4.0 POLICY, PLANNING & DEVELOPMENT CONTEXT

4.1 INTRODUCTION

This chapter considers the proposed project works (hereafter referred to as the proposed project) in terms of legislative context and in relation to Strategic, National, Regional And Local Planning policies and objectives, in order to ascertain whether it is consistent with the relevant legislation and with the proper planning and sustainable development of the area.

The nature and location of the proposed project is described fully in Chapter 2, but will include up to 21 wind turbines and will be built within a wind farm site that extends to approximately 1,434 hectares (ha) of which approximately 1200 ha are commercial forest, owned by Coillte. The remaining lands are third party property, is comprised of a mix of agricultural grasslands, arable crops and commercial forest. Castlebanny Wind Farm is located in south-east Kilkenny, between the settlements of Mullinavat, Inistioge and Ballyhale, which are located approximately 4.1km southwest, 5.7km northeast and 1.9km northwest of the site of the proposed wind farm, respectively. Therefore, the wind farm site and the associated areas lies within the functional areas of Kilkenny County Council and thus informed by the provisions of the Kilkenny County Development Plan.

The relevant Global, European, National and Regional climate, energy and planning Policies as set out in section 4.4 emphasise the need to generate renewable energy and the importance of moving towards decarbonising the economy. The proposed wind farm will contribute to the expansion of the renewable wind resource in Ireland and contribute towards Governmental, National and Regional goals and targets by generating more power from renewable resources. The 2009 EU Renewable Energy Directive (2009/28/ EC) set Ireland a legally binding target to meet 16% of our energy requirements from renewable sources by 2020. Ireland is committed to meeting 40% of electricity demand from renewable sources, with 10% for transport and 12% for heat. It is now established that Ireland will not meet the 2020 renewable energy targets. A report issued by the Sustainable Energy Authority of Ireland (SEAI) entitled 'Renewable Energy in Ireland – 2020 Update' shows that Ireland is still heavily dependent on fossil fuels. [1] Out of the 27 EU member states, plus the UK, Ireland had made the second lowest progress towards hitting the targets, with only the Netherlands performing worse. Ireland will be subject to tariffs through the EU Emissions Trading System (ETS) until these targets are realised.

The Irish Government published the Climate Action Plan in June 2019 which sets ambitious actions to ensure our 2030 targets can be achieved. This is in the context of substantial and continuing failure by Ireland in meeting climate targets to date. According to a report by Climate Action Network Europe (CAN), Ireland is *"Way off track with its greenhouse gas emission reductions in sectors such as transport, buildings, waste and agriculture (non-ETS) both for 2020 and 2030"*[2].

The Climate Action Plan recognises that Ireland must make a significant increase in the levels of renewable energy in the country. The Climate Action Plan states that "*We should be radically reducing our reliance on carbon; Ireland's greenhouse gas emissions have been rising rapidly. We are currently 85% dependent on fossil fuels. We have a short window of opportunity to*

[1] https://www.seai.ie/publications/2020-Renewable-Energy-in-Ireland-Report.pdf

[2] CAN, Time to Pick up the Pace – Insights into the draft National Energy & Climate Plans (2019)

reverse this trend and secure a better, healthier, more resilient future for the country…This plan identifies how Ireland will achieve its 2030 targets for carbon emissions and puts us on a trajectory to achieve net zero carbon emissions by 2050."

The analysis in this chapter will include a review of relevant European, National, and Local planning policy documentation, planning legislation, strategies and plans and examines the local planning context of the project. It will also review the Regional Spatial and Economic Strategy for the Region (RSES), County Development Plans County Wind Energy Strategies the current and draft revised Wind Energy Guidelines, and any other appropriate renewable/wind energy development policies.

As mentioned previously, the proposed development (as described in Chapter 2 (Description of the Proposed Development)) is located within County Kilkenny and thus informed by the provisions of the current Kilkenny County Development Plan 2014-2020. Therefore, this chapter will include a full review of the relevant wind energy development policies included in the current Kilkenny County Development Plan and any emerging Development Plans for Kilkenny. The site is currently identified in the Kilkenny County Development Plan 2014-2020– Wind Energy Strategy as 'Open for Consideration' for the development of wind energy. In addition, a full review of all renewable energy applications (wind and solar) local to the site has been carried out. The Draft Kilkenny Wind Energy Development Strategy 2021 takes into account the provisions of the 2019 Draft Wind Energy Guidelines, and weighs the wind speed and general potential for wind energy generation against the sensitivity of the local environment. Based on this analysis, proposed site's designation has been almost entirely defined as "Acceptable in Principle".

The surrounding local area predominantly consists of one-off housing and agricultural buildings. Energy Infrastructure does exist in the local area e.g. there is Ballymartin Wind Farm to the south and Rahora Wind Farm to the south east of the proposed site. The Great Island to Kilkenny 110kV line is located a short distance from the site. In addition, there are 3 no. Solar Farm developments approved located north west of the site these include:

- Ballyhale Solar Farm located 2km from the site, granted 2016;
- Kilkenny West Solar Farm located 2km from the site granted 2018; and
- Derrynahinch West Solar Farm located 3km from the site and granted in 2019.

4.2 PLANNING LEGISLATION

The 7th Schedule of the Planning and Development Act 2000 (as amended) sets out classes of development which, following consultation with An Bord Pleanála, may be considered to constitute Strategic Infrastructure Development (SID) under Section 37A of that Act. Class 1 of the 7th Schedule includes the following:

> *"An installation for the harnessing of wind power for energy production (a wind farm) with more than 25 turbines or having a total output greater than 50 megawatts".*

In view of the fact that the development proposed fits into this category , consultations were held with the Board under Section 37B of the Planning and Development Act (as amended). The Board by letter dated 16th December 2020, confirmed that the proposed development falls within the scope of paragraphs 37A(2)(a), (b) and (c) of the Act. Accordingly, the Board have confirmed that the propsoed 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 in included in Appendix 1-1. The planning application for the proposed development, which this EIAR accompanies, is made to An Bord Pleanála under Section 37E of that Act.

4.3 PLANNING HISTORY

A full review of the Kilkenny planning register and also An Bord Pleanála (ABP) planning register was conducted to establish all existing and approved projects that are to be considered cumulatively with the proposed project (excluding replanting lands that are assessed separately in Appendix X) and including any renewable energy developments i.e. wind and solar farm developments. The full list of these existing and approved projects are included in Appendix 4-1. As previously mentioned, there are two commissioned wind farms to the south and south east of the site namely; Ballymartin Wind Farm and Rahora Wind Farm , respectively.

In general, the majority of residential properties identified in the area of the proposed wind farm are not located in close proximity to the proposed turbines and associated infrastructure . There are no properties located or proposed within 750m of the proposed turbine locations. As per Appendix 4-1 a 2km radius was used to identify all properties proximal to the proposed site. The distances and potential impacts of the proposed development on residential properties are discussed further in individual chapters in this EIAR and in Chapter 5 Population and Human Health. The 2 no. commissioned wind farm developments in the area are discussed in more detail below.

Finally, a 'zone of influence' was identified for other developments for the purpose of the cumulative assessment. This was set at a 10km radius of the proposed development site within which 'other development' is either in situ, has planning permission, or is planned in the future. These other developments included searches for any Electricity Infrastructure, Quarries, Waste Water Treatment Plants, Piggeries, Power plants, Biomass Developments and any other large developments within a 10km radius of the proposed development site. Again, these are all included in Appendix 4-1.

4.3.1 Planning History of the Proposed Development Site

Planning history searches have been conducted on the wind farm site boundary over a 10-year period up to October 2020. There are no prescriptive techniques used in determining the period but as planning permission normally lasts for 5 years, it was felt a 10-year planning history period was appropriate in this instance.

PL. Ref. 17/529 - Retention of 'an existing 26.4m high telecommunications structure carrying antennas, communications dishes together with associated ground-mounted equipment with a 2.4 metre palisade fenced compound as previously granted under Reg Ref P12/27'. The planning application was granted 02/10/2017 subject to 4 no. conditions.

PL Ref. 17/481 – Retention of 'an existing 26.4m high telecommunications structure carrying antennas, communications dishes together with associated ground-mounted equipment with a 2.4 metre palisade fenced compound as previously granted under file Ref 12/27'. The application was invalidated due to the incorrect development address on both the site notice and newspaper notice.

PL. Ref. 06/1382 – Permission for the 'continuance of use of a 25-metre-high monopole support structure carrying radio antennas for mobile telephony, palisade perimeter

fencing, and equipment container as previously granted under Reg Ref 00/593 which forms part of Meteors cellular digital communications network'. The application was granted 04/10/2006 subject to 5 no. conditions.

PL. Ref. 00/593 - Application 'to erect a 25-metre high monopole antennae support structure carrying GSM telecommunications equipment, container and palisade fencing to form part of its wireless communications network'. The application was granted 17/07/2000 subject to 7 no. conditions.

PL. Ref. 08/320 – Application 'to construct a dwelling house, sewerage system and percolation area, including all necessary site works'. The application was granted 01/05/2008 subject to 7 no. conditions. An extension of duration application was submitted in 2012 ref 12/509 and was refused.

PL. Ref. 07/99 – Application 'to construct a cattle shed over slatted tank, concrete apron and associated site works'. The application was granted 09/03/2007 subject to 5 no. conditions.

PL. Ref. 07/327 – Application 'to construct a cattle shed over slatted tank and associated site works'. The application was granted 16/04/2007 subject to 5 no. conditions.

PL. Ref. 05/1798 – Application 'to construct a dwelling house, sewerage system and percolation area, including all necessary siteworks'. The application was granted 03/01/2006 subject to 13 no. conditions.

PL. Ref. 95/66 - Planning permission 'to erect a triangular steel lattice transmission mast 37.5m'. Application withdrawn 24/01/1996.

4.3.2 Planning History of neighbouring wind farm developments.

Ballymartin Wind Farm -PL.Ref. 03/1585 & PL.10.208178 - Planning permission was refused by Kilkenny County Council and subsequently overturned by An Bord Pleanála for 3 wind turbines, service roadways, electrical transformer compound, control housing and 50m anemometer at Ballymartin, Smithstown. The site is located in an elevated area approximately 5km to the northeast of Mullinavat, and 400m to the south of Regional Road R704 which runs from Mullinavat to New Ross and approximately 575m from the Proposed Development site entrance. The site is stated as being 46.5 hectares and is generally flat. The Planning Authority Refused Permission for the development for the following reasons:

1. The proposed development is premature pending the adoption of a Wind Energy Strategy for County Kilkenny which is a specific objective of the County Kilkenny Development Plan 2002 (Paragraph 6.6.2 page 50, Volume 1) Accordingly the proposals are not in accordance with the Proper planning and sustainable development of the area.
2. The proposed development would set an undesirable precedent for other windfarm developments in advance of a Wind Energy Strategy for County Kilkenny being adopted which would be contrary to the proper planning and sustainable development of the area.

The Inspector's report dated 22/11/2004 stated that in the absence of a Wind Energy Strategy, the County Development Plan refers to proposals being assessed on their merits having regard to relevant Government Guidelines. The proposed development was not within a designated Special Area of Conservation, National Heritage Area of Area of High Amenity as designated in the County Development Plan and considering its location, and scale would not have a

detrimental visual impact on the area. The inspector further stated there was precedent permission in the immediate area, most notably (PL. Pl.10. 206373 (Planning Authority reg. 03/1117) where Permission was granted by the Board for 5 turbines close to the current site at Rahora, Ballalog, Guillkagh More. The Technical reports of the Planning Authority with respect to the Roads, and Environment Section had no objection to the proposed development. The need to fulfil Ireland' national and international commitments to renewable energy was recognised. The inspector considered that the proposed development was consistent with national and local policy with regard to encouraging renewable energy and recommended, therefore, permission for the proposed 3-turbine windfarm. The Board decided to grant permission in accordance with the Inspector's recommendation, subject to 14 no. conditions.

Pl. Ref.10/576 - Planning application lodged by Bord Gáis for the development of four electricity generating wind turbines with a hub height of 79 metres at Smithstown, Tullogher. The application was granted 17/11/2010.

PL Ref. 07/2140: Permission was granted on 05/08/2008 for an alteration to a previous planning permission (KCC Ref. 03/1585) which entailed an increase in hub height of 3 approved wind turbines from 60m to 79m and on-site relocation of electrical transformer compound and control housing.

PL Ref. 07/2141: Planning permission was granted on 05/09/2008 for 3 wind turbines with ancillary access tracks, transformer compound, electrical control building and anemometer. An Environmental Impact Statement (EIS) was lodged with the planning application. The above planning application 07/2140 is situated adjacent to this and was submitted in parallel to this application. The local authority granted permission for the following reasons:

a) The national policy with regard to the development of alternative and indigenous energy sources and the minimisation of emissions of greenhouse gases,
b) The guidelines issued by the Department of the Environment and Local Government on Wind Energy,
c) The provision of the Kilkenny Wind Energy Development Strategy,
d) The relevant policies of Kilkenny County Development Plan 2008,
e) The nature of the landscape in the area,
f) The existing permission on the adjacent southern site,
g) The responses received from referrals.

PL. Ref. 13/10 Planning permission was granted 07/03/2013 to construct an extension to existing 20kV electrical substation building including installation of a septic tank with associated percolation area and the provision of a borehole well water supply.

Rahora Wind Farm – PL Reg Ref. 03/1117 & PL10. 206373: Planning permission was refused by Kilkenny County Council and the decision subsequently overturned by An Bord Pleanála for five wind turbines, meteorological mast and associated site works. The proposed development is located in the townlands of Rahora, Ballalog and Guilkagh More in the southern area of County Kilkenny, approximately 4.2 km southeast of the proposed development site. The site is located in close proximity to the R704 Regional Route between Mullinavat and New Ross, which passes to the north of the appeal site linking into the national road network at Mullinavat (N9) and at New Ross (N25) and is located 3km from the proposed development site.

The Planning Authority decided to refuse permission for the development and three reasons were stated. The first related to the development being premature pending the adoption of a wind energy strategy for the county, which is a specific objective of the county development

plan. The second reason relates to the development being an undesirable precedent in the absence of the strategy and the third reason relates to the development being prominent when viewed from areas of high amenity and detract from their amenity value.

The Inspectors' report dated 25/06/2006, stated that the development in the absence of a strategy should be assessed on its merits as provided for in the development plan to determine whether the development and its visual impact can be absorbed without impinging in any significantly adverse manner upon its character, integrity or uniformity of the landscape. The Inspector further stated that a development of the scale proposed can be accommodated on the site without having a significant visual impact on the area immediate to the site and the wider area. The Board decided to grant permission in accordance with the Inspector's recommendation, subject to 11no. conditions.

PL. Reg Ref: 07/2253 -Planning permission was granted 21/02/2008 for an amendment to existing planning permission Register Reference 03/1117 for repositioning of the 5 No. permitted wind turbines and amended layout of site roads. The planners report stated that the development remained the same in essence as the previous approved application, and it was only the position of the turbines that was proposed to be changed. The report stated that the proposal seemed to have improved visual appearance and from several perspectives there seemed to be an improvement in the spacing of the units.

4.3.3 Other Developments and Cumulative Impact Assessments

A review of the Kilkenny County Council Planning Register shows that the following 'other developments' as described above are relevant planning applications in terms of the 10km zone of influence radius surrounding the proposed development site.

Pl. Ref. 10/103 – Planning application in 2010 by ESB for the development at this site at Kilkenny 110kV electrical transformer station. The development will consist of Amendment to previously approved application Reg. Ref: 08/404. Permission was granted 22/02/2010.

Pl. Ref. 16/14 - Planning permission for the permission of a period of 15 years and the retention of existing quarry with an extraction area of approximately 1.20 ha. At Castlegannon, Ballyhale. Planning permission was granted 24/10/2016

Pl. Ref. 16/445 – Highfield Solar Limited application for a 10 year permission for the construction of a Solar PV Energy development at Derrynahinch, Knocktopher, within a total site area of up to 10.6ha, to include one, single-storey electrical substation building, electrical transformer/inverter station modules, solar PV panels ground mounted on steel support structures. Granted by Council 17/01/2017.

Pl Ref: 16/778 - ART Generation Ltd application for a solar farm at Tullaroan, Callan, consisting of PV arrays for the generation of electricity of up to 5MW for export to the national grid on land covering an area of approximately 10.6 hectares (approximately 9.8 hectares for the solar arrays and 0.8 for the existing site entrance and access road) with associated infrastructure. Granted by Council 25/04/2017.

Pl Ref: 16/592- Solar Sense SPV3 Limited applied for permission for a solar photovoltaic installation comprising up to 26,100m2 of solar panels on ground mounted frames, 4 no. inverters housed in 2 units, 1 no.20kV substation, security fencing, new entrance onto public road, access tracks, CCTV; underground cable and ducts including underground cable and ducts along the public road to the entrance of the existing Ballyhale substation within the townland of

Kiltorcan, Co. Kilkenny. Kilkenny County Council refused permission but the decision was over turned by ABP and they granted permission 13/02/2018.

Pl Ref: 18/573 – EirGrid plc application for proposed uprate works on the existing 110kV line between Great Island substation, Co. Wexford and Kilkenny substation, Co. Kilkenny, Permission was granted 08/03/2019.

Pl Ref: 19/538 – Solar Sense SPV 3 Ltd applied for permission for the provision of 4 no battery storage container required by the previously granted solar farm in Ballyhale and Kiltorcan, (Reg Ref: 16/592). Permission was granted 25/10/2019.

The existing neighbouring wind farms as described in Section 4.3.2 above are considered in the cumulative impact assessments in this EIAR, as are all the projects listed in Appendix 4-1. Ongoing forestry and agricultural activities in the area are also considered.

4.4 PLANNING AND DEVELOPMENT POLICY CONTEXT

When considering wind as an energy source, it is important to place its development in an international, national, and local policy context from the perspective of environment, energy, and planning. This section outlines the legislative mechanisms and requirements from a global to local level, which have been formulated to support the generation of energy from renewable sources and reduce the dependency on fossil fuels.

The Irish planning policy system (Figure 4-1) is set within a hierarchical structure. National policy is informed by EU Directives, Planning Legislation, Ministerial Guidelines. Government Policy and Capital programmes.

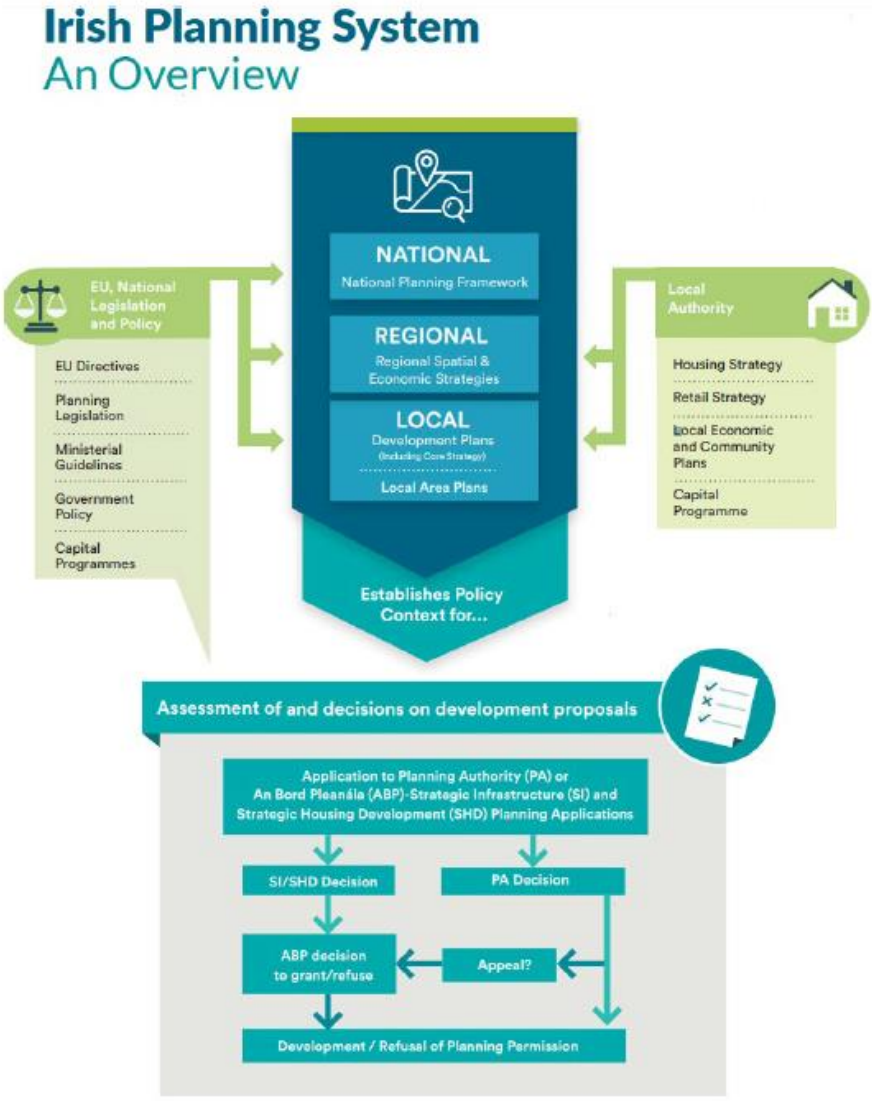


Figure 4-1: The Irish Planning System Overview3

4.4.1 International and European Policy

4.4.1.1 The 1992 United Nations Framework Convention on Climate Change

The United Nations Framework Convention on Climate Change (UNFCCC) is an international environmental treaty negotiated at the United Nations Conference on Environment and Development (UNCED), in Rio de Janeiro in 1992. Fifty countries ratified an international treaty, the United Nations Framework Convention on Climate Change (UNFCCC), as a framework for international efforts to combat the challenge posed by climate change. The UNFCCC seeks to limit average global temperature increases and the resulting climate change. In addition, the UNFCCC seeks to cope with impacts that are already inevitable. It

recognises that the climate system is a shared resource whose stability can be affected by industrial and other emissions of carbon dioxide and other greenhouse gases.

[3] Project Ireland 2040, National Planning Framework

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. The convention enjoys near universal membership, with 197 countries listed as being Parties to the Convention[4].

4.4.1.2 The Kyoto Protocol Targets

The Kyoto Protocol is an international treaty which extends the 1992 United Nations Framework Convention. The Kyoto Protocol came into effect in 2005, as a result of which, emissions 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.

4.4.1.3 The 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.

4.4.1.4 The Paris Agreement 2015

This is an agreement within the United Nations Framework Convention on Climate Change (UNFCCC) dealing with greenhouse gas emissions mitigation, adaptation and finance, starting in the year 2020, which aims to keep the global average temperature rise this century to below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.

On the 5th October 2016, the threshold for entry into the agreement was adopted and the agreement came into force on the 4th November 2016. Ireland is legally bound by Article 7 of the United Nations COP21 Paris Agreement, signed in December 2015, to prepare and submit

[4] https://ec.europa.eu/knowledge4policy/organisation/unfccc-united-nations-framework-convention-climate-change_en

periodic updates on its national adaptation and mitigation plans in the global effort to keep global warming below 1.5 °C.

An 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 preindustrial 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.

4.4.1.5 The European Green Deal 2019

The European Green Deal 2019 resets the European Commission's commitment to tackling climate and environmental-related challenges. It is a new growth strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use. The various elements of the deal are indicated in the infographic below:

Figure 4-2: Elements of the Green Deal[5]

First climate action initiatives under the Green Deal include:

- European Climate Law to enshrine the 2050 climate-neutrality objective into EU law;

[5] https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf

- European Climate Pact to engage citizens and all parts of society in climate action.

Based on a comprehensive impact assessment, analysis of the national energy and climate plans, and considering stakeholder contributions received to the public consultation, the Commission will propose a new EU ambition to reduce greenhouse gas emissions by 2030.

By June 2021, the Commission will also review and, where necessary, propose to revise all relevant policy instruments to deliver additional greenhouse gas emissions reductions.

In early 2021, the Commission will adopt a new, more ambitious EU strategy on adaptation to climate change in order to strengthen efforts on climate-proofing, resilience building, prevention and preparedness, ensuring that businesses, cities and citizens are able to integrate climate change into their risk management practices.

By summer 2020, the Commission proposed to present an impact assessed plan to increase the EU's greenhouse gas emission reductions target for 2030 to at least 50% and towards 55% compared with 1990 levels in a responsible way. In a speech by the President of the European Commission, Ursula Von der Leyen, on September 8th, 2020, it was confirmed that the EU would increase the reduction target from the 40% in the Europe 2030 and Energy Framework to a new target of 55%. This will put the EU on track for climate neutrality by 2050 and for meeting its Paris Agreement obligations. The Carbon Border Adjustment mechanism will help ensure others will follow Europe's lead. By summer 2021, it was confirmed also that the Commission will revise all of the EU's climate and energy legislation to make it 'fit for 55'.

4.4.1.6 Renewable Energy directive 2009/28/EC

This Directive concerns the promotion of the use of energy from renewable sources. Its set out a target of 20% of EU energy consumption from renewable sources by 2020 and a 20% cut in greenhouse gas emissions by 2020, the so-called 20:20:20 plan. The Directive recognises the need to promote renewable energy sources and technologies which will have a positive impact on:

- Security and Energy Supply;
- Regional and Local development opportunities;
- Rural development;
- Export prospects;
- Social cohesion;
- Employment opportunities.

The Renewable Energy Directive (RED) is the most important legislation influencing the growth of renewables in the European Union (EU) and Ireland. The RED sets out mandatory targets for renewable energy in Ireland to be met by 2020. The first relates to overall renewable energy share (RES) and is commonly referred to as the overall RES target. For Ireland, the overall RES target is for at least 16% of gross final energy consumption (GFC) to come from renewable sources in 2020.

In addition to the EU mandatory targets, Ireland had two further national renewable energy targets for 2020. These are for electricity and heat sectors and are designed to help Ireland meet the overall RES target. Ireland target is for 40% of gross electricity consumption to come from renewable sources in 2020 and 12% of energy used for heating and cooling to come from

renewable sources. According the SEAI's publication "Renewable Energy in Ireland, 2020 Report" [6], Ireland are not on track to meet any of its 2020 renewable energy targets.

The Renewable Energy Directive sets a target of at least 27% renewables in the final energy consumption in the EU by 2030.

In the context of the co-decision procedure, a final compromise text among the EU institutions was agreed in June 2018. In December 2018, the revised renewable energy directive 2018/2001/EU entered into force. Renewable Energy – Recast to 2030 (RED II Directive).

The proposed Castlebanny Wind Farm development supports the shift towards increased levels of renewable energy production and helps Ireland towards achieving its renewable energy targets as set out in the 2009/28/EC Directive and the revised figure as outlined in the RED II Directive.

4.4.1.7 A Sustainable Europe by 2030

'A Sustainable Europe by 2030' (January 2019) is the EU's ten-year growth strategy for years 2020-2030 which focuses on the implementation of the United Nations 2030 Strategic Development Goals (SDG's) and informs the EU Strategic Agenda 2019-2024. The plan identifies several key areas of importance to the sustainable growth of the Eurozone through to 2030 while transitioning to a carbon friendly economy and maintaining rankings in the 2030 SDG's. The four important policy areas include:

1. Transitioning from a linear to a circular economy;
2. Sustainability from Farm to Fork;
3. Future proofing energy, buildings and mobility; and,
4. Ensuring a socially fair transition (to ecologically sustainable economic growth).

In 2019, more than half of the European Union's energy supply was climate neutral, underpinning the importance of renewable energy to the EU. As part of the Energy Union regulation, the European Commission framework for energy transition brings together climate, energy, transport, research and other policies. It is this framework which is responsible for requiring under EU legislation that at least 32% of all energy consumption be from a renewable energy source by 2030. This framework also seeks to have 32.5% energy efficiency by 2030. A strategic aim of this policy is to reduce greenhouse gas emissions by at least 40% by 2030 compared to 1990 levels, in alignment with the EU commitment under the Paris Climate Agreement and beyond.

> "*Beyond 2030 more is needed to live up to the letter as well as the spirit of the Paris Climate Agreement, exploiting the full economic potential of the energy transition. The EU can significantly decrease its costly dependency on fossil fuels, reduce its fossil fuel import bill of some EUR 260 billion, increase its energy autonomy, and contribute to a fairer energy market. It is essential that we continue the integration of the energy market by building the missing interconnections and facilitating cross-border energy trade. The clean energy transition can also be supported by ocean energy and offshore wind energy. As a leader in this field, the EU should continue enjoying its first-mover advantage.*"

[6] https://www.seai.ie/publications/2020-Renewable-Energy-in-Ireland-Report.pdf

The EU indicates in this policy document that it can significantly decrease the costly dependency on fossil fuels, increase energy autonomy, lower our carbon footprint and contribute to a fairer energy market while growing the EU economies. It is understood that the economic measures to keep the EU at the forefront of SDG's in the world rely heavily on renewable energy. However, not all EU countries, such as Ireland are on par with their renewable targets as indicated in Figure 4-3 below:

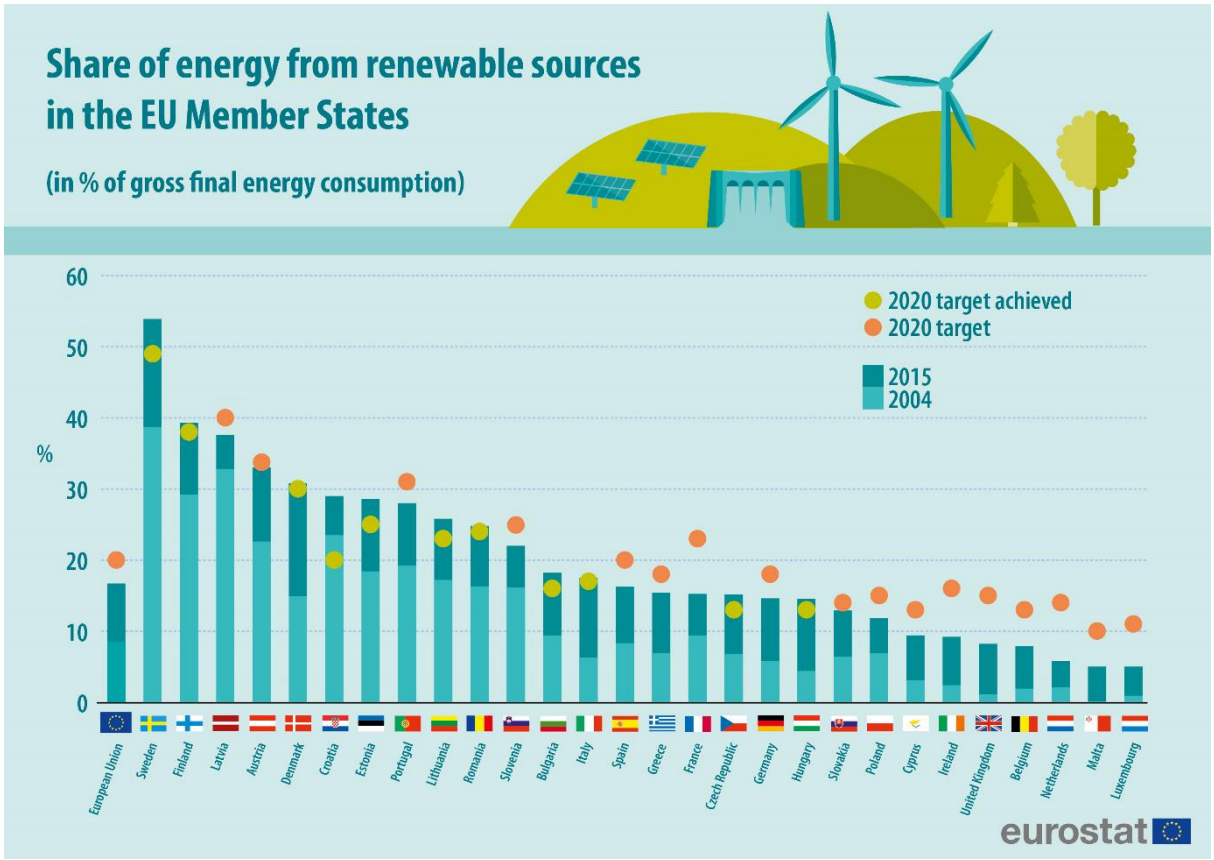


Figure 4-3: 2020 Renewable Energy Target 7

4.4.1.8 The 2030 Climate and Energy Framework

The 2030 Climate and Energy Framework was adopted by EU leaders in October 2014 and marks a further development of EU renewable energy policy. The Framework sets out a policy framework for climate and energy in the period from 2020 to 2030 and aims to make the European Union's economy and energy system more competitive, secure and sustainable. The framework defines further EU wide targets and builds on the 2020 climate and energy package in setting three key targets for the year 2030 as follows:

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

The European Commission published its proposal for an effort sharing regulation on the allocation of national targets for greenhouse gas emissions for the period 2021-2030 in July

[7] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Infographic_REN-2004-2015.png

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

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

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

The grant of permission for the proposed Castlebanny Wind Farm development will directly contribute to Ireland's on-going progression towards its 2030 targets.

4.4.1.9 Renewable Electricity Support Scheme (RESS) 2020

RESS is the new Renewable Electricity Support Scheme in Ireland. RESS will provide financial support to renewable electricity projects in Ireland. It is a pivotal component of the National Energy and Climate Plan and is essential for achieving Ireland's 70% renewable electricity target by 2030. Auctions will decide which generators will receive contracts.

The first RESS auction was delivered by a number of organisations and agencies, namely the DCCAE, Commission for Regulation of Utilities (CRU) and EirGrid, working together. With a primary focus on cost effectiveness, the RESS will deliver a broader range of policy objectives, including:

- An enabling framework for community participation through the provision of pathways and supports for communities to participate in renewable energy projects;
- Increasing technology diversity by broadening the renewable electricity technology mix (the diversity of technologies);
- Delivering an ambitious renewable electricity policy to 2030;
- Increasing energy security, energy sustainability and ensuring the cost effectiveness of energy policy.

On 27th February 2020, the Department of Communications, Climate Action and Energy published the final terms and conditions for the first competition under the Scheme. The RESS will be implemented through a series of renewable electricity competitions, providing a renewable electricity roadmap and indicative timelines and capabilities.

The first RESS Auction took place on the 4th August 2020 with the provisional results announced the same day. Final auction results were announced on the 10th September 2020 with the notice of final award announced on the 25th September 2020. A total of 114 projects applied to participate, with 82 successful projects. Figure 4-4 below shows the location of each provisionally successful project by Eligible Technology.

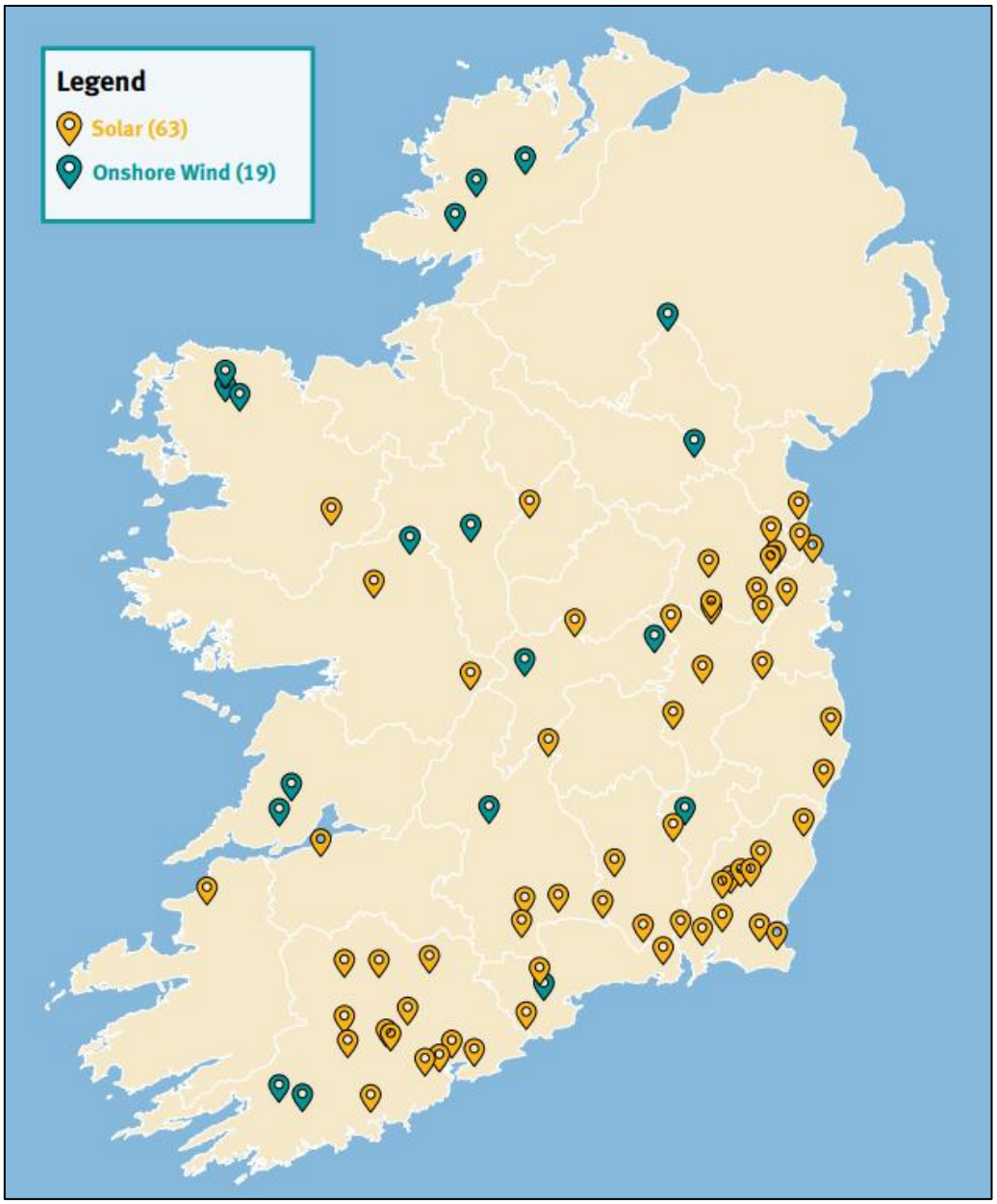


Figure 4-4: Location of each successful project by eligible Technology

4.4.1.10 Roadmap for moving to a competitive Low-Carbon Economy in 2050

The low carbon Roadmap sets out cost-efficient pathways for key economic sectors for achieving an overall 80% reduction in the EU's emissions by 2050 (compared to 1990). Extensive economic modelling undertaken to prepare the Roadmap shows that domestic emission cuts of the order of 40% and 60% below 1990 levels could be achieved in a cost-effective way by 2030 and 2040, respectively. Current policies are projected to reduce emissions domestically to -30% in 2030 and -40% in 2050.

Figure 4-5 below illustrates the pathway towards an 80% reduction by 2050, shown in 5-year steps. The upper "reference" projection shows how domestic greenhouse gas emissions would develop under current policies. A scenario consistent with an 80% domestic reduction then shows how overall and sectoral emissions could evolve, if additional policies are put in place, considering technological options available over time.

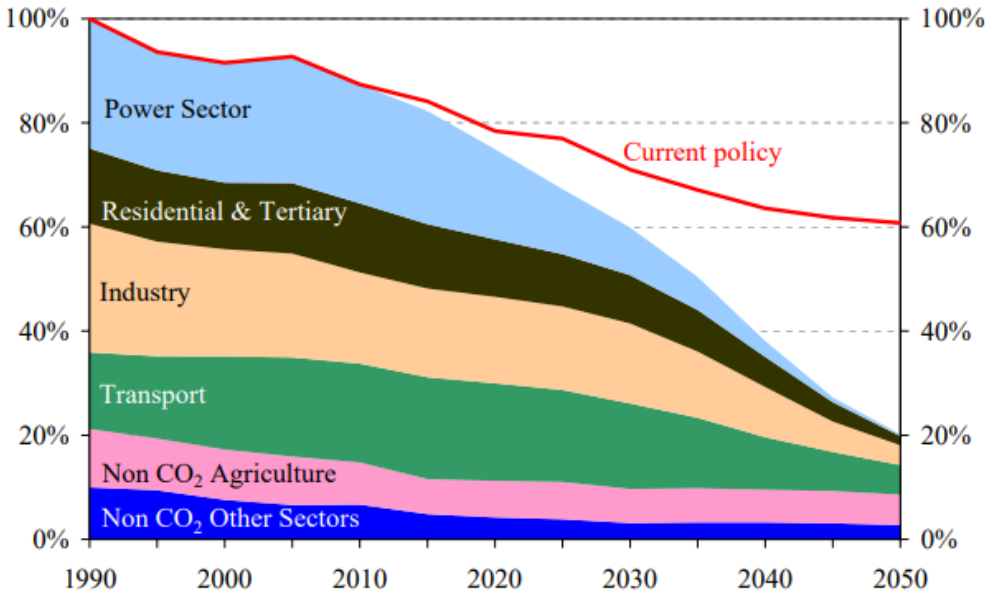


Figure 4-5: EU GHG emissions towards an 80% domestic reduction (100% =1990)[8]

With full implementation of current policies, the EU is on track to achieve a 20% domestic reduction in 2020 below 1990 levels, and 30% in 2030. However, with current policies, only half of the 20% energy efficiency target would be met by 2020. If the EU delivers on its current policies, including its commitment to reach 20% renewables, and achieve 20% energy efficiency by 2020, this will enable the EU to outperform the current 20% emission reduction target and achieve a 25% reduction by 2020. This would require the full implementation of the Energy Efficiency Plan[9] presented together with this Communication, which identifies measures which would be necessary to deliver the energy efficiency target. The amount of currently allowed offsets would not be affected[10].

[8] https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0112:FIN:EN:PDF

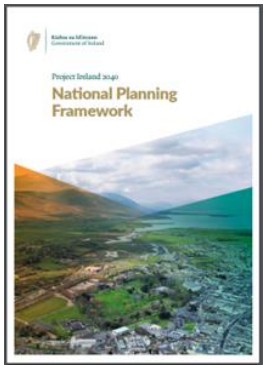
[9] Energy Efficiency Plan - COM(2011) 109.

[10] As agreed by the emissions trading Directive 2003/87/EC (as amended by Directive 2009/29/EC) and the effort-sharing Decision (Decision 406/2009/EC).

The Commission intends to use the Roadmap as a basis for developing sector specific policy initiatives and Roadmaps. They will ensure that the EU Emissions Trading System remains a key instrument to drive low carbon investments in a cost-efficient manner. It will also remain attentive to the risk of carbon leakage in order to ensure a level-playing field for industry.

4.4.2 National Policy Context

4.4.2.1 The National Planning Framework : Project 2040



The National Planning Framework (NPF) and the National Development Plan (NDP) together make up Project Ireland 2040. It was published by the Department of Housing, Planning and Local Government in February of 2018. The NPF is a framework to guide Ireland's development and investment in the coming years. It is the Government's high-level strategic plan to shape Ireland's development until the year 2040. It contains a set of national objectives and key principles from which more detailed and refined plans will follow. This document acknowledges that new energy systems and transmission grids will be necessary for a more distributed, more renewables focused energy generating system from energy sources such as wind.

The NPF sets out the key goals and objectives for the State, and central to this is the theme of *Realising Our Sustainable Future*. In particular, the NPF notes in section 9.2: Resource Efficiency and Transition to a Low Carbon Economy that our transition to a low carbon energy future requires:

- *"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; and*
- *Legal and regulatory frameworks to meet demands and challenges in transitioning to a low carbon economy.*"

With respect to the locating of renewable energy projects, the NPF states that *"Rural areas have significantly contributed to the energy needs of the country and will continue to do so, having a strong role to play in securing a sustainable renewable energy supply."* Furthermore, the NPF goes onto state that, "*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 rural settings, while also continuing to protect the integrity of the environment and respecting the needs of people who live in rural areas."*

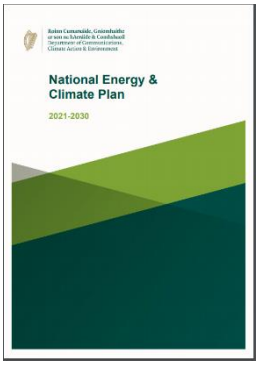
National Policy Objective 55 of the NPF has a stated aim to: *"Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050."*

4.4.2.2 The National Development Plan 2018-2027

The National Development Plan (NDP) 2018 – 2027 is clearly aligned with the delivery of the objectives of the National Planning Framework. It sets out the significant level of investment, almost €116 billion, which will underpin the successful implementation of the National Planning Framework and drive it forward over the next 10 years.

The NDP includes National Strategic Outcome 8 – Transition to a Low-Carbon and Climate Resilient Society. The NDP recognises that the national objective of transitioning by 2050 to a competitive low-carbon, climate resilient, and environmentally sustainable economy and society must influence public capital investment choices over the next 10 years. It acknowledges that Ireland's energy system requires a radical overhaul to achieve its energy and climate objectives by 2050. This means how energy in Ireland is generated and used needs to fundamentally change. Investment in renewable energy sources, ongoing capacity renewal, and future technology affords Ireland the opportunity to comprehensively decarbonise our energy generation. Renewable energy, including wind technology, will play a key role in helping to diversify away from a reliance on fossil fuels.

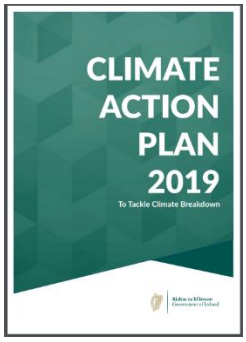
4.4.2.3 National Energy and Climate Plan (NECP) 2021-2030



The National Energy and Climate Plan (NECP) builds on the existing national energy and climate policy framework documents, which aim to diversify and decarbonise Ireland's electricity generation sector, with the long-term objective of decarbonising the energy sector and achieving an economic transformation with a carbon neutral agriculture and land use sector by 2050.

The NECP envisages a target of at least 55% renewable energy in electricity by 2030. However, as of June 2020, Under the Programme for Government, Our Shared Future, Ireland is committed to achieving a 7% annual average reduction in greenhouse gas emissions between 2021 and 2030. The NECP was drafted in line with the current EU effort-sharing approach, before the Government committed to this higher level of ambition, and therefore does not reflect this higher commitment. Ireland is currently developing those policies and measures.

4.4.2.4 Climate Action Plan 2019



On the 17th June 2019, the Irish Government published the Climate Action Plan setting out how they plan to make Ireland a leader in tackling climate change. The objective of the Plan is to enable Ireland to meet its EU targets to reduce its carbon emissions by 30% between 2021 and 2030 and lay the foundations for achieving net zero carbon emissions by 2050.

The plan outlines the current state of play across key sectors including Electricity, Transport, Built Environment, Industry and Agriculture and charts a course towards ambitious decarbonisation targets. The Plan sets out governance arrangements including carbon-proofing policies, establishment of carbon budgets, a strengthened Climate Change Advisory Council and greater accountability to the Oireachtas.

The Climate Action Plan sets out the target for 70% of electricity to be produced by renewable energy by 2030. This includes the development of wind energy which will be delivered in a

competitive framework of auctions and corporate contracting with a renewed focus on community and citizen participation.

With specific reference to the electricity sector, the Plan sets out targets for 2030 to:

- Reduce CO_2 emissions from the sector by 50–55% relative to 2030 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 comprised of:
  - 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.

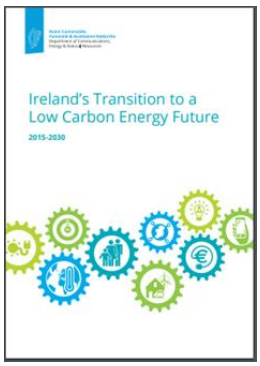
The Plan reinforces the Government's commitment to a significant increase in clean, renewable energy and provides an overview of the Renewable Energy Support Scheme (RESS) which is expected to support up to an additional 4.5GW of renewable electricity by 2030.

As part of the Climate Action Plan, a new charter was introduced at the end of October 2019 which sets the direction for local councils in a bid to tackle climate change. The charter is a key action in the plan and will ensure every local authority embeds decarbonisation, sustainable development, and climate resilience into every aspect of the work they do. A range of new measures will be adopted requiring all 31 councils to proactively consider the carbon impact of decisions they make. Each council must establish a procedure for "carbon-proofing" major decisions, programs, and projects, including investments in transport and energy infrastructure.

Among other commitments, all local authorities will:

- Put in place a process for carbon proofing major decisions, programmes, and projects on a systematic basis, including investments in transport and energy infrastructure;
- Deliver a 50 percent improvement in energy efficiency by 2030;
- Ensure all suppliers provide information on their carbon footprint and steps they plan to reduce its impact;
- Build local citizen engagement, particularly with young people;
- Partner and collaborate on climate action initiatives with local community groups, local enterprise and local schools and higher-level institutions; and,
- Monitor evaluate and report annually on the implementation of activities under the charter.

4.4.2.5 White Paper on Energy – Irelands Transition to a Low Transition to a Low Carbon Future 2015-2030



This White Paper on energy policy (Department of Communications, Energy and Natural Resources (December 2015) provides a complete energy policy update for Ireland. It sets out a framework to guide policy and actions that the Government intends to take in the energy sector up to 2030. It also outlines a transition to a low carbon energy system by 2050. It is significant as it was the first time a government has proposed the eventual elimination of fossil fuels from Ireland's energy system. The then Minister for Energy Alex White stated that *"high-carbon fuels like peat and coal will give way to lower-carbon or renewable alternatives in the short to medium term before fossil fuels are largely replaced by renewable energy sources by 2050. Greenhouse gas emissions from the energy sector will "fall to zero or below by 2100".*

The 2015 White Paper's stated objective is to "guide a transition to a low carbon energy system, which provides secure supplies of competitive and affordable energy to our citizens and businesses" as Ireland progresses towards a low carbon energy system. In doing so, it takes into account European and international climate change objectives and agreements, as well as Irish social, economic and employment priorities.

The White Paper sets out how Ireland's energy transition will be facilitated by an accelerated and diversified programme of renewable energy generation, and an increased focus on energy efficiency, facilitated by innovative financing. It promises strong regulation, effective markets, appropriate infrastructure, and deeper European cooperation. It heralds a new focus on citizens and communities as agents of change in the way Ireland generates, transmits, stores, conserves and uses energy. And it sets out actions to enable people to participate in energy-related decisions, including decisions about grid and renewable energy infrastructure.

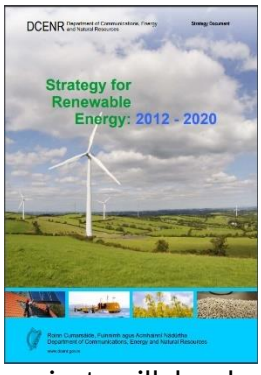
The White Paper, and achievements since its introduction, underpins government policy to continue to support development of both onshore and offshore wind energy developments in accordance with published planning guidelines and local development plan policy.

4.4.2.6 Climate Action and Low Carbon Development Act 2015

This Act provides the statutory basis for the national transition objective set in the national policy position. It commits to a carbon neutral situation? by 2050 and to also match Ireland's targets with those of the EU. It requires that the Minister for Communications, Climate Action, and the Environment must make and submit to Government a series of successive National Mitigation Plans and National Adaptation Frameworks. While there are no explicit targets set out within the Act itself, the legislation obliges the State to consider any existing obligations of the State under the law of the European Union or any international agreement.

In effect the Act formally obliges the State to adhere to EU targets such as 20% reduction in emissions by 2020 over 1995 levels. The other major feature of the Act is the establishment of an expert advisory council of between nine and 11 members which will advise and make recommendations to the Minister for the Environment.

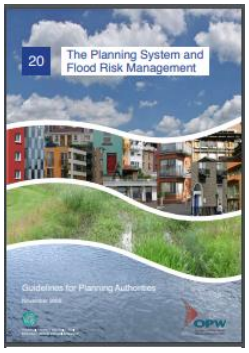
4.4.2.7 Strategy for Renewable Energy 2012 – 2020



This Strategy reiterates the Government's position that the development and deployment of Ireland's abundant indigenous renewable energy resources, both onshore and offshore, clearly stands on its own merits in terms of the contribution to the economy, to the growth and jobs agenda, to environmental sustainability and to diversity of energy supply. Strategic Goal 1 of the Strategy is to "progressively produce more renewable electricity from onshore and offshore wind power for the domestic and export markets".

The Strategy states that 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.

4.4.2.8 The Planning system & flood risk management – Guidelines for Planning Authorities



These Guidelines include comprehensive mechanisms for the incorporation of flood risk identification, assessment, and management as part of the planning process and outline how this will be implemented and achieved through actions at various levels, including site-specific levels. These guidelines require the planning system at national, regional, and local levels to:

- Avoid development in areas at risk of flooding, particularly floodplains, unless there are proven wider sustainability grounds that justify appropriate development and where the flood risk can be reduced or managed to an acceptable level without increasing flood risk elsewhere;
- Adopt a sequential approach to flood risk management when assessing the location for new development based on avoidance, reduction, and mitigation of flood risk;
- Incorporate flood risk assessment into the process of making decisions on planning applications and planning appeals.

4.4.3 Other Relevant Policies

4.4.3.1 Wind Energy Development Guidelines 2006

In 2006, the Department of the Environment, Heritage and Local Government (DoEHLG) published '*Wind Energy Development Guidelines for Planning Authorities'* under Section 28 of the Planning and Development Act, 2000. The Wind Energy Development Guidelines (WEDG) provide statutory guidance for wind energy development, including consideration of environmental issues, such as noise and shadow flicker, design, siting, spatial extent and scale, cumulative effect and spacing, as well as the layout and height of wind turbines having regard to the landscape and other sensitivities. Planning authorities must have regard to the Guidelines on planning for wind energy through the development plan process and in determining applications for planning permission. The guidelines are intended to ensure a consistency of approach throughout the country in the identification of suitable locations for wind energy projects and in the treatment of planning applications for wind energy developments.

Relevant points include:

- Visual impact is among the more important considerations and advice is given on spatial extent, spacing, cumulative effect, layout, and height. There is an emphasis on the distinctiveness of landscapes and their sensitivity to absorbing different types of development;
- Environmental considerations such as the impact on habitats and birds and the need for habitat management are discussed. It is noted that designation of an area of natural and cultural heritage does not in itself preclude development, unless it is judged to be such that it would impact on the integrity of such sites and their natural heritage interests;
- The need for information on the underlying geology of the area including a geotechnical assessment of bedrock and slope stability and the risk of bog burst or landslide. Geological consultants should be employed to ensure that sufficient information is submitted;
- Impacts on human beings such as noise and shadow flicker.

These guidelines have been considered in the preparation of this EIAR as at the time of writing they are the current guidelines.

4.4.3.2 Draft Revised Wind Energy Development Guidelines – December 2019

The review of the Wind Energy Development Guidelines 2006 began with the issuing of draft proposals in December 2013. Following consultation, a preferred draft approach was announced in 2017. Accordingly, the Minister for Housing, Planning and Local Government, Eoghan Murphy, T.D. and the Minister for Communications, Climate Action and Environment, Richard Bruton, T.D., launched a public consultation on proposed revisions to the Wind Energy Development Guidelines on Thursday 12th December 2019.

The Draft Revised Wind Energy Development Guidelines were issued for public consultation, which concluded in February 2020 and primarily focus on addressing a number of key aspects including noise, visual amenity setback, shadow flicker, community consultation obligations, community dividend and grid connections.

The draft guidelines propose the following main changes to the 2006 Guidelines:

- New noise standards;
- Setback distances;
- Automatic shadow flicker control mechanisms;
- Community consultation;
- Community dividend;
- Grid connections;

These revised guidelines are still under review and until such time as the new guidelines are published, the 2006 guidelines remain the statutory policy guide in relation to all wind energy developments. As demonstrated in the subsequent chapters, the Castlebanny wind farm development will not result in any likely significant effects on the environment and is in accordance with the principles of proper planning and sustainable development and has been designed such that it is anticipated it is capable of adhering to the draft guidelines.

4.4.3.3 Irelands Greenhouse Gas Emission Projections 2016-2035

The National Climate Change Strategy designated the Environmental Protection Agency (EPA) with responsibility for developing annual national emission projections for greenhouse gases for all key sectors of the economy, including transport.

The International Panel on Climate Change has put forward its clear assessment that the window for action on climate change is rapidly closing and that renewable energy sources such as wind energy will have to grow from 30% of globally electricity at present to 80% by 2050 if we are to limit global warming to below 2 degrees[11].

The EPA's most recent publication, the State of the Environment Report (2020) defines Climate and biodiversity as the most pressing issues to be addressed in Ireland. It highlights concerns about environmental indicators which are regressing. The report states that "Climate change is the defining challenge for this century". Last year, the government published its Climate Action Plan, "an important step," the EPA says in reaching national and EU climate goals. However, when it comes to tackling the causes of climate change — greenhouse gas (GHG) emissions in the form of carbon dioxide, methane and nitrous oxide — the EPA grades the country's current performance as "very poor".

[11] "IPCC Fifth Assessment Synthesis Report" Intergovernmental Panel on Climate Change AR5 report

The report says air pollution is the "single largest environmental health risk in Europe". The three main sources of air pollution in Ireland are:

- Emissions from burning of solid fuels in homes
- Transport emissions from vehicles in urban areas
- Ammonia emissions from agriculture

The Castlebanny Wind Farm will contribute positively to both climate and air quality in Ireland. This will come about through increased electrification of home heating and transport, along with increased renewable electricity generation (and associated avoidance of fossil fuel burning generation) with an overall reduction in air pollution.

The previous EPA report(May 2014) stated that current projections indicate that Ireland is not on a pathway to a low-carbon economy. Total national greenhouse gas emissions are projected to, at best, decrease by an average of 0.4% per annum up to 2020 if all national policies are implemented and delivered. Furthermore, emissions are projected to increase between 2020 and 2030 (12% in total), with transport a key contributor to this trend, in the absence of additional policies and measures. However, it should be noted that renewable electricity generation in the Ireland is estimated to have saved 778 Kilotonne of Oil Equivalent (ktoe) of fossil fuel, with an associated CO_2 emissions reduction of 1.94 million tonnes.[12] Wind generation is the largest contributor, with savings estimated at 586 ktoe of fossil-fuel and a CO_2 emissions reduction of 1.51 million tonnes.

The operational stage of this proposed development will have significant long-term positive impacts on air quality and climate change. Further details relating to the positive effects of the Castlebanny Wind Farm development on air quality and climate change are included in Chapter 14 (Air Quality & Climate) of this EIAR.

4.4.3.4 Irish Wind Energy Association – Best Practice Guidelines for the Irish Wind Energy Industry , 2012

The 'Best Practice Guidelines for the Irish Wind Energy Industry' were published by the Irish Wind Energy Association in 2008 with Guideline aims updated in 2012[13] . 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).

[12] SEAI Quantifying Irelands Fuel and CO_2 Emissions Savings from Renewable Electricity in 2012

[13] Irish Wind Energy Association, Best Practice Guidelines for the Irish Wind Energy Industry, 2012; http://www.iwea.com/index.cfm/page/industryreports?twfId=1061&download=true

4.4.3.5 IWEA Best Practice Principles in Community Engagement and Community Commitment (2013)

Following on from the IWEA published Best Practice Guidelines in March 2012, the Association extended its guidance with the publication of this Best Practice in Community Engagement and Commitment. IWEA and its members support the provision of financial contributions by wind farm operators to local communities and have sought to formulate best practice principles for the provision of a community commitment. The document sets out IWEA's best practice principles for delivering extended benefits to local communities for wind farm developments of 5 Megawatts (MW) or above.

Best Practice Principles of community engagement when planning the engagement strategy and preparing associated literature are also outlined in the document. The aim of these guidelines is to ensure that the views of local communities are considered at all stages of a development and that local communities can share in the benefits.

4.4.3.6 Commission for Regulation of Utilities: Grid Connection Policy

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

On the 10th June 2020, the CRU further published the Enduring Connection Policy – Stage 2 (ECP-2) Decision (CRU/20/060). This decision marks a major milestone in the Enduring Connection Policy regime and provides for three batches of new generation connection offers to access the electricity network.

The number of connection offers represents an increase in ambition from ECP-1 and sets a challenging but achievable programme for the System Operators. This will facilitate new renewable generators competing in forthcoming RESS auctions as well as conventional generators and system service providers. The decision also provides a pathway for community-led projects to connect the grid.

4.4.3.7 Code of Practice for Wind Energy Development in Ireland Guidelines for Community Engagement (DCCAE, 2016)

In December 2016, the Department of Communications, Climate Action and Environment DCCAE published a Code of Practice for Wind Energy Development in Ireland on Guidelines for Community Engagement. The code cites ten key areas that wind farm promoters must comply with when engaging with communities. These include:

1. Contact and visibility;
2. Arrangement for making contacts;
3. Engagement;
4. Compliance with statutory and regulatory obligations;
5. Community benefit;
6. Impact mitigation;
7. Independent advisory and information bodies;
8. Expert professional advice;

9. Ancillary development;
10. Reports.

It is intended to ensure that wind energy development in Ireland is undertaken in observance of best industry practices, and with the full engagement of communities around the country. 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 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.

Springfield fully complies with the Code of Practice for Wind Energy Developments in Ireland in the Castlebanny Wind Farm Development.

4.4.3.8 Draft Climate Action and Low Carbon Development (Amendment) Bill 2020

On 7th October 2020, the Government published the draft text of the Climate Action and Low Carbon Development (Amendment) Bill 2020 .The aim of the Bill is to set the country on course to become climate neutral by 2050. The Bill is a positive step forward for the climate agenda, but also for Ireland. The Climate Action Bill will make Ireland a leader when it comes to climate action. The Programme for Government commits to a 7% average yearly reduction in overall greenhouse gas emissions over the next decade, and to achieving net zero emissions by 2050.

The Bill brings in a system of 5-year economy-wide carbon budgets, which will outline a ceiling for total greenhouse gas emissions. These will be prepared by the Climate Change Advisory Council and presented to Government to consider and approve, with input from the Oireachtas. The Bill includes the following key elements:

- Establishes a 2050 emissions target
- Introduces system of successive 5-year, economy-wide carbon budgets starting in 2021
- Strengthens the role of the Climate Change Advisory Council in proposing carbon budgets
- Introduces a requirement to annually revise the Climate Action Plan and prepare a National Long-Term Climate Action Strategy at least every decade
- Introduces a requirement for all Local Authorities to prepare individual Climate Action Plans which will include both mitigation and adaptation measures

This bill gives a stronger oversight role for the Oireachtas through an Oireachtas Committee.

4.4.4 Regional Policy Context

4.4.4.1 Regional Planning Guidelines (RPG's)

The Planning and Development Act, 2000 (as amended) Part II, Chapter III provides for the adoption of RPGs. The RPG's informed the development plans in each local authority from 2010 until the adoption of the Regional Spatial and Economic Strategies (RSES). Arising from the Local Government Reform Act 2014 a number of changes were made to the regional structures in Ireland where the eight regional authorities were dissolved. Three new Regional Assemblies came into effect on 1st January 2015, namely the Southern Regional Assembly, the Eastern and Midland Regional Assembly and the Northern & Western Regional Assembly. See Figure 4-6, below.

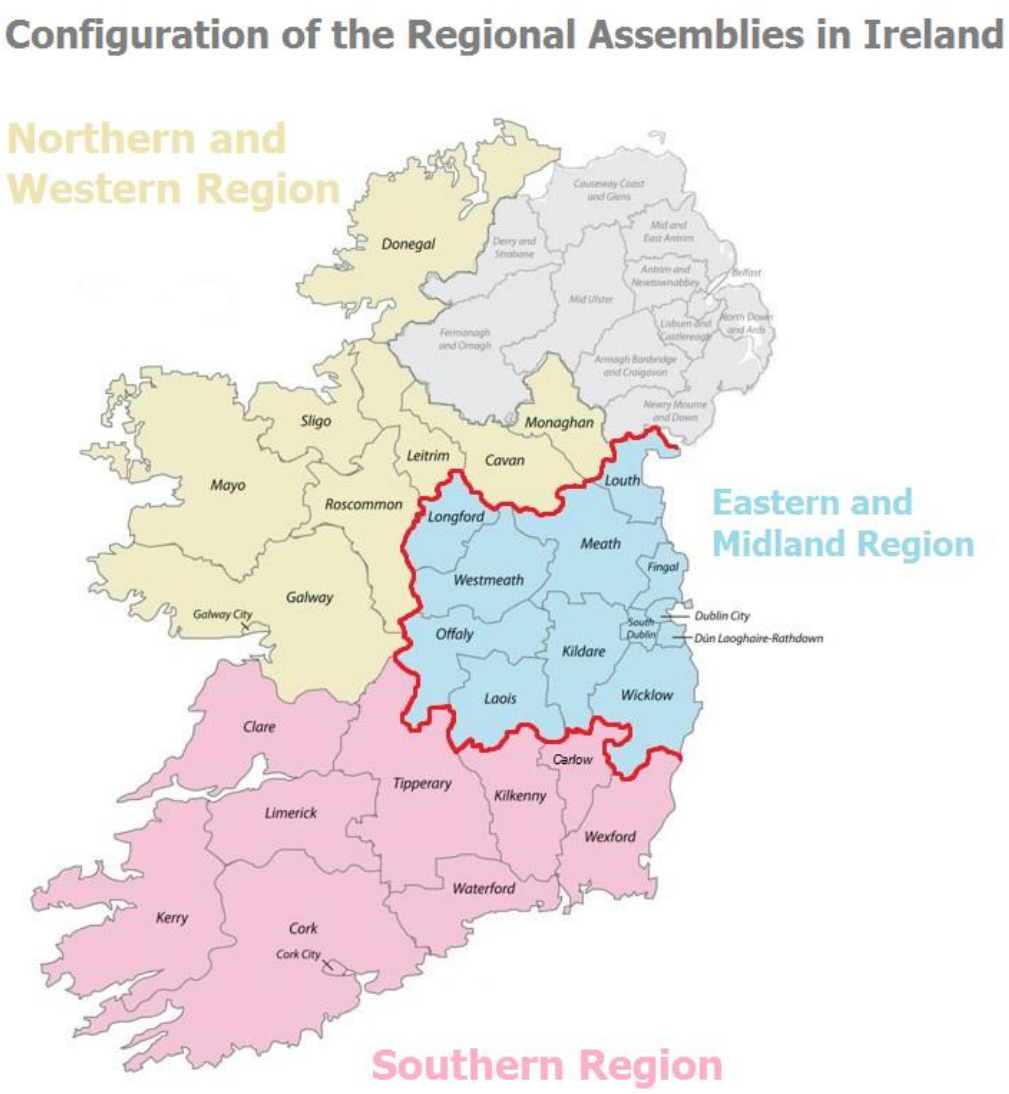


Figure 4-6: Regional Assemblies in Ireland[14]

4.4.4.2 Regional Spatial and Economic Strategy (RSES) 2019-2031 for the Southern Region

The RSES is a link between the National Planning Framework, the City & County Development Plans, and the Local Economic & Community Plans. Each assembly is centrally involved in the formulation of policies geared towards achieving a greater dispersal of economic growth and development throughout the region. The Local Authorities must update their development plans to be in accordance with the RSES. Draft plans or proposed variations to development plans are referred by the Local Authority to the Regional Assembly to ensure alignment.

[14] https://emra.ie/regional-spatial-and-economic-strategies-2/overview/

The Proposed Development is located within the Southern Region. The Southern Regional Assembly RSES sets out a vision for the Southern Region to[15]:

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

The Southern RSES seeks to achieve balanced regional development and full implementation of Project Ireland 2040 – the National Planning Framework and came into effect on 31st January 2020. The Region has nine counties Cork, Clare, Kerry, Limerick, Tipperary, Waterford Carlow, Kilkenny, and Wexford which are administered by 10 local authorities. The region is further divided into three sub-regional areas, called Strategic Planning Areas (SPAs) - the Mid-West, South East and South-West and Kilkenny belongs in the South East Area.

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

Policies in the RSES relevant to the proposed development at Castlebanny are outlined as follows:

- **Regional Policy Objective 87 - Low Carbon Energy Future :** The RSES is committed to the implementation of the Government's policy under Ireland's Transition to a Low Carbon Energy Future 2015-30 and Climate Action Plan 2019. It is an objective to promote change across business, public and residential sectors to achieve reduced GHG emissions in accordance with current and future national targets, improve energy efficiency and increase the use of renewable energy sources across the key sectors of electricity supply, heating, transport, and agriculture.
- **Regional Policy Objective 95 - Sustainable Renewable Energy Generation :** It is an objective to support implementation of the National Renewable Energy Action Plan (NREAP), and the Offshore Renewable Energy Plan and the implementation of mitigation measures outlined in their respective SEA and AA and leverage the Region as a leader and innovator in sustainable renewable energy generation.
- **Regional Policy Objective 96 - Integrating Renewable Energy Sources :** It is an objective to support the sustainable development, maintenance and upgrading of electricity and gas network grid infrastructure to integrate renewable energy sources and ensure our national and regional energy system remains safe, secure, and ready to meet increased demand as the regional economy grows.
- **Regional Policy Objective 98 - Regional Renewable Energy Strategy :** It is an objective to support the development of a Regional Renewable Energy Strategy with relevant stakeholders.

[15] https://www.southernassembly.ie/uploads/general-files/Regional_Spatial__Economic_Strategy_for_the_Southern_Region_LOW_RES.pdf

- **Regional Policy Objective 99 - Renewable Wind Energy :** It is an objective to support the sustainable development of renewable wind energy (on shore and offshore) at appropriate locations and related grid infrastructure in the Region in compliance with national Wind Energy Guidelines.
- **Regional Policy Objective 219 - New Energy Infrastructure :** It is an objective to support the sustainable reinforcement and provision of new energy infrastructure by infrastructure providers (subject to appropriate environmental assessment and the planning process) to ensure the energy needs of future population and economic expansion within designated growth areas and across the Region can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs.

The RSES supports the measures outlined in the Climate Action Plan 2019. Supporting actions will focus on renewable energy, energy efficiency, sustainable transport, agriculture and forestry and climate resilience through flood defences. Actions on decarbonisation will be linked to the implementation of the crosscutting measures in the Climate Action Plan 2019, the National Mitigation Plan, and the National Adaptation Framework in conjunction the work of the Climate Action Regional Offices (CARO).

4.4.5 Local Policy Context

Chapter 2 of this EIAR sets out an overall description of the proposed development and provides a list of all townlands that the proposed development is located within. As previously mentioned, the proposed development is located entirely in Co. Kilkenny and thus informed by the provisions of Kilkenny County Development Plan 2014-2020 as can be seen from Figure 4-7 below. Therefore, this section will set out the relevant objectives, policies, and provisions for wind energy in the current Kilkenny Development Plan which are relevant to the proposed development.

Due to the strategic location of the proposed site it is worth taking into account the neighbouring counties. Counties Waterford, Wexford, Carlow and Tipperary are all in close proximity and therefore the relevant sections of each of the development plans will be considered in this section.

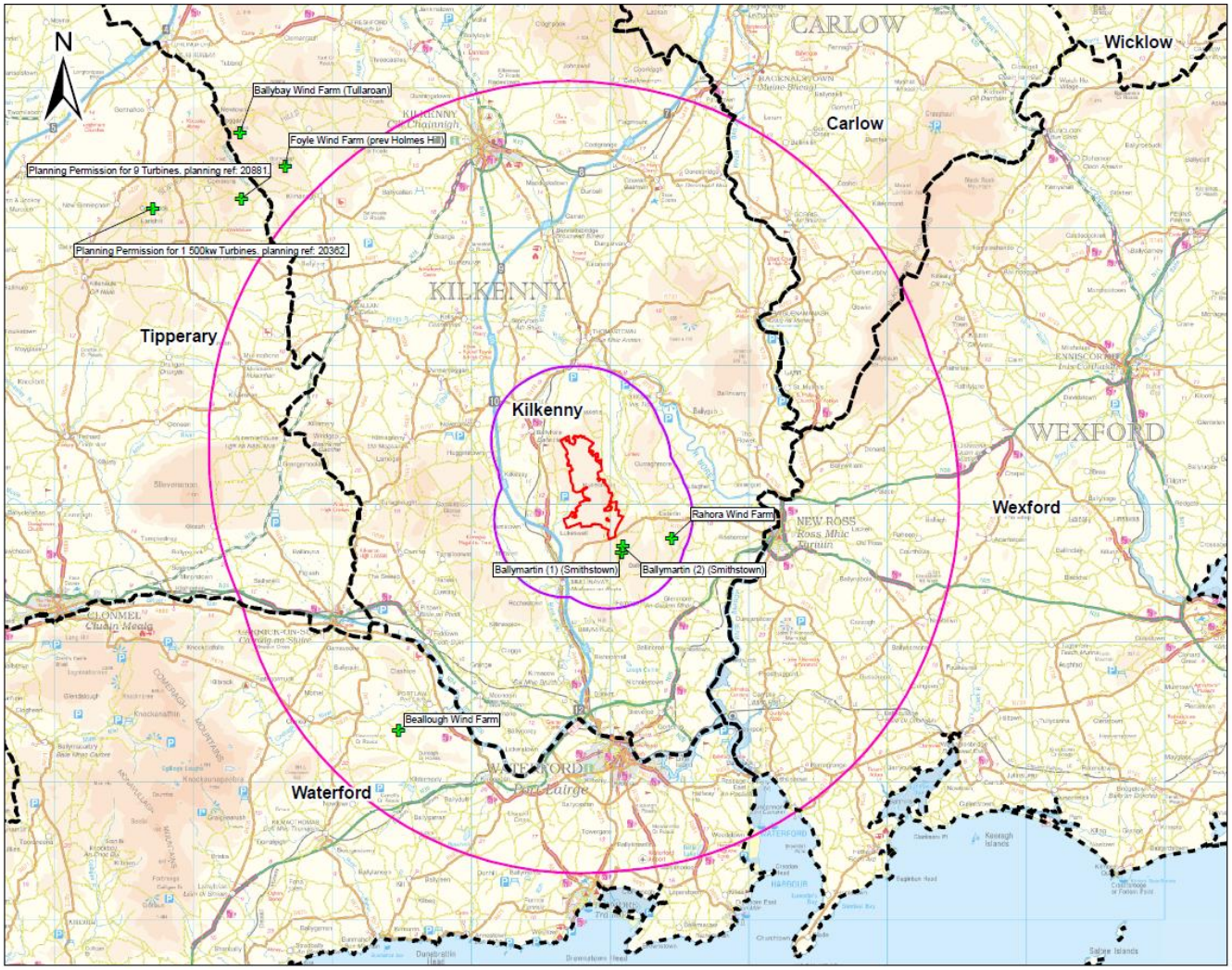


Figure 4-7: Location of Proposed Windfarm Development

4.4.5.1 Kilkenny Development Plan 2014-2020

The Kilkenny County Development Plan (CDP) was adopted in 2014 and sets out a range of policies in respect to the economic, social, cultural and heritage development in Kilkenny. Policies with most relevance to the development at Castlebanny are outlined below. Chapter 10 of the plan sets out planning policies relating to the renewable energy strategy. The strategic aim as stated in chapter 10 is *'To promote and facilitate all forms of renewable energies and energy efficiency improvements in a sustainable manner as a response to climate change*[16]*.*

According to Section 10.5.2 of the Kilkenny CDP:

> 'A Wind Energy Study was first carried out by CAAS (Environmental Services) Ltd for Kilkenny County Council in 2003. This study was reviewed and updated as a Wind Energy Development Strategy for the 2008 Development Plan. As part of this plan (2014-2020), the strategy has been revised'

A Landscape Character Assessment was prepared for Kilkenny County in 2003, which still informs and provides a framework for landscape-related policy in the current CDP. The Landscape Character Assessment identified four landscape character types (LCT), as Upland Areas, Lowland Areas, River Valleys and Transitional Areas. These were then subdivided into 14 landscape character areas, with some areas identified as being of special landscape character value and also identified features and areas of high landscape sensitivity.

Paragraph 10.5.3 states that all wind farm applications will be assessed in accordance with the Wind Energy Development Guidelines.

The Castlebanny ridge divides 'Upland Area C South-Western Hills,' from 'Upland Area E – South Eastern Hills', as per Figure 4-8 below:

[16] https://www.kilkennycoco.ie/eng/Services/Planning/Development-Plans/Development_Plans_2014-2020/Adopted-County-Plan-for-printing.pdf

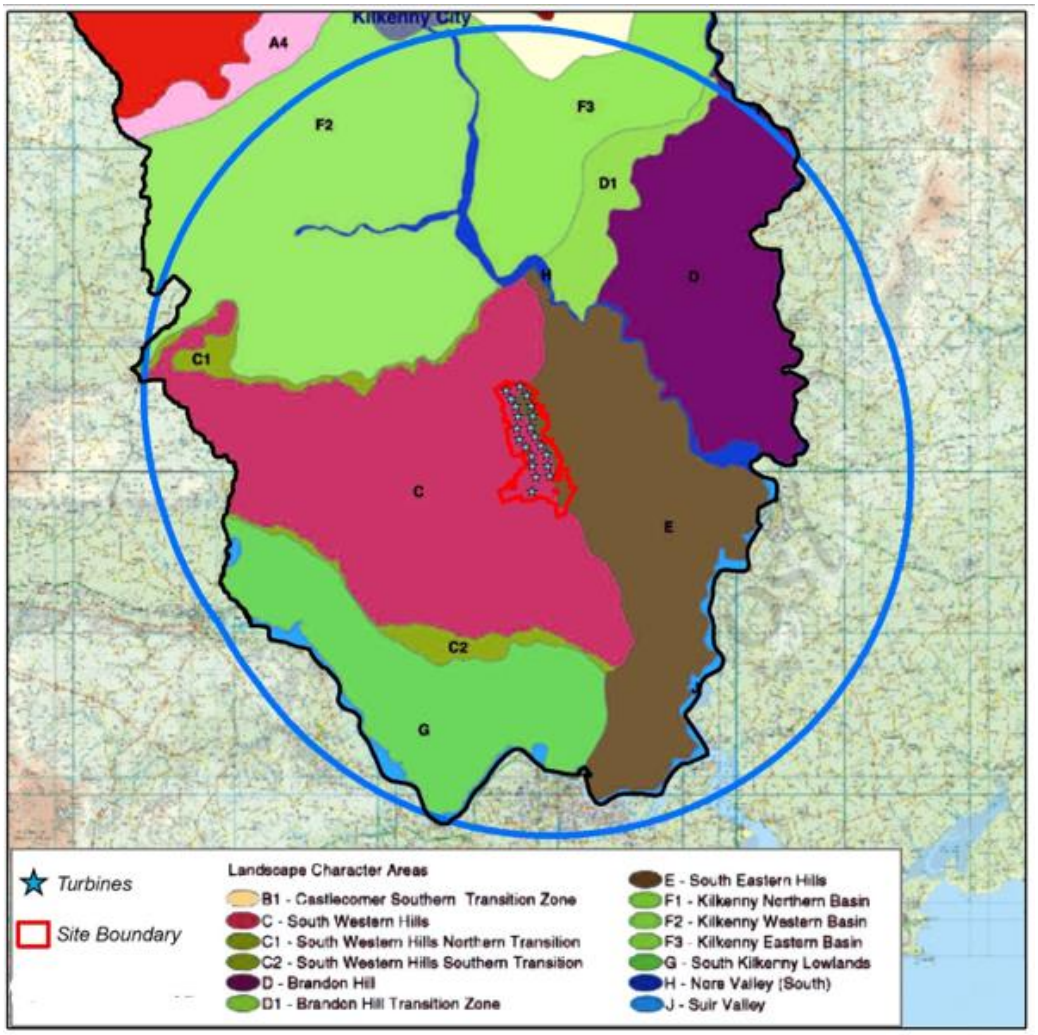


Figure 4-8: Extract of 'Map 13 – Landscape Character Areas' of the 2003 County Kilkenny Landscape Character Assessment

Chapter 8 of the CDP pertains to Heritage, with Section 8.2.10 relating to Landscape. Objective 8G of the CDP relate to landscape character *"To protect and sustainably manage the landscape character of County Kilkenny, having regard to the findings of the landscape character assessment and the development management standards set out in this chapter for the sustainable development of the county and appropriate conservation of its landscape character."*

The Renewable Energy Strategy for the Kilkenny CDP was prepared in conjunction with the Carlow-Kilkenny Energy Agency, having regard to the Sustainable Energy Authority of Ireland, Methodology for Local Authority Renewable Energy Strategies, 2013. The Strategy consists of the following four elements:

1. Policy context for all renewables
2. An analysis of the resource potential and existing operations,
3. An outline of development management guidelines including potential impacts and
4. Policies for their future development.

As mentioned previously, a Wind Energy Study was first carried out by CAAS (Environmental Services) Ltd., on behalf of Kilkenny County Council in 2003 - this has since been updated and revised. In line with the Wind Energy Development Guidelines 2006, a step by step approach was taken to identify the wind strategy policies areas. These polices included:

- Wind speed and viability in the area,
- An evaluation of the landscape,
- Identification of wind energy development strategy areas.[17]

Following the identification of 22 areas within the county that have sufficient wind speed and viability, each area was placed into one of the following three categories for wind farm development:

Wind Energy Development Category	
• Preferred	
• Open for consideration	
• Unsuitable	

Figure 4-9 below indicates the location of each category area. Castlebanny is identified as Area 18 'Open for Consideration'. Is states that "*this area has some heritage considerations but due to its location at a remove from centres of large populations,* ***windfarms developments may be acceptable"[18].*** in response to the potential for impacts, this EIAR has carried out assessments on cultural heritage in Chapter 15 and tourism in Chapter 5 Human Health and Population and has taken into account the potential impacts to Jerpoint Abbey as well as the South Leinster way (See Chapter 13 (Landscape and Visual Impact) and Chapter 15 (Cultural Heritage).

Area	LCA categorisation	Ridge lines/peaks	Settings/ backdrops	Tourism/ heritage	Existing wind farms	Adjoining county	Summary	Categorisation
(18) Castlebanny	On border of two areas; South Eastern Hills – none and South Western Hills – none	Castlebanny – 250m	Inistioge 6km Ballyhale 3km M9 6km	South Leinster Way Jerpoint Abbey	No	N/A	This area has some heritage considerations but due to its location at a remove from centres of large populations, windfarm development may be acceptable.	

Figure 4-9: Extract from Appendix J (Wind Energy Strategy of the Kilkenny CDP)

[17] https://www.kilkennycoco.ie/eng/Services/Planning/Development-Plans/Development_Plans_2014-2020/County-Appendices-for-printing.pdf

[18] https://www.kilkennycoco.ie/eng/Services/Planning/Development-Plans/Development_Plans_2014-2020/County-Appendices-for-printing.pdf

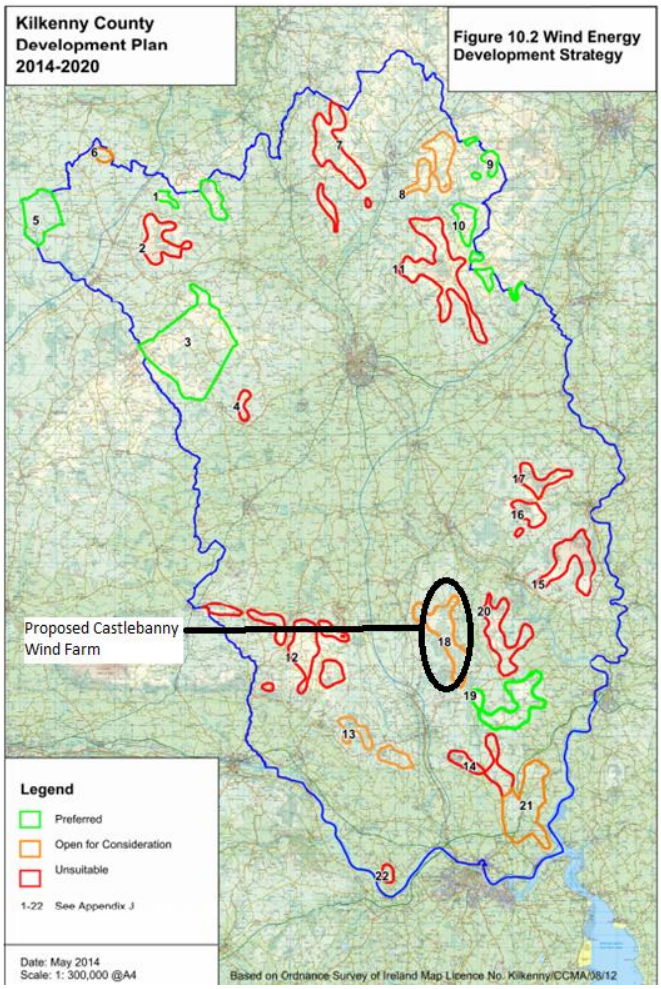


Figure 4-10: Wind Energy Development Areas Kilkenny County Development Plan 2014-2020.

Wind energy developments can be divided into four categories depending on their scale, as follows:

1. Individual wind turbines
2. Auto producer
3. Small scale wind developments (5 or less turbines and output less than 5MW)
4. Large scale wind developments

A matrix is set out below outlining which of the various category scales will be considered in each Wind Strategy area.

This Strategy area – Project Category	Preferred	Open for consideration	Unsuitable	Rest of County
Individual Turbine	√	√	√	√
Auto Producer	√	√	√	√
Small Scale	√	√	X	X
Large Scale	√	X	X	X

As mentioned the proposed Castlebanny Wind Farm site is located within an area deemed '*Open for Consideration'* .Within the Kilkenny CDP, the matrix under Section 10.5.4 – 'Wind Energy Policy Areas' indicates that only 'small scale wind farms' (5 turbines or less and output less than 5MW), 'Auto producer' or 'Individual turbines' will be acceptable in 'Open to Consideration' areas.

Based on consideration of the impacts of the proposed development and on the individual site characteristics, it is likely that the designation at the site could be altered from "Open for Consideration" to "Preferred". This is based on the issues highlighted in Figure 4-10, which may not necessarily reflect the actual site issues. It is considered that the issues marked in orange and red in the table would be adjusted, based on an assessment of the project characteristics with the criteria used for developing the wind energy strategy, see also discussion in Section 13.3.4.2 – Wind Energy in Chapter 13 Landscape and Visual Impact Assessment for further details. Based on the findings of the Visual Impact Assessments in Chapter 13, the specific site layout will not have the impact as predicted by the "Open for Consideration" assessment. Following review of the impacts of the Proposed Development against each of the headings (limited visibility from Inistioge and Ballyhale, neither of which are 'extensive population centres', barely visible from Jerpoint Abbey, < 3 km from adjacent wind development), it is likely that that the indicator for 'Settings/Backdrops' would likely be green, the indicator for 'Tourism/heritage' would likely be at least Orange and the indicator for 'Existing wind farms' would likely be green. In this context, it is considered that an assessment of the proposed project against the criteria used to develop the wind energy strategy would result in a designation as a "Preferred" area for wind energy development.

The limitation of 'Small Scale' wind farms is not compatible with current technology and economic support policies for wind energy development. The latest wind turbines typically have a generating capacity of 4 MW or greater. The Renewable Energy Support Scheme requires a competitive auction to determine which projects will be provided with a guaranteed price per unit energy. This will result in only the most cost-effective projects being successful and reducing costs for consumers. For these reasons, the limitations associated with 'Small Scale' wind farms in the CDP are not practical in the current environment.

As per Chapter 2 of this EIAR, the proposed wind turbines will have an assumed rated electrical power output of approximately 6 MW. This may vary as a result of the final turbine type, power output modelling and turbine development over the period leading up to construction. For the purposes of this EIAR, a rated output of between 5 and 6MW has been used to calculate the power output of the proposed wind farm (as specified for the worst case scenario in the relevant chapters), which would result in an estimated installed capacity of between 105 and 126 MW. Based on the above, the proposed wind farm has the potential to produce up to between 303,534 and 364,241 MWh (Megawatt hours) of electricity per year and could supply the equivalent of between 66,072 and 79,286 Irish households with electricity per year., as described in Chapter 2 (Description of the Proposed Development).

The provisions of the Kilkenny CDP 2014-2020 and the Wind Energy Development Strategy for County Kilkenny, are generally in favour of the development of renewable energy, including wind energy, and acknowledge the economic and environmental benefits which can be derived from same. In this regard particular consideration was given to the potential for the development of wind energy to aid in the achievement of Ireland's international, European and national commitments as regards the reduction of greenhouse gas emissions and the provision of energy from renewable sources. Accordingly, the Wind Energy Development Strategy advocates a strategic plan-led approach with regard to the siting of wind energy developments

in accordance with the recommendations of the 'Wind Energy Development, Guidelines for Planning Authorities' -2006.

It is worth nothing again that Area 18 -Open for Consideration, as stated in the Kilkenny CPD 2014-2020, *'has some heritage considerations but due to its location at a remove from centres of large populations, windfarms developments may be acceptable'.* It is commonplace for local authorities to determine applications where an 'open for consideration' designation applies whereby the applications are assessed in terms of their contribution towards the achievement of any zoning that is in place, the vision as set out by the CDP and their compliance and consistency with the overall policies and objectives of the CDP.

As referenced below Kilkenny County Council are currently in the process of preparing their draft CDP 2021-2027 and went on public display on the 22nd December 2020 and is discussed in detail in section 4.4.5.2 below. Landscape Character Areas were defined 15 years ago when there were no statutory targets for renewable energy production. There is now a requirement to generate 40% of our energy requirements from renewable resources by 2020 and 70% by 2030 which is unlikely to be achieved in Co. Kilkenny unless suitable areas with adequate wind resources are utilised. According to the report by the Chief Executive on the Pre-Draft Stage of the preparation of the CDP 2021-2027, its states that:

> *'the Wind Energy Strategy will be reviewed and will make provision for updated perspectives and policies as per national and Regional guidance, contained in the NPF and RSES'.*

In addition it further states that:

> *'a strategic approach will be taken to Wind Energy Development, and this should inform which areas are suitable or unsuitable for wind farm development.*[19]

We would like to note that the majority of the sites which were set out as 'preferred areas' for wind energy development in the current plan have been harnessed and optimised in relation to their potential capacity and constraints. Only a limited number of suitable sites are available for wind energy developments.

Chapter 13 (Landscape and Visual Impact) assesses the potential for the proposed project to cause any impacts, and contains further information on this topic, but it finds that, in general, there will be no significant impacts on the wider landscape and visual amenity of the region.

Finally, as demonstrated in the subsequent chapters of this EIAR, the proposed development complies with the development management standards and requirements relevant to areas deemed 'Open to Consideration' and is fully complaint with national, regional and local policies in particular it adheres to the current Wind Energy Development Guidelines 2006. Furthermore, the use of more than 5 no. turbines, and greater than 5MW output will significantly contribute towards the national targets by which Ireland is bound as described in Section 4.4.2. The proposed project will contribute between 105-126MW of clean renewable energy and will allow County Kilkenny to make a significant contribution towards reaching those targets.

[19] https://ourplan.kilkenny.ie/wp-content/uploads/2020/05/Pre-draft-CE-Report-2018-11.9.2018.pdf

In effect, the proposed development is in line with the Kilkenny County Development Plan 2014-2020, based on the considerations of the individual site characteristics.

4.4.5.2 Draft Kilkenny County Development Plan 2021-2027.

The Draft Kilkenny County Development Plan 2021-2027 went on public display on the 22nd December 2020[20]. This plan sets out KCC's policies and objectives for the proper planning and sustainable development of the City and County from 2021 to 2027. The plan is aligned with the Regional Spatial and Economic Strategy for the South East to give effect to the National Strategic Outcomes of the National Planning Framework and the National Climate Action Plan at a Local Level.

Chapter 11 of the draft plan sets of the policies and requirements for Renewable Energy and states that that strategic aim is ' *to generate 100% of electricity demand for the County through renewables by 2030 by promoting and facilitating all forms of renewable energies and energy efficiency improvements in a sustainable manner as a response to climate change"*

In setting targets for the plan, the Council consulted with the Three Counties Energy Agency (3CEA). The mainstay of the Council's strategy is the facilitation of appropriate renewable energy, including Wind, Solar, and Bio-energy. As a result, the draft plan includes a revised Wind Energy Strategy (Appendix K) as well as the required controls for the rollout of renewable energy developments throughout the county over the life of the plan.

The wind energy strategy builds on the strategies from previous development plans and having regard to Government policy generally and the Draft Revised Wind Energy Development Guidelines (DWEDG) December 2019. In accordance with the DWEDG requirements, the Planning Authority undertook a 4-step process for identifying suitable locations for wind energy generation. The aim of the exercise was to identify the key areas within the planning authority's functional area where there is significant wind energy potential and where, subject to criteria such as design and landscape planning, natural heritage, environmental and amenity considerations, wind energy development will be

a) acceptable in principle;
b) open for consideration for wind energy development;
c) not normally permissible.

As can be seen from Figure 4-11 below, the designation of the proposed site has been updated from "Open for Consideration" to "Acceptable in Principle", which indicates that this is the preferred area for a wind energy development, characterised by high wind speeds, and no significant conflict with environmental designations or sensitivities.

[20] https://consult.kilkenny.ie/en/consultation/kilkenny-city-and-county-draft-development-plan-2021-2027

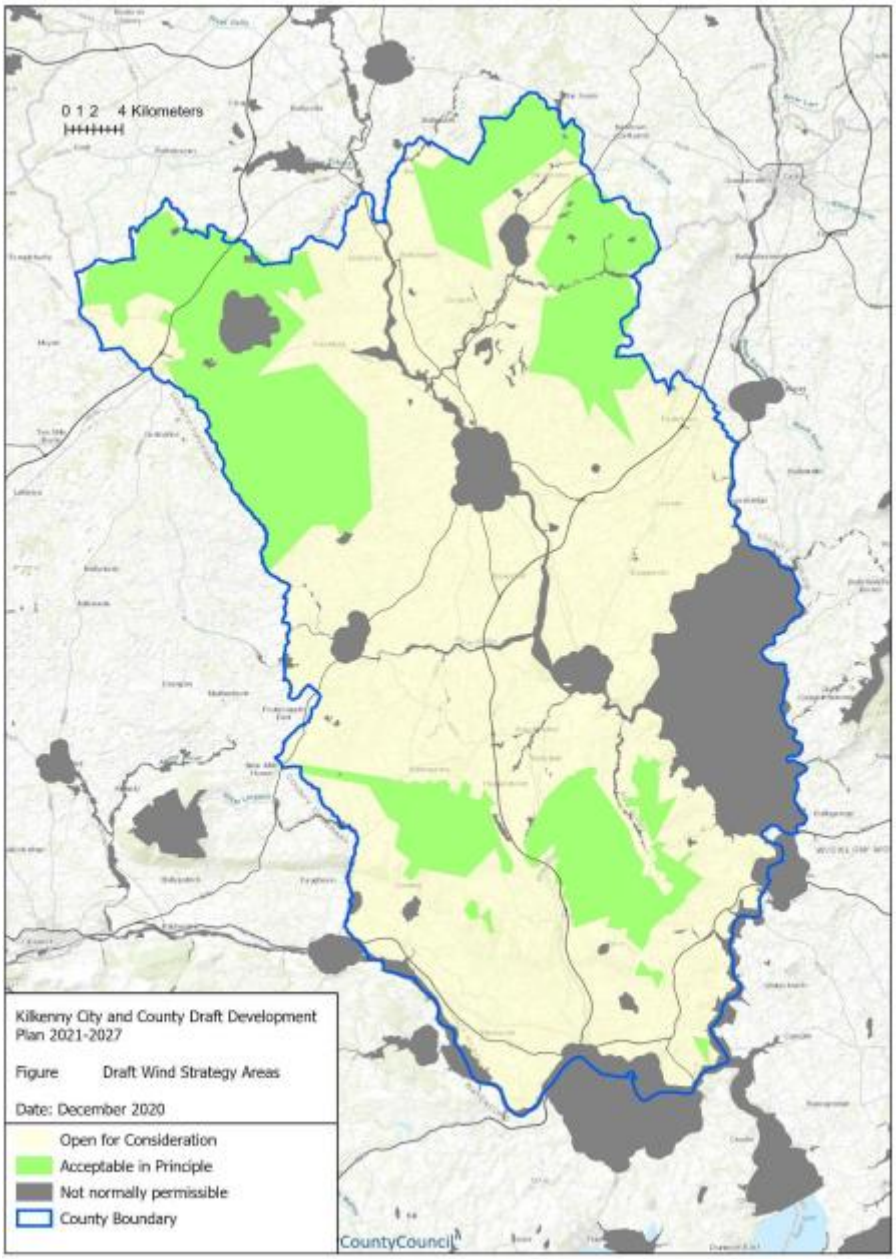


Figure 4-11: Draft Wind Energy Strategy Areas 2021-2027 (December 2020)

Wind energy developments can be divided into five categories in the wind energy strategy depending on their scale, as follows:

1. Individual wind turbines
2. Auto producer
3. Community Schemes (Compliant with the RED II Directive definition of community)
4. Small scale wind developments (5 or less turbines and output less than 5MW)
5. Large scale wind developments

A matrix is set out below outlining which of the various category scales will be considered in each Wind Strategy area.

Wind Energy Strategy Areas – Policy Approach			
This Strategy area – Project Category	Acceptable in Principle	Open for Consideration	Not normally Permissible
Individual Turbine	√	√	√
Auto Producer	√	√	√
Small Scale wind farm/Community led initiative	√	√	X
Large Scale	√	X	X

As demonstrated above this designation of acceptable in principle is cognisant of the high wind speeds in the area, the lack of areas of significant heritage designation, and the low impact on the development plans of adjoining counties. In addition, this upgrade in status supports the positive status of the proposed development with respect to International, European and National Policy and is in compliance with the Draft Kilkenny County Development Plan 2021-2027, subject to consideration of the individual site characteristics.

4.4.5.3 Waterford County Development Plan 2011-2017 (extended)

Section 11B of the Planning & Development Act 2000 (as amended) requires Local Authorities which have been subject to amalgamation, in this instance Waterford City & County Council, to commence the preparation of a development plan for the amalgamated administrative area within 12 months of the making of the Regional Spatial & Economic Strategy. Therefore, the Waterford County Development Plan (CDP) 2011–2017, has had "its lifetime extended and will remain in effect until a new City and County Development Plan is prepared."

While a Landscape Character Assessment has not yet been prepared for County Waterford, a Scenic Landscape Evaluation has been included in the Waterford County Development Plan. As the site of the proposed development is not within Waterford County, the main element within the Evaluation that are of relevance to the proposed development is that of Scenic Routes. According to '6.6(b) Policy with Regard to Scenic Routes' of Waterford County Scenic Landscape Evaluation:

> *"Scenic routes indicate public roads from which views and prospects of areas of natural beauty and interest can be enjoyed. Sightseeing visitors are more likely to be concentrated along these routes. The onus should be on the applicant for permission to develop in the environs of a scenic route, to demonstrate that there will be no obstruction or degradation of the views towards visually vulnerable features nor significant alterations to the appearance or character of sensitive areas."*

The landscape and visual impacts of the project including impact on scenic views in Co. Waterford are assessed in Chapter 13 of this EIAR.

Section 6.9 of Chapter 6 (Green Economy) of the Waterford CPD states that a range of opportunities exist in renewable energy for farmers, energy producers and businesses. In addition, the provision of renewable energy solutions will help attract globally mobile industries to County Waterford, as it provides a cheaper, cleaner solution that reduces the carbon footprint.

- **Policy ECD 15** - To facilitate appropriate renewable energy infrastructure and promote the use of renewable energy among businesses and households throughout Waterford County.

Chapter 8 sets out the policies and objectives for the Environment and Heritage and states that the provision and maintenance of sufficient infrastructure in the area of waste water treatment, water supply, flood prevention and control and **renewable energy,** sustainable transport and waste management are critical to ensuring the maintenance of a good quality environment.

Section 8.8 sets out the following policy in relation to Renewable Energy:

- **Policy ENV 10** - To facilitate and encourage sustainable development proposals for alternative energy sources and energy efficient technologies.
- Objective ENV 5 - It is an objective of the Development Plan:
  - To encourage, where appropriate, proposals for renewable energy developments and ancillary facilities;
  - To promote and facilitate wind energy production in the County in accordance with the County Wind Energy Strategy and the Wind Energy Guidelines produced by the Department of the Environment, Heritage and Local Government;
  - To facilitate, where appropriate, the development of small-scale hydroelectric power generation, in particular when developed in combination with other forms of energy infrastructure, such as wind farms; and
  - To support and encourage the appropriate development of the bio-energy sector and facilitate its development for energy production, heat storage and distribution.

Chapter 8 also sets out the policy in relation to the Landscape of County Waterford. These policies and objectives include:

Policy ENV 2 To support provisions of the National Landscape Strategy and provide for the sustainable management of all of County Waterford's landscapes including archaeological landscapes, coastal, upland, rural and peri-urban landscapes.

Policy ENV 3 To develop the Comeragh Area into a National amenity and to promote the heritage and recreational features of the area for all users while conserving its natural habitats, protected species, flora, fauna, archaeology and landscape, and as a sustainable area for the local community.

Policy ENV 4 The Council will assess all proposals for development in terms of the Scenic Landscape Evaluation map, the Development Management Standards (Chapter 10) and

the Rural Housing Design Guidelines (that will be prepared within one year of the adoption of the Plan).

Policy ENV 5 Development in areas outside of settlements, along the coast road (from Youghal to Cheekpoint) and in upland areas, will only be considered where such proposals do not have an adverse impact on the landscape and where they satisfy the criteria set out under the settlement strategy policy contained in Chapter 4 County Settlement Strategy

Objective ENV 1 To prepare a Landscape Character Assessment of County Waterford in accordance with National guidance on landscape from the Department of Environment, Heritage and Local Government.

Any potential landscape and visual impacts of the proposed project including impact on scenic views in County Waterford are assessed in Chapter 13 (Landscape and Visual Amenity) of this EIAR.

Chapter 10 of the CDP sets out the minimum standards to which new developments must comply to qualify for planning permission, it states that Wind farm sites in all areas that are close to the electrical transmission grid should be looked at favourably because they are more likely to be financially viable and have a reduced environmental impact through grid connection. Priority will be given to developments close to high capacity grid infrastructure.

A 'Renewable Energy Strategy[21] 2016-2030 has been prepared for Waterford. The Renewable Energy Strategy examines the renewable energy potential for the city and county and considers the strategic planning factors contributing towards the deployment of such renewable energy. It also highlights the importance of integrating renewable energy and land use planning. To this end, the Strategy recognises that there is a need to strengthen links between renewable energy and land use planning through County Development Plans, Strategic Development Zones and other local plans. The proposed development is complimentary to the overall objectives of the Waterford County Development Plan.

4.4.5.4 Wexford County Development Plan 2013-2019 (extended)

The Wexford CDP supports the development of sustainable renewable energy sources due to their role in reducing fossil fuel dependency and greenhouse gas emissions and facilitating the transition to a low carbon economy. The Plan promotes the development and use of renewable sources of energy such as wind, tidal and energy crops, as a sustainable solution. The Council will prioritise the development of renewable energy resources and the maximisation of electricity production from renewable sources where possible.

Objective EN11 - To promote and facilitate wind energy development in accordance with Guidelines for Planning Authorities on Wind Energy Development (Department of

[21]https://www.waterfordcouncil.ie/media/plans-strategies/renewable-energy-strategy/RenewableEnergyStrategy%202016-2030.pdf

Environment, Heritage and Local Government, 2006) and the Wind Energy Strategy which forms part of this Plan, subject to compliance with normal planning and environmental criteria and the development management standards contained in Chapter 18.

Volume 5 of the Wexford CDP sets out the Wind Energy Strategy for the County. The Wind Energy Strategy was prepared in accordance with the Guidelines for Planning Authorities on Wind Energy Development (Department of Environment, Heritage and Local Government, 2006). It identifies areas where wind energy development is Acceptable in Principle, Open for Consideration or Not Normally Permissible and outlines the criteria that apply to each of these areas. The objectives for wind energy development in County Wexford are set out below:

Objective WE01 -Ensure the security of energy supply by supporting the development of wind energy resources in County Wexford at appropriate scales and in appropriate locations, subject to compliance with normal planning and environmental criteria and the development management standards contained in Section 5.

Objective WE02 - Aim to achieve a target of 255 MW of wind energy, to enable County Wexford to make the initial steps toward a low carbon economy by 2020.

Objective WE03 - Facilitate wind energy development on appropriate sites in the county and work with the relevant agencies to encourage investment in research and technology associated with wind farms and other renewable energy technology.

Objective WE04 - Favourably consider proposals for the development of infrastructure for the production, storage and distribution of electricity through the harnessing of wind energy in appropriate sites and locations, subject to relevant policy, legislation and environmental considerations and the development management standards contained in Section 5.

Objective WE05 - Promote community consultation in proposed wind farm developments in accordance with Guidelines for Planning Authorities on Wind Energy Development (Department of Environment, Heritage and Local Government, 2006) and Best Practice Guidelines for the Irish Wind Energy Industry (IWEA, 2012).

Objective WE06 - Encourage the development of ecological enhancements or improvements that go beyond measures required to mitigate or compensate for damage from wind farm construction. Providing attractive and wildlife-rich habitats is a way to contribute to local and national biodiversity strategies and targets.

Objective WE07- Require an Appropriate Assessment to be carried out for proposals which have the potential to adversely affect the integrity of any Natura 2000 site. Having regard to Articles 6(3) and 6(4) of the Habitats Directive 92/43/EEC, where a proposed development will give rise to significant adverse direct, indirect or secondary impacts on Natura 2000 sites (either individually or in combination with other plans or projects), permission will only be granted where there are no alternative solutions and where there are imperative reasons of overriding public interest in favour of granting permission, including those of a social or economic nature.

Objective WE08 - Facilitate, where appropriate, small scale wind energy development projects in urban areas, industrial estates, business parks and small community-based

proposals, subject to compliance with normal planning and environmental criteria and the development management standards contained in Section 5.

Objectives WE09 - Consider the re-powering (by replacing existing wind turbines) and extension of existing wind farms. Applications on such sites will each be assessed on their merits and will be subject to the development management standards.

Objective WE10 - Facilitate onshore support infrastructure including landing locations for land-sea connections for appropriate offshore development, subject to relevant policy, legislation, environmental, landscape, amenity, seascape and technical considerations and subject to the development management standards contained in Section 5.

A Landscape Character Assessment has been prepared for County Wexford and this is incorporated into the current Wexford County Development Plan 2013-2019. Within the current Development Plan the council notes that it is "prudent to await the publication of the National Landscape Strategy before embarking on a comprehensive review of the LCA prepared for the Wexford County Development Plan 2007-2013. In the interim, the LCA has been redefined, principally to improve its legibility and practical application." Any potential landscape and visual impacts of the project including impact on scenic views in County Wexford are assessed in Chapter 13 (Landscape and Visual Amenity) of this EIAR. Similarly, the proposed development at Castlebanny is in keeping with the general aims of the Wexford County Development Plan.

4.4.5.5 Carlow County Development Plan 2015-2021

The Carlow CDP promotes and supports the development of renewable energy resources including in particular wind subject to the normal planning and environmental requirements[22]. It is the policy of Carlow County Council to:

E.D. Policy 12- Encourage and facilitate the development of 'green' industries, including industries relating to renewable energy and energy-efficient technologies, and waste recycling and conservation

Energy – Policy 1 – It is the policy of Carlow County Council to:

- Facilitate, promote and achieve a balance between responding to Central Government policy on renewable energy and enabling energy resources within the plan area to be harnessed in a manner which is in accordance with the principles of proper planning and sustainable development and in accordance with Article 6 of the Habitats Directive ;
- Facilitate the achievement of a secure and efficient energy supply and storage for County Carlow;
- Promote County Carlow as a low carbon county by 2021 as a means of attracting inward investment and to facilitate the development of energy sources which will achieve low carbon outputs;
- Raise awareness of the need to reverse fossil fuel dependency, to mitigate the effects of peak oil and reduce carbon emissions, to mitigate the effects of climate change.

A Wind Energy Strategy was prepared for the county in 2008. The key recommendation of the plan is that a more plan led approach to wind farm development should be adopted. This process

[22] http://www.carlow.ie/wp-content/documents/uploads/carlow-county-dev-plan-2015-2021.pdf

involves identifying areas, which are deemed suitable or unsuitable for wind energy development. The strategy suggests that large-scale wind farms should be encouraged to achieve efficient deployment of wind energy, and to avoid a proliferation of grid connections. Any potential landscape and visual impacts of the project including impact on scenic views in Co. Carlow are assessed in Chapter 13 (Landscape and Visual Amenity) of this EIAR. Due to the distance from the proposed site, In being a larger scale wind farm development, the Castlebanny Wind Farm will be in keeping with the objectives of the Carlow County Development Plan.

Any potential landscape and visual impacts of the proposed project including impact on scenic views in County Carlow are assessed in Chapter 13 (Landscape and Visual Amenity) of this EIAR.

4.4.5.6 Tipperary County Development Plans (extended)

The existing County Development Plans for both South Tipperary and North Tipperary have both had their lifetimes extended (11A Planning and Development Act 2000, (as amended)), and will remain in effect until a new Regional Spatial and Economic Strategy is made by the Southern Regional Assembly, thereafter a new Tipperary County Development Plan will be made.

In 2017 a variation was made (variation no. 2) to the South Tipperary Development Plan 2009. This variation was prepared with a view to establishing policies and objectives which will achieve a coherent approach to development on a countywide basis and replace the written statement of the South Tipperary Development Plan 2009.

Chapter 8 of the plan sets out the provisions for Climate Change, Energy and Flooding. The Core Aim is '*To ensure that the county continues to be a leader in addressing climate change through the facilitation of appropriately located renewable energy developments and through supporting energy efficiency in all sectors of the economy*[23]'.

In 2016, the Council prepared a Renewable Energy Strategy to provide a detailed planning framework for the development of renewable energy in the County. The Renewable Energy Strategy is set out in two volumes. Volume 1 sets out the main text of the Renewable Energy Strategy and contains out a revised Wind Energy Strategy. Volume 2 sets out the Strategic Environmental Assessment and Appropriate Assessment. The Tipperary Renewable Energy Strategy 2016 sets out planning policy and objectives for the development of renewable energy and should be read in conjunction with the County Development Plan (as varied). The Renewable Energy Strategy is set out as Appendix 6 of the Plan.

Policy RE2: It is the policy of the Council to facilitate new development which integrates with and respects the character, sensitivity and value of the landscape in accordance with the guidelines set out in the Tipperary Landscape Character Assessment 2016 and the policies as set out in the County Development Plan (as varied) and the Development Management standards set out in Chapter 10.

Appendix 1 of the Renewable Energy Strategy contains the Wind Energy Strategy, and its aim is to set out one integrated, comprehensive suite of policies for wind energy development in Tipperary. The following are the general wind energy policies:

> **TWIND 1**: It is the policy of the Council to support, in principle and in appropriate locations, the development of wind energy resources in county Tipperary. The Council

[23] https://www.tipperarycoco.ie/sites/default/files/ST%20Written%20Statement%20Dec%202017.pdf

recognises that there is a need to promote the development of 'green electricity' resources and to reduce fossil fuel dependency and greenhouse gas emissions in order to address the global issue of climate change, and to comply with European and International policies with regards to renewable and sustainable energy resources.

TWIND 2: It is the policy of the Council to ensure that all wind energy development in the county complies with the provisions of all applicable government legislation and guidance on wind energy development and renewable energy resources (and any review thereof).

TWIND 3: It is the policy of the Council that when assessing planning applications for wind energy development, to require compliance with the Wind Energy Development Guidelines, Guidelines for Planning Authorities (DoEHLG) 2006 or any revision thereof, and the policy and objectives of the County Development Plan (as varied).

Given its support for wind energy development, the policies of the Tipperary County Development Plan are in line with the proposed development.

4.5 PLANNING NEED FOR THE PROPOSED DEVELOPMENT

Section 4.4 of this chapter outlines the national policy that clearly drives the need for the type of development that is proposed and is under consideration in this EIAR. Of particular relevance is the Energy White Paper – Ireland's Transition to a low Carbon Energy Future, as well as the targets outlined by the Climate Action Plan 2019. Ireland faces significant challenges to meet its 2020 targets, its EU targets for renewable energy by 2030 and its commitment to transition to a low carbon economy by 2050. The proposed Castlebanny Wind Farm is critical to helping Ireland address these challenges as well as addressing the country's over-dependence on imported fossil fuels

It should be noted that there is a considerable economic benefit to the development of wind farms nationally. In the national context, Baringa published a report in October 2018 titled '70 by 30 - A 70% Renewable Electricity Vision for Ireland in 2030'. In the report Baringa analysed two different scenarios for the energy sector on the island of Ireland in 2030. 'Renewable Energy' is a scenario where the island of Ireland continues to be a world leader in renewable electricity and in wind and solar power in particular. Ireland achieves a renewable electricity target of 70% by 2030 in this scenario. 'Fossil Fuel' is a scenario where there is no further deployment of renewable generation after the 2020 target of 40% renewable electricity is met. In this scenario, Ireland still primarily relies on fossil fuels to generate electricity in 2030.

Baringa's '70 by 30' report demonstrated that 70% renewable electricity by 2030 in Ireland can be achieved at a net financial benefit to end consumers[24] . This report played an important role in influencing Ireland's renewable energy ambitions and in March 2019 the Irish government pledged a binding target of 70% renewable electricity by 2030. Further to this, both the Irish[25] and UK[26] governments have set a goal of net-zero emissions by 2050 and decarbonisation has also been made a primary goal in the strategies of key all-island stakeholders such as the

[24] https://www.iwea.com/images/files/70by30-report-final.pdf

[25] https://www.dccae.gov.ie/en-ie/climate-action/publications/Pages/Climate-Action-Plan.aspx

[26]https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law

Commission for Regulation of Utilities, Water and Energy (CRU) , the Utility Regulator in Northern Ireland , and the Transmission System Operators (TSOs) EirGrid and SONI .

The analysis shows that:

- Procuring system services from zero-carbon providers could reduce all-island power sector emissions by almost 2 million tonnes of CO_2 per year by 2030. This is equivalent to one third of total 2030 power sector emissions that could be avoided by transitioning to a Zero-Carbon Model.
- There are significant operational cost savings associated with sourcing all system services from zero-carbon sources, with up to €90m per year of savings by 2021, increasing to €117m per year by 2030, primarily from avoided fuel and carbon costs. They project an annual operational cost saving of €57m per year by 2030 if reserve requirements alone are met by zero-carbon technologies.
- There is a significant reduction in renewable curtailment if system operational constraints are met using zero-carbon service providers. In 2030, the analysis suggests a greater than 50% reduction in renewable curtailment from 8.1% to 4.0%. This reduction in the curtailment of zero-marginal cost renewables results in lower electricity generation costs as it displaces more expensive, typically fossil-fuelled, generators in the production of electricity.

Pöyry also published a report in March 2014 titled 'The Value of Wind Energy to Ireland'. The report stated that the sector could support 22,510 jobs in the construction stage and double the amount of existing jobs in the operational phase by 2030. It also projected an investment of €4.8 billion in the time period from 2020 to 2030. Specifically, in the case of Castlebanny, up to approximately 100 no. jobs will be supported during the construction phase and up to 1-2 no. jobs during the operational phase.

The proposed development will have several significant long-term and short-term benefits for the local economy including job creation, landowner payments, local authority commercial rate payments and a Community Benefit Scheme. In addition, during construction, additional employment will have been created in the region through the supply of services and materials to the development. In addition to this, there will also be income generated by local employment from the purchase of local services i.e. travel and lodgings.

Furthermore, a report published by Trinity College Dublin and the Economic Social Research Institute in 2014, outlined three future scenarios for the industry that could be pursued and stated that as many as 35,000 jobs could be generated by developing Ireland's wind energy sector further. The report entitled "An Enterprising Wind: An Economic Analysis of the Job Creation potential of the Wind Sector in Ireland" was jointly commissioned by Siemens and the Irish Wind Energy Association (IWEA). It suggests that an overall private sector investment of between €7 billion and €29 billion would be required, depending on the level of ambition pursued.

According to the study, if Ireland were to meet its current 2020 targets and install 4,000MW of wind energy, 8,355 new positions would be created, more than double the number of jobs that then existed in the sector. The report goes on to suggest that if Ireland were to build on the existing target and add an additional 4,000MW of onshore and offshore wind energy capacity for export, that over 17,000 jobs could be created and if 12GW of installed wind capacity were to be developed , there would be 35,275 new jobs created. The figures in the report are suggestions made in the report only.

The need for the proposed project is driven by the following factors:

1. A legal commitment from Ireland to limit greenhouse gas emissions under the Kyoto protocol to reduce global warming;
2. A requirement to increase Ireland's national energy security as set out in the Energy White Paper;
3. A requirement to diversify Irelands energy sources, with a view to achievement of national renewable energy targets and an avoidance of significant fines from the EU (the EU Renewables Directive);
4. Provision of cost-effective power production for Ireland which would deliver local benefits; and
5. Increasing energy price stability in Ireland through reducing an over reliance on imported gas.

The proposed development will produce energy from indigenous, renewable resources. As such, it will contribute towards international, EU, national, regional, and local policy regarding the reduction of dependence on fossil fuels, increased reliance on renewable energy and reducing emissions of GHGs. It will contribute towards national policies to increase wind electricity generation capacity in the country and assist in the exploitation of Ireland's renewable energy resources. It will also contribute to meeting the EU's challenging target of 32% renewable energy by 2030.

In addition, the proposed development is aligned with the objectives of RSES for the new Southern Region i.e. the objective to support the sustainable development of renewable wind energy (on shore and offshore) at appropriate locations and related grid infrastructure in the Region in compliance with national Wind Energy Guidelines. Finally, at local level, the proposed development is in line with and supports the policies of the Kilkenny CDP and is predominantly located in an area open for consideration in the Kilkenny County Development Plan 2014-2020.

While the current CDP stipulates a limit of 5 turbines and maximum capacity of 5 MW, the Draft County Development Plan 2021-2027 indicates that the proposed site is located in an area designated as 'preferred' for wind energy development. As demonstrated above this designation of acceptable in principle is cognisant of the high wind speeds in the area, the lack of areas of significant heritage designation, and the low impact on the development plans of adjoining counties. In addition, this upgrade in status supports the positive status of the proposed development with respect to International, European and National Policy and is in compliance with the Draft Kilkenny County Development Plan 2021-2027, subject to consideration of the individual site characteristics.

4.6 PROJECTS CONSIDERED IN CUMULATIVE 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.

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

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

The projects considered in relation to the potential for cumulative impacts and for which all relevant data was reviewed include those planning applications listed in Appendices 4-1 and 4-2, and relevant ongoing activities in the area, as described below.

For the purpose of the evaluation of potential cumulative impacts development has been taken to include:

- Any permitted electricity transmission developments, or proposed developments currently in the planning process, located within Kilkenny and surrounding areas of adjoining counties.
- Permitted or proposed developments with the potential for significant cumulative effects with the proposed development, e.g. major linear infrastructure development, such as proposed road development, windfarms, other Strategic Infrastructure Development (SID), or public utilities and services along the grid route corridor.

Section 4.3 above identifies the proposed, permitted and the constructed turbines within a 10 kilometre radius of the proposed development site. The cumulative impact of the proposed development in association with adjoining wind turbines has been assessed in the relevant sections of this report. The nearest existing wind turbine is approximately 575m from the proposed wind farm site entrance.

The review of the relevant local authorities planning registers documented existing and approved projects and planning applications pending a decision in the vicinity of the proposed wind farm site and the grid connection route, most of which relate to the provision and/or alteration of one-off rural housing and agriculture-related structures. These existing, approved and in-planning projects have also been taken into account in describing the baseline environment and in the relevant assessments. Details of all these developments in the wider area of the site are provided in Appendix 4-1.

4.7 CONCLUSION

There are significant International, European, National and Local policy supports for renewable energy technologies in the country. In October 2020, it was confirmed that Ireland yet again missed its targets for reducing greenhouse gas emissions as per the latest report from the Climate Change Advisory Council – 'Annual Review September 2020'[27].

2050 European targets mean that Europe's energy production will have to be almost carbon-free by that time, and while Ireland has come a long way in recent years to increase renewable energy generation, the targets are ever increasing. It is this commitment on energy and climate policy that justifies a clear need for renewable energy generation in Ireland. It is recognised that there are a range of renewable resources alternatives that could be explored to meet our International and European commitments however, onshore wind is recognised as being the most economically competitive and viable at this point in time.

Ireland is fortunate to have access to the lowest cost renewable electricity resources in the world. As a small island nation, the challenges are to deliver a secure supply of energy to meet our growing needs and drive economic prosperity, while making sure cost is to the forefront of

[27] http://www.climatecouncil.ie/media/CCAC_AnnualReview2020FINALWEB.pdf

decision-making, alongside reducing CO_2 emissions to protect the environment and limit the impact of climate change for future generations.

Ireland is one of the leading countries in its use of wind energy and is in third place worldwide in 2018 after Denmark and Uruguay. As mentioned previously the Irish government is ramping up its aspirations on renewables, aiming for 70% renewable electricity by 2030. Wind energy provides a clean, sustainable solution to our energy problems. It can be used as an alternative to fossil fuels in generating electricity, without the direct emission of greenhouse gases.

The benefits of wind power are considered to be many and these can be summarised as follows:[28]

- Wind energy releases no pollution into the air or water.
- Wind energy is both renewable and sustainable. The wind will never run out, unlike the earth's fossil fuel reserves (such as oil and gas).
- Adding wind power to the energy supply diversifies the national energy portfolio and reduces reliance on imported fuels.
- Wind turbines have a relatively small footprint. Although they can tower high above the ground, the impact on the land is minimal. The area around the base of the wind turbine can often be used for other purposes such as agriculture.
- Wind turbines are considered relatively low maintenance. A new wind turbine can be expected to last some time prior to any maintenance work needing to be carried out.
- Local and Economic Benefits. As well as attracting investment into Ireland, wind energy is also contributing to our national growth through paying taxes and is predicted to contribute a tax revenue of €1.8 billion by 2030[29]. Ireland saves money (over €1 billion in the last five years) on wind energy from cutting down on expensive fossil fuel imports. In 2014, wind energy alone saved us over €200m on fossil fuel payments.

A windfarm development at this location will produce energy from indigenous, renewable resources. As such, it will contribute towards international, EU, national, regional, and local policy regarding the reduction of dependence on fossil fuels, increased reliance on renewable energy and reducing emissions of GHGs. It will also contribute towards national policies to increase wind electricity generation capacity in the country and assist in the exploitation of Ireland's renewable energy resources and contribute to meeting the EU's challenging target of 32% renewable energy by 2030.

The need for the proposed project is driven by the following factors:

1. A legal commitment from Ireland to limit greenhouse gas emissions under the Kyoto protocol to reduce global warming ;
2. A requirement to increase Ireland's national energy security as set out in the Energy White Paper;
3. A requirement to diversify Irelands energy sources, with a view to achievement of national renewable energy targets and an avoidance of significant fines from the EU (the EU Renewables Directive);
4. Increasing energy price stability in Ireland through reducing an over reliance on imported fossil fuels;

[28] https://www.esb.ie/tns/education-hub/future-energy/wind-energy

[29] Wind Energy (esb.ie)

5. Provision of cost-effective power production for Ireland which would deliver local benefits

It is requested that the Planning Authority have regard to the national objectives to support wind energy development as part of the International, European, and National binding agreements to increase the use of renewable energy. The proposed development is compliant with the policies and objectives of the Kilkenny County Development Plan 2014-2020 and the Wind Energy Development Strategy, subject to the discussion on the 'Open to Consideration' status of the proposed site analysed in Section 4.4.5.1 above. It also complies with the RSES, and the Wind Energy Development Guidelines 2006. The proposed development is cognisant of the Draft Revised Wind Energy Development Guidelines (2019) and the policies and objective of the surrounding county development plans as described above.

In particular, with respect to the Kilkenny City and County Draft Development Plan 2021-2027, the change in the designation from "Open for Consideration" to "Acceptable in Principle" at the site of the proposed wind farm is supportive of the proposed project with respect to International, European and National policy. The proposed project will contribute towards achieving National and EU targets for renewable energy production and CO_2 emission reductions. The proposed development at this location is in compliance with the Draft Kilkenny County Development Plan 2021-2027, subject to consideration of the individual site characteristics.