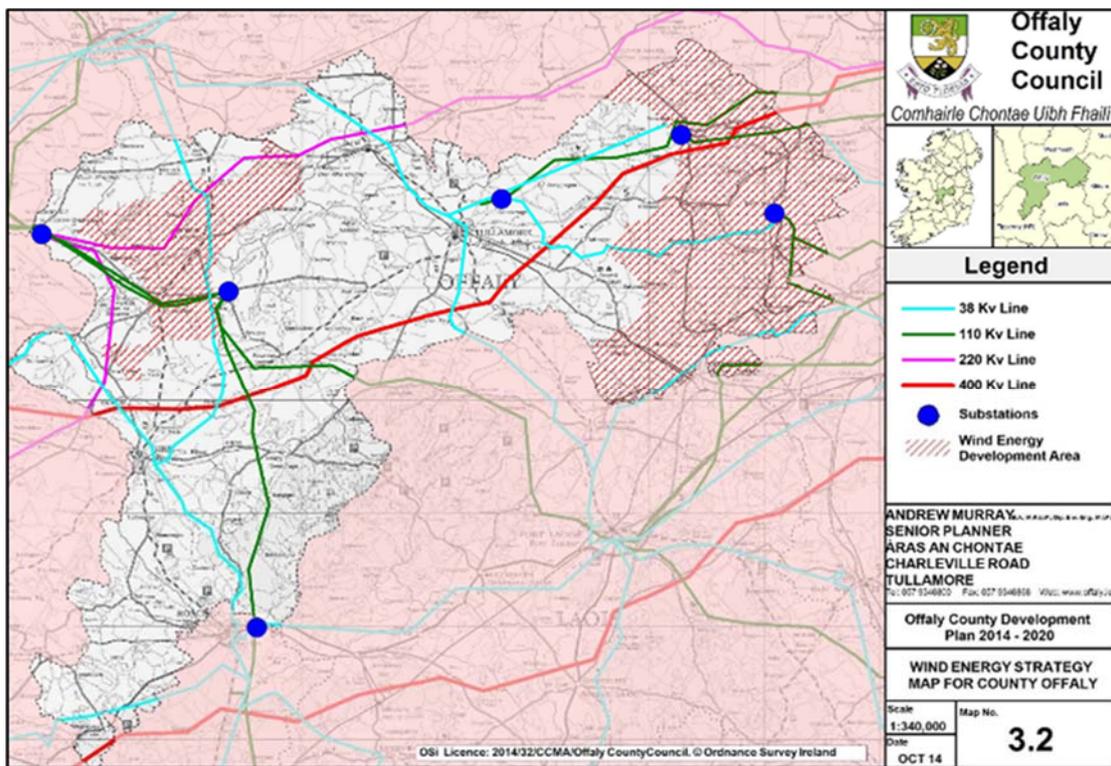


Figure 2.4 Offaly Wind Energy Strategy

In relation to energy the following objectives have been set to aid the plan in meeting its goals during the duration of the development plan:

- **EP-01:** It is Council policy to support national and international initiatives for limiting emissions of greenhouse gases and to encourage the development of renewable energy sources.
- **EP-02:** It is Council policy to facilitate the continual development of renewable energy sources having regard to the proper planning and sustainable development of the area concerned, the protection of amenities, landscape sensitivities, European Sites, biodiversity, natural heritage, and built heritage, and where such proposals comply with policy contained in the County Development Plan, in the interests of proper planning and sustainable development.
- **EP-03:** It is Council policy to encourage the development of wind energy in suitable locations, on cutaway bogs within the wind energy development areas open for

consideration identified in Map 3.2, in an environmentally sustainable manner and in accordance with Government policy, having particular regard to the Wind Energy Strategy for the County and Section 3.5.1, which states that appropriate buffers should be provided, which shall be a minimum of 2km from Town and Village Cores, European designated sites, including Special Areas of Conservation (SAC) and Special Protection Areas (SPA), and national designations, Natural Heritage Areas (NHA). Wind Energy developments on cutaway bogs should generally be developed from the centre out.

- The Area around Corracullin Bog, (Area 4 in Wind Energy Strategy), is omitted from the Wind Energy Development Area.
- **EP-05:** It is Council policy that applications for wind energy development outside of the wind energy development areas open for consideration identified in Map 3.2 will not normally be permitted except when it can be demonstrated that the proposal falls into the following category:
  - Category A: Single Turbines that are sited close to and specifically relate to the operations of an industrial/commercial premises or a school, hospital or other community-related premises. Supporting evidence must be provided detailing that the development will only facilitate and is only related to the operation of the business or community facility.
  - Each proposal within this category will be open for consideration outside of the wind energy development areas and subject to site specific assessment in accordance with relevant guidance.
- **EO-01:** It is an objective of the Council to achieve a reasonable balance between responding to government policy on renewable energy and in enabling the wind energy resources of the county to be harnessed in an environmentally sustainable manner. This will be implemented having regard to the Council's Wind Energy Strategy as follows:
  - In Areas open for consideration for Wind Energy Development, as identified in Map 3.2;
  - In all other areas, Wind Energy Developments shall not normally be permitted except as provided for under exemption provisions and as specifically described in Section 5.4 of the Wind Energy Strategy and Policy EP-05.

The Offaly County Development Plan lists cutaway bogs as areas of moderate landscape sensitivity. The characteristics of this landscape type are described in the Plan as follows:

*“Cutaway bogs cover a large part of the landscape of Offaly and in their entirety, are approximately 42,000 hectares. There are a number of land uses for cutaway bog, which include wilderness, grassland, forestry and recreation. Some cutaway bog landscapes are more robust and may be considered for other uses.”*

The Plan states that some areas of cutaway bog may be appropriate for other sensitively designed and located developments, including renewable energy (wind farms, biomass crops), and/or industrial use.

The County Development Plan identifies Areas of High Amenity, to protect and enhance areas of scenic and amenity value in County Offaly which are worthy of special protection in order to preserve their uniqueness and amenity value. Drinagh Bog is designated as High Landscape Sensitivity and is also an area of High Amenity and part of the Lough Boora Parklands. Clongawny is designated as an area of Moderate Landscape Sensitivity. The amenity value and landscape sensitivity are assessed in Chapter 12, Landscape and Visual Impact.

## 2.4.7.2 Offaly County Council Wind Energy Strategy

The Wind Energy Strategy (WES) for Offaly County Council was adopted as part of the Offaly County Development Plan 2014-2020. The objective of the strategy is to evaluate and analyses the potential for wind energy development with the County. Development of alternative energy sources is a priority at National and European level for both environmental and energy policy reasons.

The WES identifies ‘Areas Suitable for Wind Energy Development’, where the development of wind farms and smaller wind energy projects are open for consideration. It aims to capitalise on the potential for wind energy development in the County, while protecting the landscape, environmental considerations and residential amenity, and to give a broad indication of where potential appropriate wind energy development could take place within the lifetime of the County Development Plan 2014 – 2020. The WES identifies ‘Areas Suitable for Wind Energy Development’, where the development of wind farms and smaller wind energy projects are open for consideration.

The WES states that these areas are likely to be suitable for all scales of wind energy on account of a combination of factors that include:

- Available access to suitable grid connections (within 10.0 kilometres);
- The absence of compelling environmental constraints;
- Low densities of adjacent residential development;
- Areas of cut-over bog, and
- Low densities of adjacent residential development.

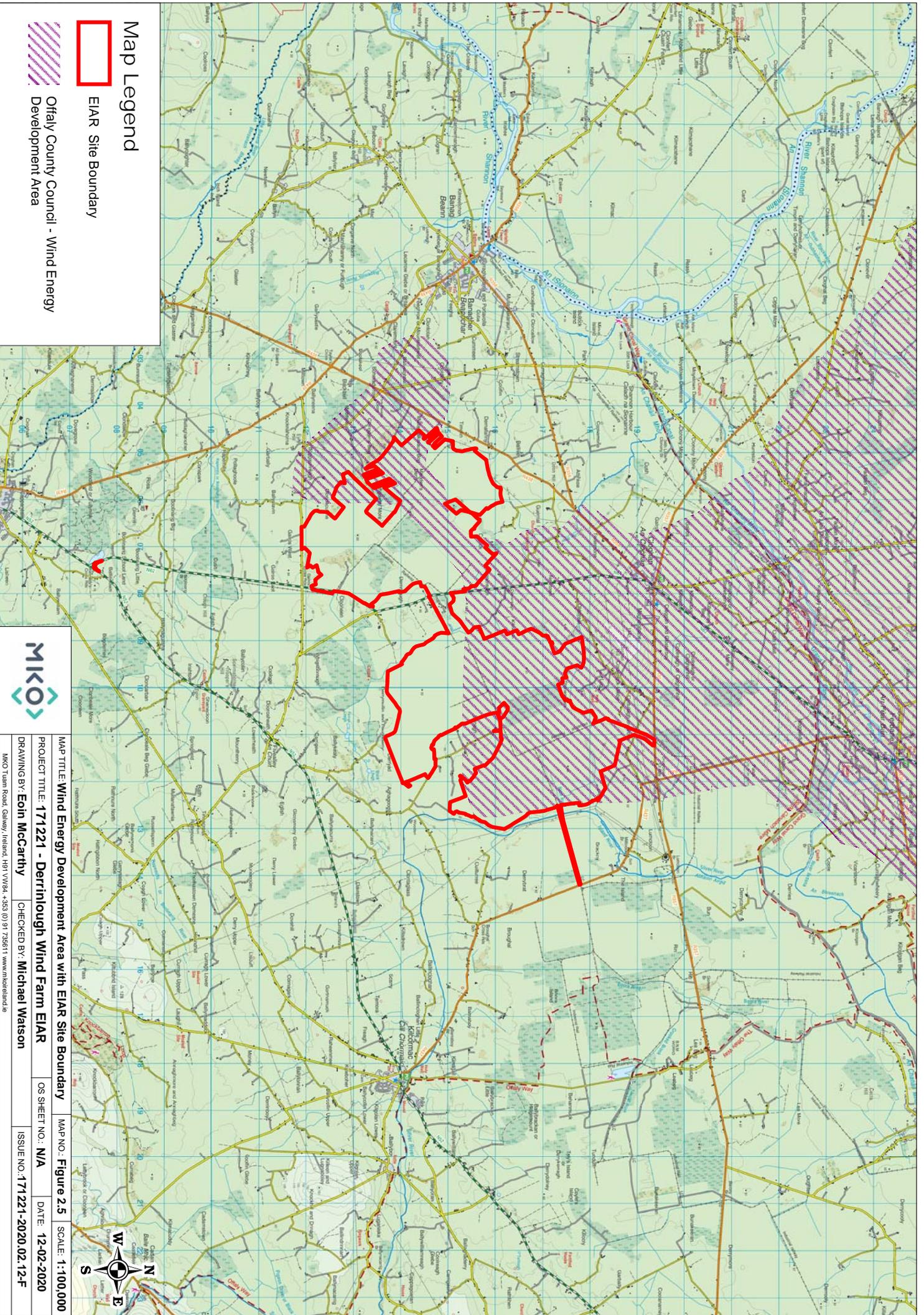
### Justification of the Site in context of the Wind Energy Strategy provisions

A portion of the proposed development site is located within the Wind Development Area (WDA) which has been designated as being appropriate for the provision of wind turbines within the Wind Energy Strategy and is shown in Figure 2.5 below. The areas of the proposed development site that are located outside of the WDA share the same characteristics as the portion within and also conform to the suitability factors listed previously above. The Strategy states that applications for wind turbines in the Suitable Areas are acceptable in principle, subject to conformance with all other requirements of the County Development Plan, including objectives relating to landscape protection and the protection of residential amenity. The rationale behind this is to minimise the impacts of large-scale developments on the environment of Co. Offaly as a whole, while maximising the potential for optimal and efficient grid connection.

The Offaly WES also identifies six main areas within the County for potential wind farm development. A portion of the proposed development site is located in Area 7: Area South of Cloghan. The Strategy found that this area is suitable for large-scale wind farm development, as follows:

*“7. Area South of Cloghan: Having regard to low levels of adjacent dwellings, reasonable access to grid, proximity to access and areas of cut-over bog this area is suitable for windfarms.”*

As can be seen from the above while the majority of the proposed development site is located within the area designated as being suitable for wind farm development there are areas that lie outside this designation and in which it is intended to place wind turbines. Policy EP-05 of the County Development Plan deals with the development of lands for wind farms outside of the designated wind energy development areas and states that *“applications for wind energy development outside of the wind energy development areas open for consideration identified in Map 3.2 will not normally be permitted”*. The plan further notes that the exception to ‘normal circumstances’ indicated above has been specified as relating to single turbines, sited close to and operated by an industrial/commercial premises or a school, hospital or other community-related premises.



### Map Legend

 EIAR Site Boundary

 Offaly County Council - Wind Energy Development Area



MAP TITLE: Wind Energy Development Area with EIAR Site Boundary	MAP NO: Figure 2.5	SCALE: 1:100,000
PROJECT TITLE: 171221 - Derrinlough Wind Farm EIAR	OS SHEET NO.: N/A	DATE: 12-02-2020
DRAWING BY: Eoin McCarthy	CHECKED BY: Michael Watson	ISSUE NO: 171221-2020.02.12-F
MCO Team Road, Galway, Ireland, t91 VV94, +353 (0) 91 736511 www.mico.ie		

Notwithstanding the current designations in the WES it is evident (from any site inspection and considering the strategy's methodology) that the entirety of the proposed development site benefits from the same characteristics and meets the five key criteria, as outlined in the WES (and above), for land suitable for wind energy development. The subject site which comprises a mixture of active and cut away bogs are surrounded primarily by a mixture of agricultural land and forestry and comprise low densities of adjacent residential development. The grid infrastructure in the area includes a 400kV line from Moneypoint to Woodland Station near Dublin which runs approximately 3 kilometres to the south of the site. There are also two 220 kV lines within the vicinity, one running south from Shannonbridge to the west of Clongawny bog and another running east from Shannonbridge approximately 7 kilometres to the north of the site. There are four 110 kV lines in the area with two running to the north of Clongawny and Drinagh, one to the west of Clongawny bog and one to the east of Drinagh bog.

In relation to ecological sensitivities, the nearest Special Protection Area (SPA), is the Middle Shannon Callows SPA, which is located approximately 2.3 kilometres north and west of the subject site at its nearest point. The nearest SAC is All Saints Bog and Esker SAC, the boundary of which is located approximately 2.5 kilometres southwest of the site. The Lough Coura pNHA lies adjacent to the south of the site while Lough Boora NHA is 3.1 kilometres to the east. A Bat roost has also been identified as shown in Figure 2.6 below.

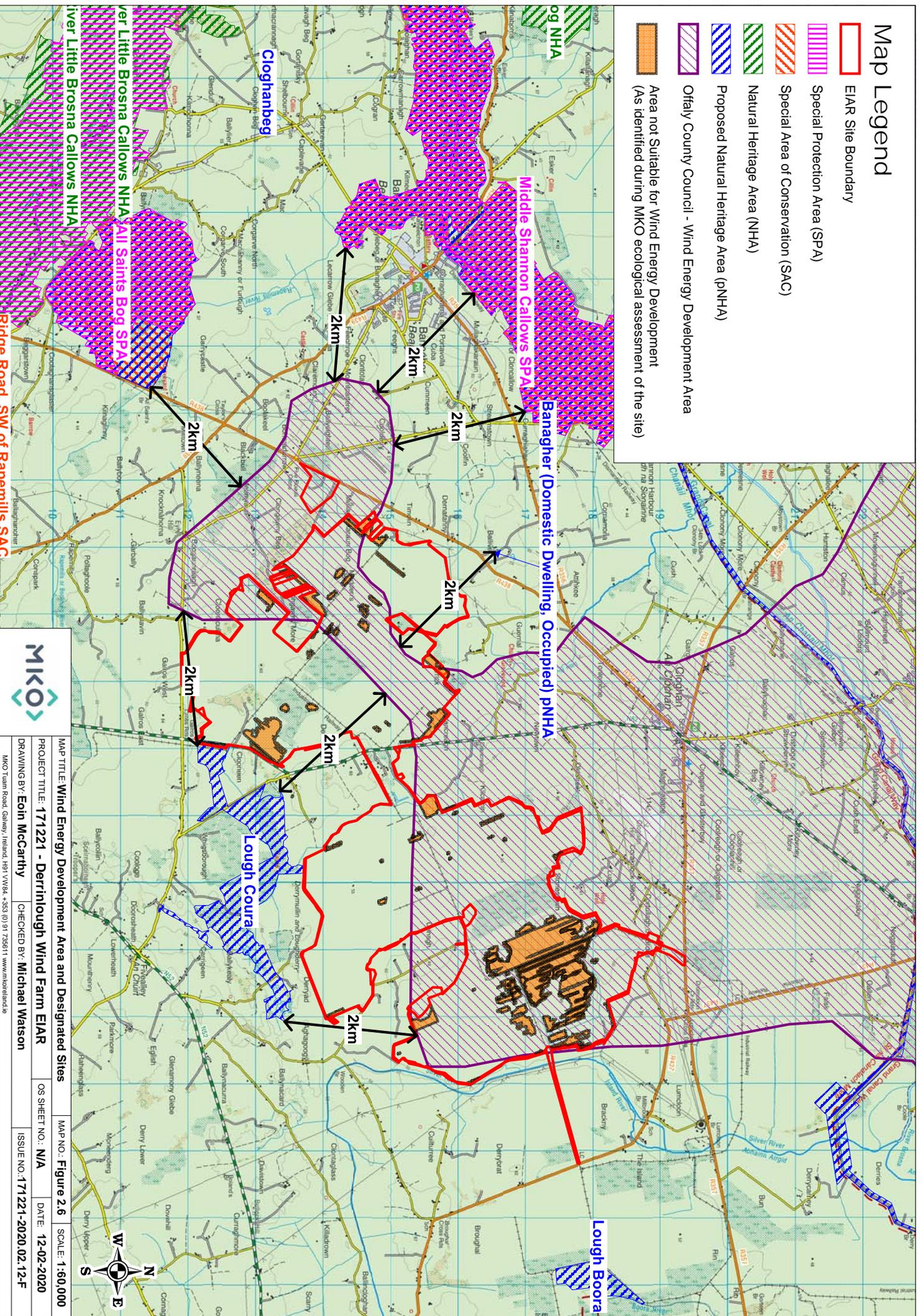
By necessity the WES for Offaly is a strategic document and the areas designated as being appropriate for wind farm development have arisen from applying a strategic "sieve" to the County. First discounting areas of particular sensitivity and then incorporating strategic nominal buffers. On review of the Offaly WES it is apparent that ecological designations, landscape sensitivities as well as proximity to settlements and other technical considerations all informed the identification of areas suitable for wind energy development in Offaly. While the entirety of the EIAR study area shares common characteristics, a portion of the subject site is situated outside of the Wind Energy Development Area.

Figure 2.6 above identifies the locations of the various sensitivities giving rise to the boundary of the Wind Energy Development Area surrounding the proposed development. The EIA study area is shown in red and surrounding sensitivities have also been indicated (NHAs, SACs, and bat roost). The WES is a strategic document and at that level and in order to ensure impacts are minimised it is appropriate and necessary to apply standardised buffers from designated areas and as the WES is a county-wide strategy it is not practical, feasible or appropriate for the local authority to carry out a finer grain review. The preparation of this EIAR has involved carrying out a range of focused and detailed environmental reports and assessments, including a full range of site-specific ecological, hydrological and landscape studies which have facilitated a greater level of understanding of the site and its surroundings than could be achieved in any strategic county-wide assessment.

The studies and assessments that have been carried out have demonstrated that there are areas within the study area that have been identified as "Wind Development Area" (WDA), that are not appropriate for the provision of wind turbines. The north-western zone of the EIA study area (hatched orange in Figure 2.6) refers in this regard. This area is under the ownership of the applicant, however, following detailed ecological review of this area, carried out as part of the EIAR process, it has been identified as the most biodiverse location in the vicinity which offers good habitats for a range of flora and fauna, however, is not subject to any specific environmental or ecological designation. Accordingly, in designing the proposed development, this area has been avoided in order to ensure the diverse range of habitats and fauna can be preserved. In this regard while it would be consistent with the provisions of the WES to provide turbines at this location, the finer grain analysis facilitated in the preparation of this EIAR highlights that biodiversity, environmental enhancement and general amenities would be better served by excluding wind turbines from this area. Accordingly, wind turbines will not be provided in this area which has been designated as WDA by the Wind Energy Strategy.

# Map Legend

-  EIAR Site Boundary
-  Special Protection Area (SPA)
-  Special Area of Conservation (SAC)
-  Natural Heritage Area (NHA)
-  Proposed Natural Heritage Area (pNHA)
-  Offaly County Council - Wind Energy Development Area
-  Area not Suitable for Wind Energy Development  
(As identified during MKO ecological assessment of the site)



MAP TITLE: Wind Energy Development Area and Designated Sites		MAP NO.: Figure 2.6	SCALE: 1:60,000
PROJECT TITLE: 171221 - Derrinlough Wind Farm EIAR		OS SHEET NO.: N/A	DATE: 12-02-2020
DRAWING BY: Eoin McCarthy		CHECKED BY: Michael Watson	ISSUE NO: 171221-2020.02.12-F
<small>MKO Team Road, Galway, Ireland, H91 VV94, +353 (0) 91 738611 www.mko.ie</small>			

Further to the finer grain studies that have been facilitated in the preparation of this ELAR other areas have been identified within the landholding (but outside the WDA designation) that can accommodate wind turbines, while minimising environmental impact and ensuring the sensitive receptors identified in the WES remain unaffected. Prior to proposing turbines at these locations, it was necessary to ensure that the particular sensitivities identified in the WES (and which informed the boundaries of the WDA at this location) were not adversely impacted. In this regard, the following is of note (and illustrated in Figure 2.6).

- The reason for the southern portion of the EIA study area being excluded from the WDA is the presence of the Lough Coura proposed Natural Heritage Area (pNHA) and its WES designated standard 2km exclusion/buffer zone. Lough Coura pNHA is a small in-filled lake, which has a long history of botanical recording and has been identified as a pNHA for the occurrence of Fen habitat. As a fen habitat, the most important consideration in terms of potential for impacts to arise relate to hydrology and hydrological connection between the proposed development and Lough Coura. In this regard, Lough Coura is located upstream of the proposed development and therefore no water or runoff from the site will flow in the direction of the pNHA. The ecological surveying and monitoring that has been carried out also highlights that there will be no other impacts arising on the pNHA from the proposed development. Accordingly, the provision of turbines within the southern portion of the subject site (on lands outside the WDA) can be provided while protecting the relevant sensitive receptor identified in the WES in the vicinity.
- In relation to the provision of turbines in the north-western portion of the site this area also lies outside the WDA designated area. Again, the WDA boundary at this location is dictated by the presence of a pNHA and its associated WES generated generic buffer zone – set back. The pNHA in question is a privately-owned dwelling house referred to as “Banagher (Domestic Dwelling, Occupied)” and it has been designated as a pNHA for being a roost of the Brown Long-eared Bat. (approximately 60 bats have been recorded in the attic in 1987). This pNHA is located over 700m from the proposed project boundary and outside the 200m survey buffer of the site, and the project has been designed to minimise any potential impacts on bats, with appropriate mitigation measures being applied throughout. Accordingly, the proposed development will not have an adverse impact on this pNHA and therefore maintain integrity of this sensitive feature identified within the WES.
- In relation to the SACs and SPAs in the wider vicinity the NIS and range of ecological studies carried out demonstrate that the proposed development will not give rise to adverse impacts on these Natura sites.

It should be noted that pNHA sites do not have any legal designations or protections under the Wildlife Act 2000, and therefore the application of arbitrary setbacks and exclusion areas from these non-designated areas, is not a mandatory or legislative requirement. The setbacks have been imposed by the methodology adopted in the WES and are not based on any guidelines or best practice. The requirement for and scale of setbacks should typically be established as part of project specific site constraints mapping or studies. It is acknowledged that the generic setbacks used within the WES can inform strategic decision making at a macro level, the protection of sensitive features (which is the fundamental principle driving the WES setbacks) can also be assured by site specific project design and mitigation once a greater understanding of any site, its surroundings and conditions is achieved. This greater site-specific understanding has been facilitated in the current instance through the EIA process. . The detailed and site specific studies carried out to inform this ELAR has allowed a more detailed and finer-grain analysis of the relevant issues to be carried out and the details set out in the relevant sections of this ELAR confirm that the design of the proposed wind farm can be accommodated as proposed without adverse impact on the sensitive features identified in the WES. In fact the analysis carried out goes further and acknowledges that a portion of land within the applicants holding (the eastern portion of the study area) which has been designated as being within the WDA is not in fact an optimum location for the provision of wind turbines due to the quality and range of the habitats that are present

at that location. These lands are not designated and are within the WDA, but turbines are not being proposed at this location arising from the various studies that have been carried out.

The identification of the southern portion of the subject site as being unsuitable for wind energy would appear to be contrary to the stated underlying rationale of the WES to maximise wind energy developments in suitable areas. In addition to this it is noted that the Offaly County Development Plan specifically references cutaway bogs, such as the subject site, as having characteristics that “*appear to be particularly suitable for wind energy development*”, and reference is made to the characteristics including large, interconnected landholdings which have sparse residential populations, which is very much the situation with the current proposed development.

It is evident that there is a clear conflict between the recognition of cut away bogs as being suitable for wind energy development and the current WES designation for the subject site, however, the findings and conclusions of this EIAR clearly point to the proposed development not only being suitable as proposed but also being in line with the requirements of proper planning and sustainable development in that the site can clearly accommodate a development as proposed without significant adverse impact on the environment in the vicinity.

The subject development has been confirmed as a Strategic Infrastructure Development by An Bord Pleanála, thereby requiring an application directly to An Bord Pleanála under the provisions of Section 37E of the Act. Section 37G of the Act states that;

*“(1) When making a decision in respect of a proposed development for which an application is made under section 37E, the Board may consider any relevant information before it or any other matter to which, by virtue of this Act, it can have regard.”*

Section 37G Subsection (2)(c) states that “Without prejudice to the generality of subsection (1), the Board shall consider .... the provisions of the development plan or plans for the area” however subsection 6, notes that the Board may;

*“decide to grant a permission for development, or any part of a development, under this section even if the proposed development, or part thereof, contravenes materially the development plan relating to any area in which it is proposed to situate the development.”*

Accordingly, An Bord Pleanála are not bound by the provisions of the development plan in determining SID applications and can grant permission for the development of wind turbines outside of the area deemed appropriate for wind farm developments. However, having regard to the dual provisions of the County Development Plan, which on the one hand supports the provision of renewable energy and specifically recognises cutover bogs as being an appropriate location for such infrastructure, while on the other the entirety of the proposed site is not within the WDA designated within the WES, it can be argued that the proposed development does not contravene the development plan provisions, particularly as the sensitive features for which buffers have been applied in the WES (to create the WDA) remain protected from potential impacts from the proposed development through the design process and the range of mitigation measures associated.

## 2.4.8 Other Relevant Guidelines

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

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

#### 2.4.8.2 DoEHLG Wind Energy Guidelines 2006

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

It is the case that each wind project has its own characteristics and defining features, and it is therefore impossible to write specifications for universal use. Guidelines should be applied practically and do not replace existing national energy, environmental and planning policy. The Department of the Environment, Community and Local Government published proposed revisions to the guidelines in December 2013 as part of a targeted review relating to Noise, Proximity and Shadow Flicker for discussion. The Department has since issued the Draft Revised Wind Energy Development Guidelines in December 2019. At the time of lodgement the consultation period for the Draft Guidelines still remained open, the consultation period closes on the 19<sup>th</sup> of February 2020. The proposed development has been designed in accordance with the current wind farm guidelines and has also been fully informed by the provisions of the Draft Wind Energy Guidelines 2019.

#### 2.4.8.3 Department Circular PL5/2017

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

Guidelines 2006. The new circular (PL05/2017) reconfirms that this continues to be the advice of the Department.

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

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

The release of Circular Letter PL05/2017 and the Interim Guidelines coincide with the publication of Ireland's first statutory National Mitigation Plan (previously discussed above).

#### 2.4.8.4 Draft Revised Wind Energy Development Guidelines 2019

The Department of Housing, Planning and Local Government published the Draft Wind Energy Guidelines (referred to as the Draft Revised Guidelines) in December 2019 and these Draft Guidelines are under public consultation (until 19<sup>th</sup> 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 and informed the design approach of the current proposed development. The current guidelines in force remain the 2006 guidelines, however it is acknowledged that the draft guidelines may be adopted prior to a decision issuing in relation to the current proposal, and accordingly in so far as is practicable the provisions of the Draft Guidelines have informed the design process for the current proposal.

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

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

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

The design of the proposed development has taken account of the “preferred draft approach” as articulated by the Department in June 2017, and accordingly, has been developed with the provisions

of the current Draft Revised Guidelines in mind. In relation to the design parameters of the draft revised guidelines, shadow flicker as an entirely controllable phenomenon can be controlled by the proposed wind farms control systems and the Project will adhere to the shadow flicker standards of the draft guidelines. Extensive community consultations have also been carried out as advised in the draft. The project will also provide a community dividend and the community gain proposal has set out in Chapter 4.5 of this EIAR. The noise section of this EIAR demonstrates that the proposed development will not have an adverse impact on sensitive properties. The layout of the project has been designed to accommodate the visual amenity setback set out in the Draft Guidelines (Section 6.18 of the Draft Guidelines refer). In this regard, the Draft Guidelines state that “... *Planning authorities and An Bord Pleanála (where relevant) shall ... ensure that a setback distance for visual amenity purposes of 4 times the tip height of the relevant wind turbine shall apply between each wind turbine and the nearest point of the curtilage of any residential property in the vicinity.... subject to a mandatory minimum set back of 500 metres from the residential property.*” The proposed development has been designed to ensure that no turbine is located within 4 times tip height of any residential dwelling.

#### 2.4.8.5 **IWEA Best Practice Guidelines for the Irish Wind Energy Industry 2012**

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

#### 2.4.8.6 **IWEA Best Practice Principles in Community Engagement and Community Commitment 2013**

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

Further details on the community engagement that has been undertaken as part of the proposed development are presented below.

#### 2.4.8.7 **Code of Practice for Wind Energy Development in Ireland - Guidelines for Community Engagement 2016**

In December 2016, the Department of Communications, Climate Action and Environment (DCCA/E) issued a Code of Practice for wind energy development in relation to community engagement. The Code of Good Practice is intended to ensure that wind energy development in Ireland is undertaken in adherence with the best industry practices, and with the full engagement of local communities.

Community engagement is required through the different stages of a project, from the initial scoping, feasibility and concept stages, right through construction to the operational phase. The methods of engagement should reflect the nature of the project and the potential level of impact that it could have on a community. The guidelines advise that ignoring or poorly managing community concerns can have long-term negative impacts on a community's economic, environmental or social situation. Not involving communities in the project development process has the potential to impose costly time and financial delays for projects or prevent the realisation of projects in their entirety. Community engagement in relation to the proposed development is discussed in full below.

#### 2.4.8.8 IWEA Community Engagement Strategy 2018

The IWEA Community Engagement Strategy was launched in March 2018 in line with their plan to 'step change' in how members will engage with communities neighbouring wind farm projects. There are a number of commitments listed under this strategy which are summarized as follows:

##### *Pre-planning*

With the long-term timelines associated with wind farm developments it is noted that there is considerable uncertainty in the early stages. When all necessary land rights are secured IWEA members commit to:

- Create a project website at an early stage of the project development. This webpage will include project milestones and timelines, as they become known;
- Appoint a Community Liaison Officer (CLO) for the project and provide contact details to the community. The CLO will be the point of contact for the community and all requests/concerns will be acknowledged within 48 hours and resolved, where possible within one week; and
- Call to the door of all residents within one kilometre of the nearest proposed turbine to provide information –in the form of a project leaflet –which explains the proposed project and provides contact details for the CLO.

##### *Pre-Construction/Construction*

It is noted that it typically takes approximately 12 months to construct a wind farm and is detailed that during periods there will inevitably be disruption locally. The role of the CLO will become more proactive, during this phase, to make sure the local community are kept up to date with developments and any issues are dealt with. The following IWEA commitments are listed:

- Provide information on the construction schedule to all stakeholders identified in the pre-planning process and on the project website;
- Facilitate public meetings, as necessary, to inform the public about the project and its status;
- The CLO acknowledging all requests/ concerns made to him / her within 48 hours and working with the project promoter / construction contractor to resolve any issues that arise. Issues raised generally to be 'closed out' within one week; and
- Produce an annual report detailing events / issues that arose and how they were dealt with. This report to be submitted to the local authority.

##### *Post Construction/Operation*

Following the completion of the construction and commissioning phase, activity on the site will dramatically reduce. During this phase the IWEA commitments are as follows:

- Maintain the project website with updated information about the project;
- CLO continuing to acknowledge all requests/ concerns made to him / her within 48 hours and work with the project promoter / owner to resolve any issues that arise/ Produce an

- annual report detailing events / issues that arose and how they were dealt with. This report to be submitted to the local authority; and
- Compile a report measuring the economic impacts of the project

*Existing projects:*

There are over 200 windfarms in operation in Ireland today of varying sizes and at varying stages of their operational life. The Strategy details that of the operational wind farms IWEA’s members make up 70% of the installed wind capacity. The following commitments are listed:

- Nominate Community Liaison Officer (CLO) to each wind farm;
- Host a project website with CLO details, or where no dedicated website for the project is in existence, IWEA members commit to providing CLO details to a windfarm database hosted on the IWEA website;
- Acknowledge all requests / concerns within 48 hours of being made;
- Ensure all instances of any planned disruption, traffic restrictions etc. are highlighted and clearly communicated to the community in advance; and
- Prepare an annual report documenting engagement with the local community. This report to be submitted to the local authority.

*Community Benefit and Community Ownership*

**Benefit** - It is noted that IWEA members should be seeking to provide support to local communities. Members are committed to providing resources for Community Benefit Funds, tailored to each particular project and the needs of each particular community, with each community defining for themselves how the funding should be allocated. To ensure that IWEA’s members are aligned with the best practice proposed in RESS, IWEA members are committing to provide €2/MWh to Community Benefit Funds for all future wind farm projects (RESS supported or not) over the first 15 years of operation.

**Ownership** - In some cases, local communities aspire to forms of community ownership or community investment in windfarms. IWEA supports this, but also recognises that there are important aspects of how this might best work in practice, that require further working through between the different stakeholders.

Bord na Móna have fully adopted the above commitments and have engaged fully with the community; full details are included in Section 2.7.4 below.

## 2.4.8.9 Commission for Regulation of Utilities: Grid Connection Policy

The Commission for Regulation of Utilities (CRU) (previously the Commission for Energy Regulation (CER)) launched a new grid connection policy in March 2018 for renewable and other generators, known as ECP-1, which will seek to allow “shovel ready” projects that already have a valid planning permission, connect to the electricity networks. The principal objective which guides this decision is to allow those projects which are ‘shovel ready’ to have an opportunity to connect to the network, along with laying the foundations for future, more regular batches for connection. In August 2018, the applicants for new connection capacity under ECP-1 were published. The CRU is expected to launch the second round of grid connection offers known as ECP-2 in 2020.

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

#### 2.4.8.10 Renewable Energy Support Scheme (RESS)

On the 24th July 2018, the Department of Communications, Climate Action and Environment announced Government approval for the new Renewable Energy Support Scheme (RESS). It is intended that the new RESS will incentivise the introduction of sufficient renewable electricity generation to deliver Ireland's contribution towards the EU wide 32% RES target, out to 2030 and will be the key policy measure that will drive the delivery of Ireland's 70% RES-E target, attracting significant international investment in the renewable sector in Ireland and driving down consumer costs. Projects will be eligible for RESS support from 1st of July 2021 until 31st of December 2037 (16.5 years max.).

This new scheme replaces the previous support mechanism for renewable electricity known as the Renewable Energy Feed-in Tariff (REFIT) and marks a shift from guaranteed fixed prices for renewable generators to a more market-oriented mechanism i.e. auction based scheme where the cost of support will be determined by competitive bidding between renewable energy generators. A Community-led category and community capacity building measures within the scheme will provide opportunities for communities to play their part in Ireland's renewable energy transition. As detailed in the Climate Action Plan (June 2019), the first RESS auction was expected to open for applications by the end of 2019. More recently it has been confirmed that the RESS auction will open at the end of Q1 2020.

#### 2.4.8.11 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.

### 2.5 Planning History

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

#### 2.5.1 Applications Within the Proposed Wind Farm Site

A review of Offaly County Council Planning Register shows that there were a number of planning applications lodged in relation to works carried out by Bord na Móna and Telecommunication operators. The following applications were identified within the site boundary:

- **Pl. Ref. 88/274** - Application made by Bord na Móna for new weighbridge and weighbridge office. The planning Authority granted conditional permission on the 23<sup>rd</sup> of November 1998.
- **Pl. Ref. 01/132** - Application made by Eircell for a telecommunications support structure, antennae and equipment shelter. The planning Authority granted conditional permission on the 23<sup>rd</sup> of May 2002.
- **Pl. Ref. 07/1235** - Application made by Vodafone Ireland Ltd. for retention of an existing 30m high telecommunications support structure, antennas, equipment container and associated equipment within a fenced compound and access track. The development forms part of Vodafone Ireland Limited's existing gsm and broadband telecommunications network. The planning Authority granted conditional permission on the 10th of June 2014.
- **Pl. Ref. 13/69** - Application made by Vodafone Ireland Ltd. for retention of an existing 30m high telecommunications support structure with antennas, equipment container and associated equipment within a fenced compound and access track. The development forms part of Vodafone Ireland Limited's existing gsm and 3g broadband

telecommunications network. The planning Authority granted conditional permission on the 4th of August 2013.

- **Pl. Ref. 14/251** - Application made by Bord na Móna PLC for the construction of a new workshop building, measuring approximately 190 m<sup>2</sup>. this building will be used to carry out minor maintenance works on peat haulage stock including locomotives and wagons. external works are to include a concrete paved yard area, with surface water run-off draining through an oil-interceptor. an on-site treatment system is to be constructed to cater for foul water run-off. External fencing and public lighting are proposed immediately outside the proposed building. Access to the site will be by the existing access to the briquette factory, off the N62 Cloghan-birr road. This application relates to a development which comprises or is for the purposes of an activity requiring an integrated pollution prevention and control licence (Boora Group EPA IPC Licence no. P0500-01). The planning Authority granted conditional permission on the 4th of August 2013.
- **Pl. Ref. 17/155** - Application made by Bord na Móna Powergen Ltd. for erection of a guyed wind monitoring mast, with instruments, up to 100m in height. the purpose of the proposed mast is to assess the suitability of the company's adjacent lands for wind farm development. The planning Authority granted conditional permission on the 4th of August 2013.

## 2.5.2 Applications in the Vicinity of the Proposed Wind Farm Site

The majority of planning applications in the immediate vicinity of the proposed wind farm site are related to the provision and/or alteration of one-off housing and agricultural developments, where relevant these have been considered in the design of the project and are considered within the relevant sections of this EIAR. The relevant housing and agricultural developments from the Planning Register in the vicinity of the proposed development site includes those listed Table 2.1 below.

Table 2.1 Housing and Agricultural Developments included on the Planning Register

Pl. Ref:	Description	Decision
Pl Ref. 82/615	Erection of saw shed/office facilities and septic tank.	Grant; 21.04.1983
Pl Ref.94/119	Bungalow and septic tank	Grant; 27.06.1994
Pl Ref. 95/358	Dwelling house and septic tank	Grant; 22.07.1996
Pl Ref. 97/394	Dwelling house and septic tank	Grant; 15.10.1997
Pl Ref. 97/704	Single storey dwelling and septic tank	Grant; 10.03.1998
Pl Ref. 98/325	Dwelling house and septic tank	Grant; 05.08.1998
Pl Ref. 98/591	Extension to dwelling house and separate garage and fuel store	Grant; 06.10.1998
Pl Ref. 99/255	Dwelling house and effluent treatment system	Grant; 08.10.1999
Pl Ref. 99/386	Bungalow and septic tank.	Grant; 13.07.1999
Pl Ref. 00/389	Dwelling house and septic tank	Grant; 27.09.2000
Pl Ref. 00/711	2 no. dwelling house and 2 No septic tank	Grant; 11.01.2001
Pl.Ref.00/965	Dwelling house, garage and septic tank	Grant; 17.11.2000
Pl Ref. 01/442-	Bungalow and garage	Refused; 16.08.2001
Pl Ref.01/990	Dwelling house and septic tank	Grant; 21.12.2001
Pl Ref. 01/1231	Dwelling house, garage and septic tank	Grant; 31.05.2002
Pl Ref. 01/1255	Dwelling house, septic tank/effluent treatment system	Grant; 24.06.2002
Pl Ref. 02/605	Dwelling house, garage/fuel store septic tank, percolation area and entrance	Grant; 19.09.2002
Pl Ref. 03/169	Dwelling house, domestic garage, effluent treatment system and entrance	Refused; 15.04.2003

Pl. Ref:	Description	Decision
Pl Ref. 03/712	Build addition and alteration to existing dwelling house	Grant; 09.10.2003
Pl Ref. 03/945	Dwelling house and construction of septic tank	Grant; 22.01.2004
Pl Ref.03/1295	Dormer dwelling and septic tank (dwelling to include solar panels in roof)	Grant; 22.04.2004
Pl Ref. 04/81	Dwelling house, detached garage, septic tank and wastewater treatment system	Grant; 26.05.2004
Pl Ref. 04/170	Two storey dwelling house, effluent treatment system, entrance and ancillary site works	Grant; 06.07.2004
Pl Ref. 04/775	Dwelling house, domestic garage, effluent treatment system and entrance	Grant; 25.11.2004
Pl Ref. 04/1066	Dwelling house, garage and effluent treatment unit	Grant; 23.11.2004
Pl Ref. 05/931	Dormer bungalow, septic tank, sewage treatment system and percolation area	Grant; 01.12.2005
Pl Ref. 06/186	Construction of dormer bungalow, effluent treatment system and domestic garage	Grant; 27.06.2006
Pl Ref. 06/319	Demolition of existing house and shed and construction of new dwelling house complete with effluent treatment system	Grant; 27.06.2011
Pl Ref. 06/991	Construction of a 42 bedroom (50 bed) single storey nursing home, effluent treatment system, entrance, car parking, landscaping and all ancillary services	Grant; 22.01.2007
Pl Ref. 06/1267	Construction of a dormer dwelling with domestic garage and effluent treatment system	Grant; 23.03.2007
Pl Ref. 06/1331	Construction of livestock cattleshed with slatted slurry tank and storage area and all associated site works	Grant; 09.01.2007
Pl Ref. 06/1686	Construction of extension to existing cubicle shed and associated concrete works	Grant; 21.03.2007
Pl Ref. 07/289	Construction of dormer dwelling with domestic garage and effluent treatment system	Grant; 23.05.2007
Pl Ref. 07/316	Construction of construction of a two-storey dwelling house with attached garage and associated site works with effluent treatment system and new separate entrance.	Grant; 27.08.2007
Pl Ref. 07/609	Construction of a plant room building housing electrical substation stores and all ancillary services on a site with permission for a 50-bed nursing home	Grant; 20.07.2007
Pl Ref. 07/645	Construction of bedded area extension to existing slatted shed and all associated concrete area	Grant; 19.07.2007
Pl Ref. 07/1192	Construction of a dwelling house, domestic garage and treatment system with percolation area	Refused; 17.09.2007
Pl Ref. 07/1226	Construction of a dwelling house, domestic garage and treatment system with percolation area	Refused; 19.09.2007
Pl Ref. 07/1450	Retention of existing garage and permission for conversion of existing attic to accommodate bedrooms and toilets, provide sunroom to southern aspect gable	Grant; 04.03.2008
Pl Ref. 07/1466	Construction of agricultural slatted shed for housing pigs. The Planning Authority granted conditional permission on the 4th of January 2008.	Grant; 04.01.2008
Pl Ref. 07/1547	Construction of a bungalow type dwelling, domestic garage, advanced effluent treatment system and all associated site works	Granted by Planning Authority; Refused

Pl. Ref:	Description	Decision
		by An Bord Pleanála 29.10.2008
Pl Ref. 07/1594	Construction of new dwelling house, domestic garage/fuel shed and install effluent treatment unit with percolation area	Grant; 02.04.2008
Pl Ref. 08/170	Construction of dwelling house, garage and effluent treatment unit.	Grant; 02.07.2008
Pl Ref. 08/429	Construction of a part 2 storey part single storey dwelling house with effluent treatment system and sundry associated works.	Grant; 11.08.2008
Pl Ref. 08/576	Installation of effluent treatment system and percolation area to existing dwelling house with all associated site works.	Grant; 04.09.2008
Pl Ref. 09/126	Extension and alterations to an existing dwelling and the retention of an existing domestic shed and permission for completion of an extension and alterations to an existing dwelling.	Grant; 22.12.2009
Pl Ref. 09/265	Dwelling house with first floor accommodation, envirocare sewage treatment system and percolation area to EPA recommendations, domestic garage and all ancillary site works.	Grant; 15.10.2009
Pl Ref. 14/48	Erection of a dwelling, entrance / driveway and wastewater treatment system, including associated site works.	Grant; 03.07.2014
Pl Ref. 17/65	Dwelling house, septic tank and percolation area, and adjacent domestic garage.	Grant; 16.05.2017

There are a number of commercial and utility developments in the wider area that have been granted planning permission which include the following applications made by Lumcloon Energy to the North of the development site:

Lumcloon Energy Applications:

- **19.PA0015:** Permission granted by An Bord Pleanála to Lumcloon Energy Ltd. for a gas fired electricity generating station capable of producing up to a maximum of 350MW approximately under the provisions of the Strategic Infrastructure Development (SID) process. Site is located 5.5 kilometres east of Cloghan. An Bord Pleanála granted permission on the 12<sup>th</sup> of March 2010.
- **Pl Ref. 17/194:** Planning application made by Lumcloon Energy Limited for the development of an energy storage facility designed to provide 100MW of system support services to the electricity grid The Planning Authority granted conditional permission for the proposed development on the 25<sup>th</sup> of July 2017. This permission was subsequently superseded by **Pl. Ref. 19/55** in an application by the same applicant for alterations to development of an energy storage facility designed to provide 100mw of system support services to the electricity grid at Lumcloon, Cloghan, Co. Offaly in lieu of that granted under planning permission 17/194. The Planning Authority granted conditional permission for the development on the 7<sup>th</sup> of August 2019.

There are a number of commercial and utility developments in the wider area that have been granted planning permission which include the following:

- **Pl Ref. 06/295:** Planning application made by Nordale Enterprises Ltd. for the construction of new single storey building (1,285sqm) in existing yard behind existing

building. The Planning Authority granted conditional permission for the development on the 17<sup>th</sup> of August 2006.

- **Pl Ref. 09/399:** Planning application made by McGill Environmental Systems (Ireland) Ltd. for the construction of a compost manufacturing facility, office building, biocycle treatment unit and all associated site works. The Planning Authority refused permission on the 21<sup>st</sup> of May 2010 and was subsequently refused again on appeal by An Bord Pleanála on the 9<sup>th</sup> of December 2010.
- **Pl Ref. 12/65:** Planning application made by Galetch Energy Developments Ltd for the erection of an anemometer mast. The Planning Authority granted permission for the development on the 22<sup>nd</sup> of June 2012.
- **Pl Ref. 18/230:** Planning application made by Galetch Energy Developments Cloghan Limited for the installation of approximately 12.5km of 38 kV electricity transmission line from the permitted (wind farm) substation (Offaly County Council Pl Ref. 14/188 and An Bord Pleanála Ref. PL 119.244053) in the townland of Stonestown, County Offaly to the existing electricity substation in the townland of Clondallow, County Offaly. The Planning Authority refused permission on the 27<sup>th</sup> of February 2019, and the application is currently on appeal with An Bord Pleanála under 304056-19.
- **Pl. Ref.19/555 -** Planning application made by Galetch Energy Developments Cloghan Limited for the installation of approximately 8 kilometres of underground electricity line with a capacity of up to 38kv from the permitted (wind farm) substation (Offaly county council planning register reference 14/188 and An Bord Pleanála reference Pl 19.244053 and Offaly county council planning register reference 19/22 -permission granted for technical amendments to substation) in the townland of Stonestown, to the permitted Derrycarney electricity substation in the townland of Lumcloon, County Offaly. This is a current planning application which is due to be decided on the 25<sup>th</sup> of January 2020

### 2.5.3 Other Wind Farm Sites

Within the wider area, there have been a number of planning applications for wind farm developments (comprising two or more turbines) lodged within a 20-kilometre radius of the EIAR study area. These wind farms applications are based on a review of the Offaly County Council and Tipperary County Council Planning Register and include those listed below. This record lists the main relevant renewable energy applications in the wider vicinity of the proposed development that could be considered to reasonably give rise to potential cumulative effects. It is not intended to be exhaustive and list every application associated with the sites.

### 2.5.4 County Offaly

- **PL. Ref. 02/734:** Planning application made by New Energy Technologies Ltd. for the erection of five wind turbine generators, a meteorological mast, associated access roads and control building. The Planning Authority granted conditional permission on the 30<sup>th</sup> of October 2002.
- **Pl. Ref. 07/1595:** Planning application made by Gaelectric Developments Ltd. for the construction of a windfarm of 3 no. turbines (hub height not exceeding 85m, blade diameter not exceeding 80m), and all associated works. The Planning Authority refused permission for the proposed development on the 30<sup>th</sup> of October 2008.
- **Pl Ref. 10/130:** Planning application made by Gaelectric Developments Ltd. for the construction of a wind farm consisting of 2 no. wind turbines (hub height not exceeding 85m, blade diameter not exceeding 82.4m), and all associated works. The Planning Authority granted conditional permission on the 2<sup>nd</sup> of July 2010.
- **Pl Ref. 12/293:** Planning application made by Galetch Energy Developments Ltd. for the erection of 10 no. wind turbines each with a hub height of up to 110m and a rotor diameter of up to 120m, with an overall maximum tip height of up to 170m and all associated site development works. The Planning Authority granted conditional

permission where subsequently An Bord Pleanála refused permission on the 23rd of December 2013.

- **Pl Ref. 14/188:** Planning application made by Galetch Energy Developments Cloghan Ltd. for permission for a period of 10 years for the erection of 9 no. wind turbines each with a hub height of up to 100m, a typical rotor diameter of 103m (overall maximum tip height of up to 150m) and all associated site development works. The Planning Authority granted conditional permission with An Bord Pleanála granting conditional permission on the 27<sup>th</sup> of November 2016.
- **Pl Ref. 15/44:** Planning application made by Meenwaun Wind Farm Ltd. for a wind farm comprising up to 5 no. turbines with a maximum tip height of up to 169m and associated works. The Planning Authority granted conditional permission on the 22nd of April 2015 with An Bord Pleanála granting conditional permission on the 21st of October 2015.
- **19/404** – Current Planning Application made by Galetch Energy Developments Cloghan Ltd. for amendments to the development permitted (above) (Pl Ref. 14/188) including an increase in overall turbine height from 150m to 169m, re-siting of turbines and realignment of access roads and electrical lines. This application is currently under the consideration of the Planning Authority (further information response submitted December 2019), at time of writing this application remains under the consideration of the Planning Authority.

### 2.5.5 County Tipperary

- **Pl Ref. 5123496:** Planning application made by T. and G Armitage for 3 no. wind turbines, service roadways and control house. The Planning Authority granted conditional permission on the 24<sup>th</sup> of June 2001.
- **Pl Ref. 5123495:** Planning application made by N. and R. Alexander for 5 no. wind turbines, service roadways and control house. The Planning Authority granted conditional permission on the 25<sup>th</sup> of May 2001. Figure 2.7 Other Wind Farms

## 2.6 Scoping and Consultation

### 2.6.1 Scoping

Scoping is the process of determining the content, depth and extent of topics to be covered in the environmental information to be submitted to a competent authority for projects that are subject to an Environmental Impact Assessment (EIA). This process is conducted by contacting the relevant authorities and Non-Governmental Organisations (NGOs) with interest in the specific aspects of the environment with the potential to be affected by the proposal. These organisations are invited to submit comments on the scope of the EIAR and the specific standards of information they require.

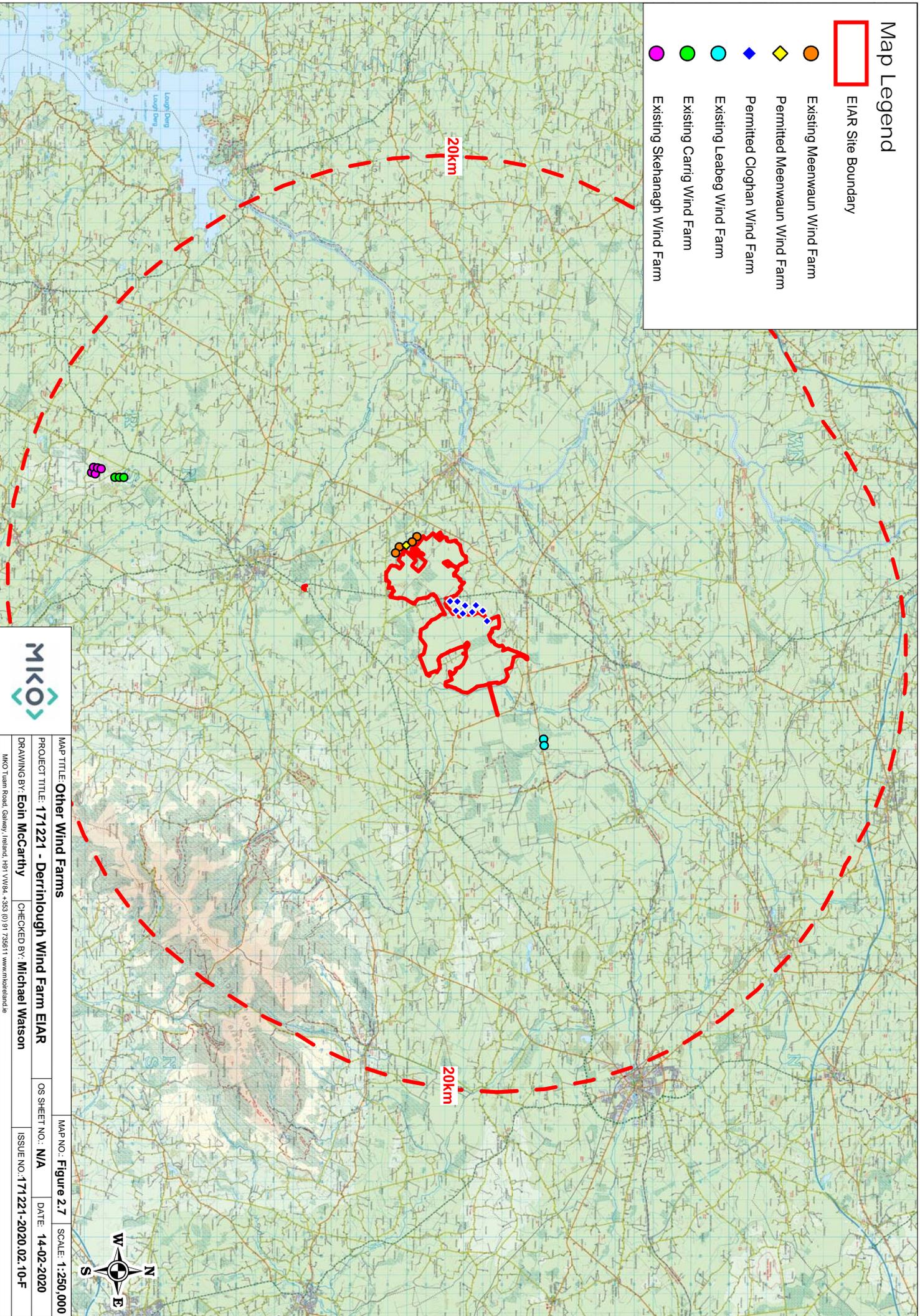
Comprehensive and timely scoping helps ensure that the EIAR refers to all relevant aspects of the proposed development and its potential effects on the environment and provides initial feedback in the early stages of the project, when alterations are still easily incorporated into the design. In this 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 proposed development, was prepared by MKO and circulated in June 2018. MKO requested the comments of the relevant personnel/bodies in their respective capacities as consultees with regards to the EIA process.

Once determined, the final proposed turbine layout was circulated to all consultees in November and December 2019. Mko, again, requested the comments of all consultees with regards to the assessment of the proposed turbine layout as part of the EIA process.

# Map Legend

-  EIAR Site Boundary
-  Existing Meenwaun Wind Farm
-  Permitted Meenwaun Wind Farm
-  Permitted Cloghan Wind Farm
-  Existing Leabeg Wind Farm
-  Existing Carrig Wind Farm
-  Existing Skehanagh Wind Farm



MAP TITLE: <b>Other Wind Farms</b>		MAP NO.: <b>Figure 2.7</b>	SCALE: <b>1:250,000</b>
PROJECT TITLE: <b>171221 - Derrinlough Wind Farm EIAR</b>		OS SHEET NO.: <b>N/A</b>	DATE: <b>14-02-2020</b>
DRAWING BY: <b>Eoin McCarthy</b>		CHECKED BY: <b>Michael Watson</b>	ISSUE NO.: <b>171221-2020.02.10-F</b>
MCO Tuam Road, Galway, Ireland, H91 VV94, +353 (0) 91 728611 <a href="http://www.mico.ie">www.mico.ie</a>			

## 2.6.2 Scoping Responses

Table 2.2 lists the consultees to which the scoping document and final turbine layout design was circulated. Copies of the scoping responses received as of 31<sup>st</sup> January 2020 are included in Appendix 2-1 of this EIAR. Table 2.3 presents a summary of the key points from the scoping responses and notes where they have been addressed in this EIAR (where applicable). The responses received were fully considered and issues raised where follow up through contact with the respondent where clarification was necessary and addressed throughout the EIAR.

Table 2.2 Scoping List of Consultees

No.	Consultee	Response Date
1	Airspeed	No response as of 31 <sup>st</sup> January 2020
2	An Taisce	No response as of 31 <sup>st</sup> January 2020
3	(BAI) Broadcasting Authority of Ireland	08.11.2019
4	Bat Conservation Ireland	No response as of 31 <sup>st</sup> January 2020
5	BirdWatch Ireland	8.11.2019
6	BT Communications Ireland	14.06.2018
7	Commission for Communications Regulation	No response as of 31 <sup>st</sup> January 2020
8	Commission for Regulation of Utilities Water and Energy	No response as of 31 <sup>st</sup> January 2020
9	Department of Agriculture, Food and the Marine	23.07.2018
10	Department of Communications, Climate Action and the Environment	No response as of 31 <sup>st</sup> January 2020
11	Department of Defence	17.12.019
12	Department of Transport, Tourism and Sport	No response as of 31 <sup>st</sup> January 2020
13	Department of Culture, Heritage and the Gaeltacht	19.07.2018
14	Eir	02.07.2018; 17.12.2019
15	Eirgrid	No response as of 31 <sup>st</sup> January 2020
16	EMR Integrated Solutions	13.03.2018
17	Environmental Protection Agency	No response as of 31 <sup>st</sup> January 2020
18	ESB Telecoms	No response as of 31 <sup>st</sup> January 2020
19	Fáilte Ireland	25.06.2018
20	Forest Service	No response as of 31 <sup>st</sup> January 2020

21	Geological Survey of Ireland	27.11.2019
22	Health Service Executive	25.06.2018; 09.01.2020
23	Imagine Group	08.03.2018; 11.09.2019
24	Inland Fisheries Ireland	No response as of 31 <sup>st</sup> January 2020
25	Irish Aviation Authority	25.06.2018
26	Irish Peatland Conservation Council	14.11.2019
27	Irish Red Grouse Association	No response as of 31 <sup>st</sup> January 2020
28	Irish Raptor Study Group	No response as of 31 <sup>st</sup> January 2020
29	Irish Sports Council	No response as of 31 <sup>st</sup> January 2020
30	Irish Water	No response as of 31 <sup>st</sup> January 2020
31	Irish Wildlife Trust	No response as of 31 <sup>st</sup> January 2020
32	Office of Public Works	No response as of 31 <sup>st</sup> January 2020
33	Offaly County Council – Planning Department	05.07.2018
34	Offaly County Council – Environment Department	05.07.2018
35	Offaly County Council – Roads Department	05.07.2018
36	Offaly County Council – Heritage Officer	05.07.2018
37	Ripplecom	No response as of 31 <sup>st</sup> January 2020
38	2rn (RTÉ Transmission Network Ltd)	12.03.2018; 19.12.2019
39	Sustainable Energy Authority of Ireland	No response as of 31 <sup>st</sup> January 2020
40	Tetra Ireland Communications Ltd.	13.11.2019
41	The Heritage Council	No response as of 31 <sup>st</sup> January 2020
42	Three Ireland	17.04.2018; 11.11.2019
43	Towercom	20.03.18
44	Transport Infrastructure Ireland	18.12. 2019
45	Viatel Ireland Ltd.	09.03.2018
46	Virgin Ireland Ltd.	11.11.2019
47	Netshare (Formerly Vodafone)	12.06.2018
48	Waterways Ireland	No response as of 31 <sup>st</sup> January 2020

Table 2.3 Review of Scoping Responses Received to date

No.	Consultee	Response	Action Required	Discussed within EIA (where applicable)
1	Broadcasting Authority of Ireland (BAI)	<p><i>“Not aware of any issues”</i></p> <p>Proposed Development <i>“is not close to existing or planned FM transmission sites.”</i></p>	N/A	Chapter 14: Material Assets
2	BirdWatch Ireland (BWI)	Scoping letter received by BWI and forwarded on to Policy Officer.	N/A	N/A
3	BT Communications Ireland	<i>“the planned development will have no impact on the BT Ireland microwave radio network”</i>	N/A	Chapter 14: Material Assets
4	Department of Agriculture, Food and the Marine	Felling Licence required if tree felling will be undertaken	No felling will be undertaken	N/A
5	Department of Defence	Obstruction lights should be incandescent one of a type visible to Night Vision Equipment. Obstruction lighting must emit light at the near Infra-Red range (specifically at or near 850nm wavelength). Light intensity to be that of or similar to visible spectrum.	Incorporated into development design	Chapter 14: Material Assets
6	Department of Culture, Heritage and the Gaeltacht	<p>Archaeology Assessment to be carried out by a suitably qualified archaeologist and by licence provided by DCHG</p> <p>All previous surveys of the bog should be examined</p>	Archaeology assessment undertaken as per DCHG recommendations	Chapter 13: Cultural Heritage and Archaeology

No.	Consultee	Response	Action Required	Discussed within EIAR (where applicable)
		<p>A new survey of the bog should be undertaken including cleaning the drains and walking the bog</p> <p>Buffer zones to be implemented where necessary</p>	Buffer zones implemented where necessary	
7	Eir (Formerly Meteor Ireland)	Four Microwave links need to be considered. Minimum separation distance to be greater than 30m horizontal separation.	Buffer zones implemented	Chapter 14: Material Assets
8	EMR Integrated Solutions	No links within 5km of the development site and are unaffected	N/A	Chapter 14: Material Assets
9	ESB Telecoms	1 Microwave link and multiple point to multi point links which could be impacted- buffer zones provided	Buffer zones implemented	Chapter 14: Material Assets
10	Fáilte Ireland	Consider Fáilte Ireland's Guidelines for the treatment of tourism in the EIAR.	Details included in relevant chapters	Chapter 5: Population and Human Health
11	Geological Survey Ireland	<p>Derrinlough Mushroom Rock County Geological Site located within the development boundary- typically afforded county protection</p> <p>Consult GSI Map Viewer for locating Natural Mineral Resources on site and Aquifer and Recharge points</p>	<p>Derrinlough Mushroom Rock County Geological Site avoided in design</p> <p>GSI Map Viewer consulted</p> <p>Geohazards considered</p>	<p>Chapter 8: Land, Soils and Geology</p> <p>Chapter 9: Hydrology and Hydrogeology</p>

No.	Consultee	Response	Action Required	Discussed within EIAR (where applicable)
		Geohazards to be taken into consideration		
12	Health Service Executive	Details of Public Consultation	Details included in relevant chapter	Chapter 2: Background of the Proposed Development
		Surface and ground water details	Details included in relevant chapter	Chapter 9: Hydrology and Hydrogeology
		Noise and Shadow Flicker	Assessed in relevant chapters	Chapter 5: Population and Human Health Chapter 11: Noise and Vibration Chapter 14: Material Assets
		Dust Minimisation Plan	Dust Minimisation Measures will be undertaken	Chapter 10 Air and Climate Appendix 4.3 Construction Environment Management Plan (CEMP)
		Cumulative Impacts	Assessed in relevant chapters	Chapters 5–14
		Potable water supply and sanitary accommodation details	Details included in relevant chapters	Chapter 4: Description of the Proposed Development Appendix 4.3 CEMP
		Proposals for Decommissioning	Details included in relevant report	Appendix 4.3 CEMP

No.	Consultee	Response	Action Required	Discussed within EIAR (where applicable)
13	Imagine Group	1 No. existing link close to the Development site This link is located approximately 200 metres from the nearest proposed turbine location. This was not highlighted as an issue by Imagine Group.		Chapter 14: Material Assets
14	Irish Aviation Authority	Agree an aeronautical obstacle warning light scheme  Provide as constructed coordinates in WGS84 format and ground and tip height elevations for each turbine  Notify the Authority of intention to commence crane operations within a minimum of 30 days prior of their erection	Incorporated into design	Chapter 14: Material Assets
15	Irish Peatland Conservation Council	Requested a Bord na Móna Rehabilitation Plan	Rehabilitation Plan undertaken	Appendix 6.8: Clongawny and Drinagh Rehabilitation Plans
16	2rn (RTÉ Transmission Network Ltd)	No impact upon fixed microwave links  Moderate risk to DTT viewers south and east of the site. Protocol to be signed between 2rn and Developer	Protocol to be signed between 2rn and Developer prior to commissioning of the proposed development.	Chapter 14: Material Assets
17	Tetra Ireland Communications Ltd.	Anticipate no impact from the development at the proposed turbine locations	N/A	Chapter 14: Material Assets

No.	Consultee	Response	Action Required	Discussed within EIAR (where applicable)
18	Three Ireland	No objection to development, nearest link to the site will not be retained.	N/A	Chapter 14: Material Assets
19	Towercom	The proposed development does not appear have a significant impact on Towercom's sites.	N/A	Chapter 14: Material Assets
20	Transport Infrastructure Ireland	<p>Avoid creating new access points onto a national road as its contra to policy</p> <p>Follow Spatial Planning and National Roads Guidelines in relation to road works, maintenance, cable laying, haul routes</p> <p>Consider Noise Impacts and how it will affect future action plans by the relevant authority. Noise barriers may need to be considered.</p> <p>Ensure consultations with LPAs are undertaken.</p> <p>Consider visual impact of the construction and operational period of the development on N62 and its users</p>	<p>National and County Development Plans and Policies considered</p> <p>Consultations with LPAs undertaken</p> <p>Visual impact on N62 considered</p>	<p>Chapter 14: Material Assets</p> <p>Chapter 11: Noise and Vibration</p> <p>Chapter 12: Landscape and Visual</p>
21	Viatel Ireland Ltd.	Ensure blades are not in direct beam/centre line. Links will not be impacted from the proposed development	Blades are not in direct beam/centre line.	Chapter 14: Material Assets

No.	Consultee	Response	Action Required	Discussed within EIAR (where applicable)
22	Virgin Ireland Ltd.	No links within the area. To be updated if the site layout changes	N/A	Chapter 14: Material Assets
23	Netshare (Formerly Vodafone)	30m perpendicular buffer between turbine rotor edge and maximum diameter of the first Fresnel zone of the point to point microwave provided.	Buffer zone implemented	Chapter 14: Material Assets

## 2.6.3 Pre-Planning Meetings

### 2.6.3.1 Offaly County Council

Two pre-planning meetings were held with the Planning Department of Offaly County Council in relation to the proposed development prior to the submission of the planning application. The meetings were held on 29<sup>th</sup> of August 2018 and the 6<sup>th</sup> of March 2019. These meetings were attended by representatives of the Planning Department, MKO and Bord na Móna.

Items discussed at the meetings included an overview of the proposal, the site selection process, County Development Plan provisions, planning application approach (Strategic Infrastructure Development process), EIAR scoping, Public consultation, Wind farm design process, and Environmental Assessments and the progress of the project design.

### 2.6.3.2 SID Meeting

Pre-application consultations also took place with An Bord Pleanála as part of the Strategic Infrastructure Development process. This matter was considered by the Board under their reference ABP-303157-18. The consultation process commenced on the 3<sup>rd</sup> of December 2018 when the applicants requested to enter into pre-application consultations under the provisions of Section 37B of the Planning and Development Act, 2000 (as amended).

As part of this process a pre-application consultation meeting was held on the 12<sup>th</sup> of March 2019. Attendee's at the meeting included the applicant representatives, J. Green and M. Watson of MKO, A.M. O'Connor, P. Calleary, J. Hayes, and F. Kilmurray on behalf of An Bord Pleanála and S. Creedon and C. Carter on behalf of Bord na Móna. At this meeting the Board set out their relevant procedures, and the design team made a presentation setting out the location, nature and character of the proposed development. The discussions included consideration of the Development Plan policy, noting that some of the site lies outside of the area shown on the Wind Energy Strategy Map, the boards representatives stressed that robust justification should be provided in relation to areas which fall outside of the designated areas. This has been provided above. Other issues discussed included residential amenity, Visual Impact/Landscape, Access, Appropriate Assessment, EIAR, engagement with the National Parks and Wildlife Service, and the existing and upcoming Wind Energy Guidelines. In relation to the Draft Wind Energy Guidelines which were yet to be published at the time of the meeting the Board acknowledged that any new guidelines would be relevant when they were enacted (not issued in draft form). It was acknowledged by the Board that should any issue of potential conflict arise due to guidelines being finalised/enacted while the current proposal was under consideration that an opportunity would be provided to the applicant to provide clarification.

Following the meeting the Board issued a record of the proceedings and the applicants moved to close out the pre-application process. The Board by letter dated 25<sup>th</sup> November 2019 confirmed that the proposed development falls within the scope of paragraphs 37A(2)(a) and (b) of the Act. Accordingly, the Board have confirmed that the proposed development would be strategic infrastructure within the meaning of Section 37A of the Planning and Development Act, 2000 (as amended), and that any application for permission must therefore be made directly to the Board. A copy of this correspondence is included as Appendix 2.2.

## 2.6.4 Community Consultation

### 2.6.4.1 Public Consultation

#### Overview

Engagement with the public, adjacent residents and local public representatives took place in many forms during the project design and preparation of the EIAR, as follows:

- Two ‘Community Information Sessions’ were held in April 2018 and November 2018, respectively.
- Briefing Sessions for public representatives were held on two occasions, namely on the evening before each of the two ‘Community Information Sessions’.
- A dedicated Community Liaison Officer (CLO) was appointed for the project in April 2018.
- Eight ‘one to one’ house visits were requested and facilitated by the project team during the period from April 2018 to November 2019.
- Approximately 40 queries received via email, post, phone and the CLO were responded to by the project team.

Summary information on all of the above is provided in the following sections. A detailed ‘Community Report’ is attached in Appendix 2.3.

#### Community Information Sessions

##### Community Information Session 1

The first Community Information Sessions were held between 24<sup>th</sup> and 26<sup>th</sup> April 2018, from 3 – 9 pm on each day. The sessions were held in the following venues:

- 24<sup>th</sup> April 2018: Saint Mary’s Parish Hall, Cloghan;
- 25<sup>th</sup> April 2018: Drumcullen GAA Club, Rath; and
- 26<sup>th</sup> April 2018: Banagher Community Centre.

In advance of the sessions, approx. 600 households within 2 km of the proposed development site were visited by the Community Liaison Officer (CLO) to provide them with information. The information distributed to each household included a map of the proposed development site location and details of the Community Information Sessions.

Details of the Community Information Sessions were broadcast on local radio - Midlands 103 - three times daily from the 19<sup>th</sup>-24<sup>th</sup> April 2018 to inform the local community of the dates, times and venues of the sessions. In addition, adverts were placed in three local papers, namely the Offaly Independent, Offaly Express and Midland Tribune for two weeks prior to the sessions and an advertisement was also circulated to the Parish Priests for Banagher and Cloghan for inclusion in the weekly mass newsletter.

Over the three days approx. 100 people attended the sessions. A series of information panels were presented at the sessions which contained details on the following:

- Proposed Location of the Development;
- The Necessity of Wind Energy Development in the Context of National Policy;
- The Suitability of Bord na Móna Peatlands for Wind Energy;
- Criteria for Site Selection;
- Preferred Draft Approach to Wind Energy Development in Ireland;
- Strategic Infrastructure Development Planning Process;
- Environmental Impact Assessment Report;

- > Visual Impact Assessment;
- > Project Benefits;
- > Complementary Uses of Cutaway Peatlands;
- > Potential Wind Farm Recreational Facilities;
- > Indicative Project Timeline; and
- > Community Engagement.

In addition, attendees were provided with an A3 map of the location of the proposed development and an information booklet.

The main queries raised and recorded by the project team at the sessions, were:

1. Proximity to houses;
2. Community Gain Scheme;
3. Number of Turbines;
4. Near Neighbour Scheme;
5. Noise;
6. Height of turbines;
7. Visual Impact; and
8. Wind Farm Amenities.

Following the first round of Community Information Sessions, the CLO revisited all of the approx. 600 homes within the 2 km area and provided them with a copy of the A3 map and Information Booklet that was available at the sessions.

### **Community Information Session 2**

The second Community Information Sessions were held between, 27<sup>th</sup> and 29<sup>th</sup> November 2018, from 3 – 9 pm each day. The sessions were held in the same three venues as the first sessions as follows:

- > 27<sup>th</sup> November 2018: Saint Mary’s Parish Hall, Cloghan;
- > 28<sup>th</sup> November 2018: Drumcullen GAA Club, Rath; and
- > 29<sup>th</sup> November 2018: Banagher Community Centre.

In advance of the sessions, the CLO circulated letters to all homes within 2 km of the proposed development site to inform them of the dates, times and venues of the Community Information Sessions.

Details of the Community Information Sessions were broadcast on local radio - Midlands 103 - three times daily on the 23<sup>rd</sup>, 24<sup>th</sup>, 25<sup>th</sup> and 26<sup>th</sup> of November 2018 to inform the local community of the dates, times and venues of the sessions. In addition, adverts were placed in two local papers, namely the Offaly Independent and Midland Tribune for one week prior to the sessions and an advertisement was also circulated to the Parish Priests for Banagher and Cloghan for inclusion in the weekly mass newsletter.

Over the three days approx. 100 people attended the sessions. A series of information panels were presented at the sessions which contained details on the following:

- > Proposed Location of the Development;
- > The Necessity of Wind Energy Development in the context of National Policy;
- > Preferred Draft Approach to Wind Energy Development in Ireland;
- > Site Layout Design;
- > Proposed Development;
- > Proposed Turbine locations;
- > Setback Distance from Properties;
- > Strategic Infrastructure Development Planning Process;
- > Environmental Impact Assessment Report;

- Photomontages of the Proposed Development;
- Local Benefits of the Project; and
- Potential Wind Farm Recreational Facilities.

In addition, attendees were provided with an Information Brochure and an A2, double-sided map of the proposed development depicting the locations of the proposed turbines and distance bands to sensitive receptors out to 2 km to enable members of the community identify the proximity of the nearest turbine to their residential property.

The main queries raised and recorded by the project team at the sessions, were:

1. Near Neighbour Scheme;
2. Proximity of turbines to Houses;
3. Number of turbines;
4. Height of Turbines;
5. Wind Farm amenities;
6. Noise;
7. Visual Impact;
8. Community Gain Scheme; and
9. Roads/Local infrastructure.

Following the second round of Community Information Sessions, the CLO circulated a copy of the information brochure and map, that was available at the sessions, to all homes within 2 km of a proposed turbine.

#### ***Information Sessions for Public Representatives***

In advance of both ‘Community Information Sessions’ Bord na Móna Powergen Ltd. held briefing sessions for Offaly County Councillors for the Municipal District of Birr.

Councillors were invited by way of written communication to the briefing sessions which were held on 23<sup>rd</sup> April and 26<sup>th</sup> November 2018, respectively in the County Arms Hotel in Birr.

The purpose of the first briefing session was to inform them about the proposed development. The second briefing session presented more information on the proposed development, namely the turbine layout design. Further, in November 2019, by way of written communication, Councillors for the Municipal District of Birr were issued a copy of the revised layout for the proposed development.

In addition, all TDs representing the Dáil Éireann Constituency of Offaly were issued a briefing note in April 2018, November 2018 and November 2019 on the proposed development.

#### **Community Liaison Officer**

A dedicated Community Liaison Officer (CLO) was appointed for the project in April 2018. The CLO was a direct contact between the project team and the local community/interested parties, providing information on the project as required and facilitating one-on one house visits as required.

In addition, as part of their duties the CLO carried out door to door visits to homes (as outlined above) providing information as follows:

- A letter of invitation to the first Community Information Session - April 2018.
- Location Map and Information Brochure (as presented at the Community Information Session) – May 2018.
- A letter of invitation to the second Community Information Session – November 2018.
- Location Map and Information Brochure (as presented at the Community Information Session) – January 2019.
- Revised Turbine Layout and Infrastructure Layout – November 2019.

## Influence of Public Consultation on the Proposed Development

### Number of turbines/Setback distance

Following the second series of Community Information Sessions in November 2018, the draft layout of the proposed development was revised from 28 to 24 turbines. This decrease in the number of turbines arose from a combination of factors, including feedback from the project team on site investigations and baseline assessments in addition to feedback received at the Community Information Sessions.

At the second Community Information Session, the project team received feedback that a number of sensitive receptors did not appear to be included on the sensitive receptor database. This was investigated by the project team after the consultation event and it transpired that during the initial design phase these properties had been identified as uninhabited dwellings given their location and relative inaccessibility from the local road. Following a site visit by the Community Liaison Officer/Stakeholder Manager, accompanied by the property owners it was determined that the buildings, should be included on the sensitive receptor database. Following this decision, a full review of all buildings within 2 km of the proposed development was conducted to ensure that all sensitive receptors were included on the database for the final turbine layout design.

As discussed in Chapter 3 (Section 3.3.5) following the lodgement of a planning application for proposed amendments to Cloghan Wind Farm in August 2019 the layout was further revised to a 21-turbine layout as the proposed amendments (which comprised an increase in turbine tip height and the micro-siting of 6 No. turbines) impacted on turbine location in an upwind and downwind direction.

### Amenity Pathways and Carparks

During both the first and second Community Information Sessions members of the local community expressed an interest in having amenity access to the proposed development site once the wind farm was operational. Consequently, approximately 20km of the internal road network will be opened up to the public once the wind farm becomes operational.

A number of local residents and local community groups expressed a desire for a connection between any proposed amenity pathways provided as part of the proposed development and Lough Boora Parklands. On this basis, the proposed development will include a link eastwards from Drinagh to the eastern extent of Derrybrat bog (where it meets the R437). This will facilitate potential future connectivity to Lough Boora Parklands.

Further, three additional amenity links will be provided, two to access points from the adjacent road network namely the R438 in West Clongawny and the L7005 in Drinagh and a link to provide potential future connectivity to the proposed Whigsborough Amenity Walk in south-west Drinagh.

2.7

## Cumulative Impact Assessment

The EIA Directive and associated guidance documents state that as well as considering any 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. 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.

## 2.7.1 Methodology for the Cumulative Assessment of Projects

To gather a comprehensive view of cumulative impacts on the above environmental considerations and to inform the EIA process being undertaken by the consenting authority, each relevant chapter within the EIAR addresses the potential for cumulative effects to arise.

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

The cumulative impact assessment of projects has three principle aims:

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

Assessment material for this cumulative impact assessment was compiled on the relevant developments within the vicinity of the proposed development. The material was gathered through a search of relevant online Planning Registers, reviews of relevant EIAR documents, planning application details and planning drawings, and served to identify past and future projects, their activities and their environmental impacts.

## 2.7.2 Projects Considered in Cumulative Assessment

The projects considered in relation to the potential for cumulative impacts arising from construction, operational and decommissioning phases of the proposed development and for which all relevant data was reviewed include those listed below.

### Peat Extraction/Peat Briquette Manufacturing

Peat harvesting and Peat Briquette manufacturing is projected to continue in the wider area however peat harvesting has ceased currently within the study area.

### Forestry

The proposed development site is partially used for commercial forestry. This land-use will continue in conjunction with the proposed wind farm. The potential for cumulative effects during the construction, operational and decommissioning phases of the proposed wind farm have therefore been assessed.

### Other Wind Turbines

There is a number of wind farms located within a 20-kilometre radius of the proposed development site, as identified previously in this Chapter. Any cumulative affects arising are considered in the relevant chapters of this EIAR.

### Other Developments/Landuses

The review of the Offaly County Council planning register documents relevant general development planning applications in the vicinity of the proposed site of the wind farm and all its associated works, most of which relate to the provision and/or alteration of one-off rural housing and agriculture-related structures, as described previously above. These applications (which include those listed previously above in Section 2.6) have also been taken account in describing the baseline environment and in the relevant assessments.

Furthermore, the cumulative impact assessments carried out in each of the subsequent chapters of this EIAR consider all potential significant cumulative effects arising from all land uses in the vicinity of the proposed development. These include ongoing agricultural practices, and drainage/maintenance works/programmes. Overall the proposed development has been designed to mitigate impacts on the environment and particularly water, and a suite of mitigation measures is set out within the EIAR. The mitigation measures set out in this EIAR have been developed to ensure that significant cumulative affects do not arise during construction, operational or decommissioning phases of the proposed development. Additional detail in relation to the potential significant cumulative effects arising and, where appropriate, the specific suite of relevant mitigation measures proposed are set out within each of the relevant chapters of this EIAR.