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ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR) FOR THE PROPOSED CROAGHAUN WIND FARM, CO. CARLOW

VOLUME 2 – MAIN EIAR

CHAPTER 4 - POLICY

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4. POLICY

4.1 Introduction

This Chapter of the EIAR outlines current EU, national, regional and where relevant local policy and legislation relating to the proposed Croaghaun Wind Farm.

The Irish Planning Policy system is set within a hierarchical structure, as identified in Figure 4.1. National policy is informed by EU Directives, Planning Legislation, Ministerial Guidelines, Government Policy and Capital programmes.



Irish Planning System - An Overview Extract from the National Planning Framework - Ireland 2040

Figure 4-1:



International and European legally binding agreements to reduce the reliance on fossil fuels and to manage climate change internationally have been adopted into Ireland's National Energy Policy. This section of the EIAR outlines how these legally binding agreements are being facilitated through national energy and climate policy with a clear mandate to support onshore wind energy development within the state. The importance in complying with the national energy policy at a local level cannot be overstated if Ireland is to achieve its national renewable energy targets. The latest SEAI figures state that Ireland will not meet its 2020 renewable energy targets with renewable electricity production approximately 25% below the 40% national target (SEAI, 2019), indicating the need for increased renewable energy production. The following Chapter sets out how the proposed development complies with national and local energy policy and will contribute towards Ireland's national renewable energy targets.

4.2 International Global Policies

4.2.1 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. Its ultimate objective was to achieve "... stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system (United Nations, 2013) " There are 195 parties ratified to the Convention and these are subdivided into Annex I, Annex II, Annex B, Non-Annex I and Least Developed Countries.

The Framework Convention specifies the aim of developed (Annex I) parties stabilising their greenhouse gas emissions (carbon dioxide and other anthropogenic greenhouse gases not regulated under the Montreal Protocol) at 1990 levels, by the year 2000. The treaty did not set any limits or binding targets, instead, it provided a framework for negotiating specific international treaties ("protocols") that set binding limits on greenhouse gases. It does, however, require all parties in Annex 1 [Decision 3 CP.5] (of which the European Union 15 (EU-15) forms part of) to prepare and publish National Inventory Reports (NIRs) on emissions. The Environmental Protection Agency (EPA) is responsible for the preparation of Ireland's NIR.

The Conference of the Parties (COP) is the highest body of the UNFCCC and consists of environment ministers who have met annually since 1995 to assess progress in dealing with the issue of climate change. At the Paris climate conference (COP21) in December 2015, 195 countries adopted the first-ever universal, legally binding global climate deal. The agreement sets out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to well below 2°C above pre-industrial levels and to limit the increase to 1.5°C. Under the agreement, Governments also agreed on the need for global emissions to peak as soon as possible, recognising that this will take longer for developing countries and to undertake rapid reductions thereafter in accordance with the best available science.

The International Panel on Climate Change (IPCC) 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 will have to grow from 30% of global electricity at present to 80% by 2050 if we are to limit global warming to well below 2°C above pre-industrial levels in accordance with the COP 21 agreement. Former Minister Kelly remarked in 2015 that "As a nation we must do everything in our power to curb our emissions". In this regard the Government enacted the Climate Action and Low Carbon Development Act 2015 which provides for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a low carbon, climate resilient and environmentally sustainable economy.



4.2.2 Kyoto Protocol

In 1997, at one of the COPs, the Kyoto Protocol which set legally binding obligations for developed countries to reduce their greenhouse gas (GHG) emissions in two commitment periods was established.

The first commitment period (2008 - 2012) applied to emissions of six main greenhouse gases (carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF6)), and set targets for:

- A 5% overall reduction in the emission of greenhouse gases in developed countries.
- An average 8% reduction below 1990 levels within the EU.

The EU-15 and other European countries (some of which subsequently acceded to the EU) have individual GHG reduction and limitation targets under the Kyoto Protocol.

Together, these European countries committed to achieve an annual emission reduction of 456 Mt CO2equivalent (CO2eq) below 1990 levels over the period 2008 to 2012 (European Environmental Agency 2010).

Ireland's contribution was a limit of 13% above 1990 greenhouse gas emission levels which corresponded to an average limit of 62.8 million tonnes (Mt) of carbon dioxide equivalent (CO2eq) per annum during the period 2008–2012. Countries not fulfilling their obligations were forced to purchase carbon credits on an open market from compliant countries.

The second commitment period applies to emissions from 2013 - 2020. All members of the European Union have binding targets in the second commitment period.

The EU-27 countries have committed to reduce their GHG emissions by at least 20% by 2020 compared to 1990 levels and to increase this commitment to a 30% reduction if other major emitting countries agree to similar targets under a global climate agreement.

Developing countries do not have binding targets under the Kyoto Protocol, but are still committed under the treaty to reduce their emissions. Actions taken by developed and developing countries to reduce emissions include support for renewable energy, improving energy efficiency, and reducing deforestation.

One of the key mechanisms introduced under the Kyoto Protocol is the international emissions trading scheme which allows developed countries to trade their commitments. They can trade emissions quotas among themselves and can also receive credit for financing emissions reductions in developing countries.

The EU Emission Trading Scheme (ETS) came into operation on 1 January 2005 and was introduced to facilitate Member States achieve their commitments to limit or reduce greenhouse gas emissions in a cost-effective way. It is the largest such scheme in the world and allows participants to buy or sell emission allowances which means that emission cuts can be achieved at least at cost. The EU ETS is a 'cap and trade' scheme, in that it caps the overall level of emissions allowed but, within that limit, allows participants in the scheme to buy and sell allowances as they require.

These allowances are the common trading 'currency' at the heart of the scheme. One allowance gives the holder the right to emit one tonne of CO2 or the equivalent amount of another greenhouse gas (CO2eq).

The categories of activity covered by the EU ETS are set out in Annex 1 of the principal Directive (2003/87/EC) and the greenhouse gases to which the Scheme applies to are set out in Annex II of the same Directive.



While all six gases listed in Annex A of the Kyoto Protocol are included in Annex II, not all are in practical terms actually covered by the ETS and the listing of all in Annex II is perhaps a signal of the intention to extend the scheme in the future.

The Scheme operates in periodic cycles that have come to be known as 'phases' as the EU ETS scheme is open ended with no termination date specified. Phase 1 ran from 2005 - 2007 and was known as the commitment period, Phase 2 covered 2008 -2012 (the Kyoto Phase) and Phase 3 extends from 2013 – 2020 and this phase ties in with the EU Commissions end date of 31 December 2020 for its own reduction in greenhouse gases.

Further changes proposed for the ETS commenced in 2013 through Directive 2009/29/EC. In summary Member states, will no longer draw up National Allocation Plans (NAPs) - instead there will be a single EU-wide cap and allowances will be allocated on the basis of harmonised rules amongst other changes to the trading period etc.

Phase 4 will run from 2021-2030 and aims to improve the ETS as part of a revision to the ETS Directive concluded in 2018, to achieve the EU's 2030 emission reduction targets in line with the 2030 climate and energy policy framework and as part of the EU's contribution to the 2015 Paris Agreement (EU, 2019). The legislation governing the auctions of emission allowances required to be changed to take into account new rules agreed as part of the 2018 revision of the ETS Directive. The changes concern in particular the use of the common auction platform to monetise the allowances dedicated to the Innovation and Modernisation Fund. This phase will include a reduced emissions allowance at an annual rate of 2.2%, up from 1.74%, increasing each nation's need to cut emissions on an annual basis.

4.3 **EU Directives and Policies**

4.3.1 Directive on the Promotion of the use of Energy from Renewable Resources

The EU Directive on the Promotion of the Use of Energy from Renewable Sources (2009/28/EC) sets 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 iewing only positive impact on:

- security of energy supply •
- regional and local development opportunities
- rural development
- export prospects
- social cohesion
 - employment opportunities.

As part of this Directive, Ireland's overall national target for the share of energy from renewable sources in gross final consumption of energy in 2020 is 16% (increased from 3.1% in 2005). The sectoral components of the overall 16% target are detailed in Table 4.1, which outlines each form of renewable energy supply (RES). The current share of renewable energy in these components is also presented.



Table 4-1: Target and Current Share of Renewable Energy in Energy Sectors

Form of Renewable Energy Supply	Target Share (2020)	2017 Position (SEAI, 2019)	2018 Position (SEAI, 2020)	
Electricity (RES-E)	40%	30.1%	33.2%	
Heat (RES-H)	12%	6.9%	6.5%	
Transport (RES-T)	10%	7.45%	7.2%	

Source: SEAI (2020), Renewable Energy in Ireland 2020 Update

4.3.2 European 2020 Strategy for Growth

Europe 2020 is the EU's ten-year growth strategy which identifies five headline targets:

- 1. **Employment** 75% of the population aged 20 64 to be employed
- 2. Research and Development 3% of the EU's GDP to be invested in research and development
- 3. Climate Change and Energy Sustainability
 - A reduction in greenhouse gas emissions of 20% (or even 30%, if conditions are right)
 - 20% of energy from renewables
 - 20% increase in energy efficiency.
- 4. Education Reducing the rate of early school leavers to below 10% and at least 40% of 30 34-year olds completing third level educations
- 5. Fighting poverty and social exclusion at least 20 million fewer people in or at risk of poverty and social exclusion

In 2018, the renewable energy share (RES) in the final energy consumption of the EU was 18.9% compared to 8.5% in 2005 (European Commission, 2020). With binding national targets, growth in renewable energy has increased but significant improvements are still required to meet the overall 2020 target and beyond.

In a Renewable Energy Progress Report published by the European Commission (2019) the Commission notes "The EU is on track for reaching its renewable energy target for 2020.". However, seven Member States – of which Ireland is one, Luxembourg, the Netherlands, Belgium, France, Poland and Slovenia are currently projected not to meet their national binding targets in line with their average 2017-2018 indicative trajectory towards 2020 targets.

Ireland's mandatory national target is to supply 16% of its overall energy needs from renewable sources by 2020. This target covers energy in the form of electricity (RES-E), heat (RES-H) and transport fuels (RES-T). For RES-E alone, Ireland has set a national target of 40% by 2020 as outlined in the National Renewable Energy Action Plan (NREAP). Government policies identify the development of renewable energy, including wind energy, as a primary strategy in implementing national energy policy.



4.3.3 <u>European 2020 Indicators – Climate Change and Energy</u>

The 'Europe 2020 Strategy' is the EU's agenda for growth and jobs for the current decade. As stated above, the Europe 2020 Strategy targets on climate change and energy include:

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

These targets are also known as the '20-20-20' targets.

The EU Climate Action Progress Report (2019) provides a summary of the main statistical findings regarding the path to achieving the EU's emissions reduction target for 2020 and 2030.

In 2018, the EU as a whole had cut man-made GHG emissions by 23% compared with their 1990 levels.

In 2017, ten EU nations exceeded their annual emissions allowance including Ireland. In 2018 Ireland exceeded its annual emissions allowance by 12%, the second highest in the EU behind Malta at 27%. The 2019 report indicates that Ireland, Germany, Malta and Austria are likely to incur a net deficit of annual emissions allowances over the 2013-2020 period and are likely to incur penalties.

In relation to 2020 targets, projected GHG emissions based on Member States' existing policy measures shows the EU is on track to surpass its 2020 target, however, it will fall below the 2030 target of reduced GHG emissions by 40% if further measures and interventions are not taken.

4.3.4 2030 Climate and Energy Framework

In October 2014 EU leaders adopted the 2030 Climate and Energy Framework (European Commission, 2014) which was subsequently updated in 2018. The framework provides a long-term perspective beyond 2020 targets. The 2030 Climate and Energy Framework sets out three key targets for the year 2030:

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

Further to this the European Commission in 2016 published its 2030 emissions targets break down for each Member State. While the overall EU target is a reduction of 40% on 1990 greenhouse gas emissions by 2030, every Member State negotiates an individual target. Ireland will have to reduce its emissions by 30% relative to its 2005 emissions.

Ireland will have 4% one-off flexibility from emissions trading, at the highest end of the ranking. Ireland will have 5.6% flexibility from land use. This is a substantially larger margin than any other Member State except Latvia.



4.3.5 A Roadmap for Moving to a Competitive Low Carbon Economy in 2050

Looking forward beyond 2020, in compliance with the EC Energy Roadmap 2050, an EU target of at least 27% has been indicated as the share of renewable energy consumed in the EU in 2030. While the Department of Communications, Climate Action and Environment (DCCAE) is currently examining the potential for diversifying Ireland's renewable technology mix in the post-2020 period, the Department recognises that; "as a proven and cost effective technology, onshore wind will remain part of Ireland's generation portfolio out to 2030 and will help to meet Ireland's contribution to the binding EU-wide 2030 renewable energy target". The Roadmap has informed national policy and has influenced the Climate Action Plan (2019) which sets out actions to reduce climate change towards 2050.

4.3.6 Clean Energy for all Europeans Package (2019)

The EU, in 2016, decided to tackle the transition towards clean energy and a carbon-neutral economy by rewriting the EU's energy policy framework to facilitate this clean and fair energy transition. By providing a modern, stable legal environment and setting a clear and common sense of direction, the EU aim to stimulate the necessary public and private investment and bring European added value by addressing these challenges. As a package, the new rules will reinforce consumer rights, putting them at the heart of the energy transition and creating growth and green jobs in a modern economy. They will enable the EU to show leadership in the fight against climate change following the Paris Agreement.

The Clean energy for all Europeans package sets the right balance between making decisions at EU, national, and local level. Member States will continue to choose their own energy mix, but must meet new commitments to improve energy efficiency and the take-up of renewables in that mix by 2030. For example, the new rules on the electricity market, which have been adopted, will make it easier for renewable energy to be integrated into the grid, encourage more inter-connections and cross-border trade, and ensure that the market provides reliable signals for future investment. Member States are required to draft plans to prevent, prepare for and manage possible crisis situations in the supply of electricity in coordination with neighbouring Member States, and to enhance the role of the Agency for the Cooperation of Energy Regulators.

In December 2018, the recast Renewable Energy Directive 2018/2001/EU entered into force, as part of the Clean energy for all Europeans package, aimed at keeping the EU a global leader in renewables and, more broadly, helping the EU to meet its emissions reduction commitments under the Paris Agreement.

4.3.7 <u>Recast Renewable Energy Directive (RED2)</u>

In June 2018, an agreement was made in Europe between negotiators for the Commission, the European Parliament and the Council with regard to increasing renewable energy use in Europe. The new regulatory framework includes a binding renewable energy target for the EU for 2030 of 32% with an upwards revision clause by 2023. This agreement will help the EU meet the Paris Agreement goals. In terms of renewable energy production, the agreement has achieved:

- A new, binding EU renewable energy target of 32% by 2030, including a review clause by 2023 for an upward revision of the EU level target;
- Improved design and stability of renewable energy support schemes.

The revised renewable energy Directive 2018/2001/EU entered into force in December 2018.

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4.3.8 European Green Deal (December, 2019)

The European Green Deal is a growth strategy for the EU which aims to transform the EU into a fair and prosperous society, improving quality of life with 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 EU aim to do this by becoming climate-neutral by 2050.

With regard to the supply of clean, affordable and secure energy, the European Green Deal underlines the fact that in order to meet the EU's climate and sustainability goals, all sectors must increase their use of renewable energy and phase out fossil fuels.

The EU aim to increase the greenhouse gas emission reductions targets for 2030 to at least 50% and towards 55%, compared to 1990 levels, in order to achieve net-zero greenhouse gas emissions by 2050. A key principle for achieving this will be to develop a power sector based largely on renewable resources.

4.4 National Policies

National energy and climate policy is derived from the overarching European Policy which aims to unify the European Union in energy and climate goals. The following section sets out the relevant national policies which will influence the development of the country in the coming decades with respect to energy production, carbon neutrality and climate change mitigation.

These policies are supported by the latest Programme for Government (2020) 'Our Shared Future' which presents strong climate governance in rapidly reducing climate change in order to protect and improve public health and quality of life. The government are committed to rapid decarbonisation of the energy sector with an aim of providing the necessary actions to deliver national renewable electricity targets. These government ambitions support the ongoing generation of renewable energy from on-shore wind sources, as detailed in the following section.

4.4.1 <u>Climate Action and Low Carbon Development Act 2015</u>

The Climate Action and Low Carbon Development Act was published in January 2016 by the then Minister for Environment, Heritage and Local Government.

The Act sets out the national objective of transitioning to a low carbon, climate resilient and environmentally sustainable economy in the period up to and including the year 2050. The Act provides for a solid statutory foundation to the institutional arrangements necessary to enable the State to pursue and achieve the "national transition objective".

While there are no explicit targets set out within the Act itself, the legislation obliges the State to take into account 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 which will advise and make recommendations to the Minister for the Environment. The Climate Action and Low Carbon Development Act has paved the way for national policy support for renewable energy generation and the reduction in greenhouse gas emissions as set out in the following sections.



4.4.2 Project Ireland 2040: The National Planning Framework

As a strategic development framework, Project Ireland 2040: The National Planning Framework, demonstrates an approach that joins up ambition for improvement across the different areas of Irish life, bringing the various government departments, agencies, State owned enterprises and local authorities together behind a shared set of strategic objectives for rural, regional and urban development.

"The National Planning Framework is a planning framework to guide development and investment over the coming years.

It does not provide every detail for every part of the country; rather it empowers each region to lead in the planning and development of their communities, containing a set of national objectives and key principles from which more detailed and refined plans will follow."

The Framework sets out the key goals and objectives for the State, and central to this framework is the theme of *Realising Our Sustainable Future*. In particular, the Framework 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."

The NPF is supported by a series of National Strategic Outcomes which the Framework seeks to deliver. The purpose of the National Strategic Outcomes (NSOs) is to create a single vision, through a shared set of goals for every community across the country. The most pertinent outcomes in the context of the proposed renewable energy development are as follows:

National Strategic Outcome 3: Strengthened Rural Economies and Communities,

National Strategic Outcome 6: A Strong Economy Supported by Enterprise, Innovation and Skills,

National Strategic Outcome 8: Transition to Sustainable Energy.

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A series of National Policy Objectives (NPOs) were developed to set the context for regional and local planning policy in Ireland. In the context of the proposed development, the following NPOs are considered the most relevant:

Table 4-2: National Policy Objectives (NPOs) from Project Ireland 2040: The National Planning Framework	Table 4-2:	National Policy Objectives	(NPOs) from Project Ireland 2040: 1	The National Planning Framework
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Policy Objective	Description
National Policy Objective 15	Support the sustainable development of rural areas by encouraging growth and arresting decline in areas that have experienced low population growth or decline in recent decades and by managing the growth of areas that are under strong urban influence to avoid over-development, while sustaining vibrant rural communities.
National Policy Objective 21	Enhance the competitiveness of rural areas by supporting innovation in rural economic development and enterprise through the diversification of the rural economy into new sectors and services, including ICT based industries and those addressing climate change and sustainability.
National Policy Objective 23	Facilitate the development of the rural economy through supporting a sustainable and economically efficient agricultural and food sector, together with forestry, fishing and aquaculture, energy and extractive industries, the bio-economy and diversification into alternative on-farm and off-farm activities, while at the same time noting the importance of maintaining and protecting the natural landscape and built heritage which are vital to rural tourism.
National Policy Objective 52	The planning system will be responsive to our national environmental challenges and ensure that development occurs within environmental limits, having regard to the requirements of all relevant environmental legislation and the sustainable management of our natural capital.
National Policy Objective 54	Reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions.
National Policy Objective 55	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.

Section 1.2: Making the Vision a Reality, recognises the need for new energy systems and transmission grids in order to deliver a more distributed, renewable focused national energy system in order to harness the potential from wind, wave and solar energy sources.

"The National Climate Policy Position establishes the national objective of achieving transition to a competitive, low carbon, climate-resilient and environmentally sustainable economy by 2050.

This objective will shape investment choices over the coming decades in line with the National Mitigation Plan and the National Adaptation Framework. New energy systems and transmission grids will be necessary for a more distributed, renewables-focused energy generation system, harnessing both the considerable on-shore and off-shore potential from energy sources such as wind, wave and solar and connecting the richest sources of that energy to the major sources of demand."



With regard to planning and investment for rural locations, Section 5.4: Planning and Investment to Support Rural Job Creation, recognises the key role of energy production in assisting in the rejuvenation of rural towns and villages to create and sustain vibrant rural communities.

"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. In planning Ireland's future energy landscape and in transitioning to a low carbon economy, the ability to diversify and adapt to new energy technologies is essential. Innovative and novel renewable energy solutions have been delivered in rural areas over the last number of years, particularly from solar, wind and biomass energy sources."

4.4.3 Project Ireland 2040: National Development Plan 2018 - 2027

The National Development Plan 2018-2027 (NDP) published in February 2018, in tandem with the National Planning Framework (NPF), seeks to drive Ireland's long term economic, environmental and social progress over the next decade, in accordance with the spatial planning context of the NPF.

The key role of the NDP is to set out the updated configuration for public capital investment over the next 10 years in order to achieve the National Strategic Outcomes as set out within the NPF. The NDP outlines a number of key energy initiatives, that set out to diversify our energy resources, and to assist in the transition towards a decarbonised society.

The NDP further emphasises National Strategic Outcome 8: Transition to Sustainable Energy, noting that:

"Ireland's energy system requires a radical transformation in order to achieve its 2030 and 2050 energy and climate objectives. This means that how we generate energy and how we use it, has to fundamentally change. This change is already underway with the increasing share of renewables in our energy mix and the progress we are making on energy efficiency.

Investment in renewable energy sources, ongoing capacity renewal, and future technology affords Ireland the opportunity to comprehensively decarbonise our energy generation. By 2030, peat and coal will no longer have a role in electricity generation in Ireland. The use of peat will be progressively eliminated by 2030 by converting peat power plants to more sustainable low-carbon technologies."

In achieving a Low-Carbon, Climate Resilient Society, the NDP outlines a New Renewable Electricity Support Scheme to support up to 4,500 megawatts of additional renewable electricity by 2030. It is considered that such schemes, in conjunction with greater investment in renewable energy, diversity of supply, and increased utilisation and adoption of electricity storage, will significantly assist in promoting a low-carbon, less energy intensive supply.

4.4.4 Climate Action Plan (2019)

The Government published a Climate Action Plan (CAP) in June 2019. The CAP resulted from the Irish Government declaring a climate and biodiversity emergency on 9th May 2019 and the need for immediate actions and mitigation. The CAP identifies how Ireland will achieve its 2030 targets for carbon emissions throughout various sectors with a number of actions.



A selection of these relevant to the Croaghaun Wind Farm are listed below:

The CAP sets out an objective to more than double Ireland's onshore wind energy capacity to 8.2GW by 2030 in order to meet new renewable energy targets and reduce emissions.

The CAP states that:

"The analysis presented in this Plan shows that it is not only technically feasible to meet our 2030 EU target, but that it is also economically achievable. The majority of the required abatement to 2030 could be achieved by deploying measures that are, over their life-time, either cost-neutral or result in net savings to society."

Key actions identified for electricity include:

- Increase reliance on renewables from 30% to 70% adding 12GW of renewable energy capacity (with peat and coal plants closing).
- Put in place a coherent support scheme for micro-generation with a price for selling power to the grid.
- Open up opportunity for community participation in renewable generation as well as community gain arrangements.
- Streamline the consent system, the connection arrangements, and the funding supports for the new technologies on and offshore.

The following actions are of importance

- Action 2: Establishment of Climate Action Delivery Board
- Action 4: Publish the Climate Action (Amendment) Bill 2019
- Action 15: Implement National Planning Framework
- Action 17: Ensure that ESB Networks and EirGrid plan network and deliver on connecting renewable energy sources to meet the 2030 70% RES-E target.
- Action 18: Facilitate additional hybrid connections (e.g. solar/wind/batteries) operating in the electricity market to increase RES-E penetration
- Action 19: Ensure that the next phase of renewable connection policy is fit for purpose to deliver on renewable energy targets and community projects, and report annually on the timeliness of grid connection
- Action 21: Ensure that updated planning guidelines for onshore wind are published in 2019
 - Action 24: Facilitate very high penetration of variable renewable electricity by 2030 (both SNSP and average) through system services and market arrangements

Action 28: Design and implement the Renewable Energy Support Scheme (RESS). Increase the volumes and frequencies of RESS auctions to deliver on the 70% renewable electricity target by 2030 ensuring an appropriate community/enterprise mix to achieve an efficient delivery of renewables.

• Action 29: Ensure that 15% of electricity demand is met by renewable sources contracted under Corporate PPA's



The policies and objectives of the CAP are reflected in the Draft National Energy & Climate Plan (NECP) 2021-2030 which was submitted to the European Commission in December 2018. The NECP was prepared to incorporate all planned policies and measures that were identified up to the end of 2019 and which collectively deliver a 30% reduction by 2030 in non-ETS greenhouse gas emissions (from 2005 levels). The NECP was drafted in line with the current EU effort-sharing approach, before the Government committed to its higher level of ambition, and therefore does not reflect this higher commitment. Further interactions of the NECP will reflect the current government's stronger climate governance.

4.4.5 Ireland's Greenhouse Gas Emission Projections 2019 - 2040

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 EPA publishes greenhouse gas emission projections on an annual basis and submits emission projections to the Commission as required under Monitoring Mechanism Regulation 525/2013.

The EPA's publication entitled *Ireland's Greenhouse Gas Emission Projections (2019)* provides an updated assessment of Ireland's projected greenhouse gas emissions out to 2040 which includes an assessment of progress towards achieving its emission reduction targets to 2020 and 2030 set down under the EU Effort Sharing Decision (Decision No 406/2009/EC). Ireland's 2020 target is to achieve a 20% reduction of non-Emission Trading Scheme (non-ETS) sector emissions (i.e. agriculture, transport, the built environment, waste and non-energy intensive industry) on 2005 levels with annual binding limits set for each year beyond 2020. New 2030 targets for EU Member States were adopted by the European Council in 2018. Irelands 2030 target under the Effort Sharing Regulation is a 30% reduction of emissions compared to 2005 levels by 2030. There will be binding annual limits over the 2021-2030 period to meet that target.

During its operation, the estimated 107GWh of electricity produced by the proposed Croaghaun Wind Farm would be sufficient to supply approximately 25,500 Irish households with electricity per year, based on the average Irish household using 4.200 MWh of electricity (this figure is available from the March 2017 CER Review of Typical Consumption Figures Decision). Thus, this energy will be used to offset the same amount of energy that would otherwise be generated from burning of fossil fuels at power stations.

It is estimated that approximately 98,725 tonnes of CO2 emissions per annum will be offset due to the proposed Croaghaun Wind Farm. As a result, the operational stage, of the wind farm will have a significant long-term positive impact on air quality and climate change in terms of complying with? policy and legislation at a local, regional, national and international level. Further details relating to the positive effects of the proposal on air quality and climate change are included in Chapter 6 of this EIAR.

4.4.6 <u>Climate Action and Low Carbon Development (Amendment) Bill 2020</u>

The Climate Action and Low Carbon Development (Amendment) Bill is piece of legislation which commits in Ireland, in law, to move to a climate resilient and climate neutral economy by 2050. 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. This Bill will drive implementation of a suite of policies to help us achieve this goal.

The Bill includes for a system of successive 5-year economy-wide carbon budgets, which will outline a ceiling for total greenhouse gas emissions. A requirement is included to revise the Climate Action Plan on an annual basis and prepare a National Long Term Climate Action Strategy at least every decade.



The Bill also requires for all Local Authorities to prepare individual Climate Action Plans which will include both mitigation and adaptation measures, representing a mandate for Local Authorities to adapt to climate change.

4.4.7 National Policy Conclusion

The development of the Croaghaun Wind Farm is in support of national policy as set out above. The project supports the enhancement of the competitiveness of rural areas and facilitates the development and diversification of the rural economy by supporting the energy sector and increasing the share of renewables in Ireland's energy mix.

The proposed development contributes to the nation's target increase of renewable energy from 30% to 70% by 2030 and supports the doubling of onshore wind energy in Ireland by 2030 as set out in the Climate Action Plan.

The project supports national targets of climate change mitigation and reduction in greenhouse gas emissions where significant focus has been set out in the recent Climate Action and Low Carbon Development (Amendment) Bill 2020. The ambitious new programme for government is prioritising carbon neutrality and renewable energy generation. In light of this, it is important for the nation to rely on proven technologies such as on shore wind in order to meet the near-term objectives, as well as long-term objectives.

The project promotes the generation of renewable energy at appropriate locations and supports the achievement of a low carbon economy by 2050. It is therefore considered that the Croaghaun Wind Farm is in line with national policy and supports the achievement of national energy and sustainability targets.

4.5 Regional Policies

4.5.1 Southern Regional Spatial & Economic Strategy

The Southern Regional Spatial & Economic Strategy (RSES) came into effect on 31st January 2020. The RSES sets out a strategy to implement the NPF at a regional level. The RSES sets out a strategic vision which includes actions to mitigate against climate change. The RSES recognises the urgency to transition to a low carbon future, accelerate the transition towards low carbon economy and increase the use of renewable energy sources across the key sectors of electricity supply, heating, transport and agriculture in order to safeguarding and enhance the region's environment through sustainable development, prioritising action on climate change across the region, driving the transition to a low carbon and climate resilient society. The RSES states the following in relation to wind energy:

"Wind energy is currently the largest contributor of renewable energy and it has the potential to achieve between 11-16GW of onshore wind and 30GW of offshore wind by 2050 (SEAI, 2016). The sector can make a significant contribution to meeting national energy demands while attaining our energy and emissions targets for 2020 and beyond."

The RSES includes a range of policy objectives which support the development of renewable energy projects such as the Croaghaun Wind Farm Project.



Objectives include the following:

Table 4-3: Regional Spatial and Economic Strategy Objectives

Policy	Description
RPO 50	It is an objective to further develop a diverse base of smart economic specialisms across the rural Region, including innovation and diversification in (among other things) renewable energy as a dynamic driver for the rural economy.
RPO 56	The RSES recognises the urgency to transition to a low carbon future and it is therefore an objective to accelerate the transition towards low carbon economy and circular economy through mechanisms such as the Climate Action Competitive Fund;
RPO 95	It is an objective to support implementation of the National Renewable Energy Action Plan (NREAP), and the Offshore Renewable Energy Plan and the implementation of mitigation measures outlined in their respective SEA and AA and leverage the Region as a leader and innovator in sustainable renewable energy generation.
RPO 99	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.

The development of the Croaghaun Wind Farm will aid in meeting the objectives set out in the RSES including diversification of the rural economy, actions against climate change and the sustainable development of wind energy at an appropriate location.

4.6 Local Policy

4.6.1 Carlow County Development Plan 2015 - 2021

The Carlow County Development Plan (CDP) sets out Carlow County Council's policies and objectives for the proper planning and sustainable development of the County. The CDP details the policies relevant to the development of the Croaghaun Wind Farm project including policies and objectives for renewable energy and climate change.

The CDP is in support of national policies regarding renewable energy production. E.D. Policy 12 of the CDP states that it is a policy of Carlow County Council to:

"Encourage and facilitate the development of 'green' industries, including industries relating to renewable energy and energy-efficient technologies, and waste recycling and conservation"

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In relation to wind energy development section 6.3.1 of the CDP states that of the renewable forms of energy generation, wind is the most advanced with the highest penetration on the Irish energy grid. Furthermore, section 6.3.1 states that County Carlow has the potential to absorb additional wind energy developments and make a contribution to national (renewable energy) targets.



Energy Policy 5 of the CDP states that it is the policy of Carlow County Council to:

"Promote and facilitate wind energy development in accordance with current Wind Energy Development Guidelines by the DoECLG and best international practices and standards and subject to compliance with normal planning and environmental criteria and the development management standards"

In this regard, the CDP states that site suitability is an important factor in determining the suitability of wind farms (turbines), having regard to possible adverse impacts associated with for example, residential amenities, landscape, including views or prospects, wildlife, habitats, designated sites, protected structures or bird migration paths, public rights of way and compatibility with adjoining land uses.

Section 6.9 of the CDP sets out policy regarding Climate Change. This section states that Carlow's support of renewable technologies will reduce dependence on non-renewable energy sources. Energy Policy 13 of the CDP states that it is a policy of Carlow County Council to:

"Encourage and favourably consider proposals for renewable energy developments and ancillary facilities in order to meet national, regional and county renewable energy targets and to facilitate a reduction in CO2 emissions and the promotion of a low carbon economy, subject to compliance with development management standards and compliance with Article 6 of the Habitats Directive"

In relation to tourism, the CDP sets out principle aims for the development of a sustainable tourism sector for County Carlow. Objectives include the following:

- To maximise the potential of tourism as a 'pillar of economic growth' this will contribute to the balanced economic development of the County and the tourism industry in the South East region
- To promote and support rapidly growing tourism sectors such as adventure, rural and eco-tourism within Carlow
- To promote and improve tourism infrastructure throughout County Carlow including tourist accommodation, amenities, access, signposting and car parking facilities

Furthermore, with respect to recreational walking, Carlow County Council will seek to improve access to the excellent walking product in the county, through the development of looped walks in co-operation with relevant Stakeholders (Section 8.4.1 of the CDP).

As part of the proposed Croaghaun Wind Farm, recreation facilities will be developed including a new looped walk and the upgrade of existing forestry tracks for recreational use. This aims to improve recreational amenity in the area and provide greater tourism potential for County Carlow, in line with CDP policy.

4.6.2 Wind Energy Strategy for County Carlow

Appendix 5 of the Carlow County Development Plan 2015-2021 sets out the Wind Energy Strategy for the County. The strategy sets out development standards for wind energy development in line with the Department of the Environment, Heritage and Local Government's Wind Energy Development Guidelines 2006, including consideration of visual impact, biodiversity, noise and amenity.



The strategy then sets out environmentally sensitive areas along with areas throughout the county with capacity for wind energy development in relation to wind speed, proximity to dwellings, substrate conditions, and access to the national grid.

The strategy identifies Kilbrannish Hill, Tinnamogney and Greenoge as being 'Open for Consideration' for wind energy development. The Wind Energy Strategy states the following in relation to these areas:

"In these instances, applications for planning permission will be treated on their merits. It is likely that such instances may arise only in the Mount Leinster/ Blackstairs area, given the requirement for adequate wind speeds."

Although the entirety of the proposed Croaghaun Wind Farm does not fall within the area marked as 'Open to Consideration', there is no apparent logical rationale for these polygons. The landscape character-based recommendations as set out in Table 2 of the strategy indicates that development of wind farms in mountain/moorland areas which correspond to the Mount Leinster/ Blackstairs Landscape Character Area, can accommodate wind farms of large spatial extent with generally no restrictions on height (further analysis of the visual impact of the proposed development is provided in Chapter 15: Landscape and Visual), in line with recommendations of the Wind Energy Development Guidelines. It is important to note that a wind farm was previously granted on this site and there is an establishes wind farm constructed adjacent to the proposed site and permission in place for an additional wind turbine in the adjacent area also. This establishes the precedent of wind farms in this area.

4.6.3 Local Policy Conclusion

The development of the proposed Croaghaun Wind Farm project is considered to be in line with local policy. The CDP supports the facilitation and development of renewable energy projects, citing the potential for the County to absorb additional wind energy development in order to support the achievement of national targets for renewable energy and greenhouse gas emission reductions.

The Wind Energy Strategy for the County focuses on the provisions as set out in the Wind Energy Development Guidelines 2006 and indicates site suitability having regard to technical requirements, environmental impacts and compliance with the habitats directive. Following a review of sensitivities, the Wind Energy Strategy identifies areas throughout the County which are considered suitable for wind farm development. The proposed Croaghaun Wind Farm is located in an area identified as 'Open for Consideration'. The suitability of the Croaghaun site for wind farm development is demonstrated throughout this EIAR and is considered to be in line with the provisions of the Carlow County Development Plan.

The proposed development also supports the provision of tourism and recreation facilities as set out in the CDP. A looped walkway and improved forestry tracks for hill walkers will be provided in support of the objectives of the CDP.



4.7 Other Relevant Policies and Guidelines

4.7.1 <u>Department of the Environment, Heritage and Local Government – Wind Energy Development –</u> Planning Guidelines 2006

The Wind Energy Development Planning Guidelines (2006) published by the Department of the Environment, Heritage and Local Government (DoEHLG) offer advice to planning authorities assessing planning applications for wind farm developments. The guidelines set out criteria which assist in the identification of suitable locations for wind energy development. They are also of assistance to developers and the wider public in considering wind energy development.

4.7.1.1 Draft Revised Wind Energy Development Guidelines (December 2019)

The Draft Revised Wind Energy Development Guidelines were published in December 2019 for public consultation. The guidelines will supersede the 2006 guidelines once public consultation is complete and the document is formally adopted by the government. The revised guidelines aim to apply consistency across all Renewable Energy Strategies with regard to Development Management objectives. The key points of note include:

- Revised set back distances. 4 times the tip height is to be applied between turbines and the nearest point of the curtilage of any residential property with a mandatory minimum set back distance of 500 meters to be applied.
- Revised noise limits provide a higher level of protection to nearby residential receptors. The draft guidelines propose a noise limit, referred to as a Relative Rated Noise Limit in the range of 35 43 dB(A), while not exceeding the background noise level by more than 5dB(A) with an upper limit of 43 dB(A).
- The draft guidelines confirm a policy of zero shadow flicker at nearby existing dwellings or other affected properties.
- Wind energy developers will have to provide an opportunity for the proposed development to be of enduring economic or social benefit to the local community, whether by facilitating community investment/ ownership in the project, other types of benefits/ dividends, or a combination of the two.
- The revised guidelines encourage the implementation of a standardised operational period of 30 years for wind energy developments across the country.

Croaghaun Wind Farm has been designed in accordance with the current statutory Section 28 Ministerial Guidelines, Wind Energy Development Guidelines 2006. We are aware that these guidelines are subject to targeted review and therefore the design of the project has had regard to the Draft Revised Wind Energy Development Guidelines, published by the Department of Housing, Planning and Local Government (December 2019).

In this regard the proposed layout has achieved a separation distance of approximately 980m between turbine locations and the closest dwellings. The Draft Revised Guidelines 2019 outlines a minimum 500m distance or 4 times tip height set back to the nearest point of the curtilage of a residential property. The proposed development is therefore in compliance with this provision.



4.7.2 Irish Wind Energy Association – Best Practice Guidelines for the Irish Wind Energy Industry

The 'Best Practice Guidelines for the Irish Wind Energy Industry' were published by the Irish Wind Energy Association in 2008 and the Guidelines were updated in 2012. These guidelines are to encourage responsible and sensitive wind farm development, and to provide assistance and recommendations for those developing onshore wind energy projects in Ireland.

The approach to the development of the proposed Croaghaun Wind Farm is in line with the 2012 IWEA guidelines in that it takes account of relevant planning and environmental legislation, requirements for environmental impact assessment, provides an environmentally sensitive design, takes account of best practice health and safety and provides quality public engagement in order to develop a responsible and sensitive wind energy project.

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

The Best Practice Principles in Community Engagement and Community Commitment were published by IWEA in 2013. 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 5MW 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 the publication is to ensure that the view of local communities is taken on board at all stages of development and that local communities share in the benefits of the development. Throughout the consultation process for the Croaghaun Wind Farm Project specific regard has been taken of this guidance document. Details of the public and stakeholder consultation process carried out throughout the development of the project is detailed in Chapter 5 – EIA Scoping, Consultation and Key Issues.

4.7.4 <u>Code of Practice for Wind Energy Development in Ireland – Guidelines for Community Engagement</u>

In December 2016, the Department of Communications, Climate Action and Environment (DCCAE) issued a code of practice for wind energy development in relation to community engagement.

This Code of Good Practice:

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

The guidance states that the methods of engagement should reflect the nature of the project and the potential level of impact that it could have on a community. Throughout the consultation process the applicant has had regard to the Code of Practice for Wind Energy including the practical steps that wind farm promoters should comply with in engaging with communities as set out in this Guidance.



4.7.5 <u>Commission for Regulation of Utilities: Grid Connection Policy</u>

The Commission for Regulation of Utilities (CRU) (previously the Commission for Energy Regulation (CER)) launched a new grid connection policy in March 2018 for renewable and other generators, known as ECP-1, which will seek to allow "shovel ready" projects that already have a valid planning permission, connect to the electricity networks. The principal objective which guides this decision is to allow those projects which are 'shovel ready' to have an opportunity to connect to the network, along with laying the foundations for future, more regular batches for connection.

The first connection offers were issued in August 2018 with the system operators expected to hold a further batch as soon as reasonably practical following the conclusion of the 2018 batch. The CRU expects that efficient and timely processing of the 2018 batch will allow the next batch to start in 2020 and continue yearly.

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

4.7.6 Renewable Electricity Support Scheme (RESS)

The new RESS scheme was launched in July 2018. The RESS is different to previous support schemes as it proposes to support renewable electricity projects through a series of scheduled, competitive auctions.

The primary policy objectives relevant to RESS include delivering our renewable electricity ambitions; increasing community participation in and ownership of renewable electricity projects, ensuring value for electricity customers and enhancing security of supply. The new scheme will help deliver Ireland's contribution to the EU-wide binding renewable energy target of 32% RES by 2030 and the nation's renewed targets of 70% electricity produced by renewable sources by 2030 as set out in the Climate Action Plan (2019).

In February 2020 the Government of Ireland published the 'Terms and Conditions for the First Competition Under the Renewable Electricity Support Scheme RESS 2020'. The Renewable Electricity Support Scheme (RESS) is an auction scheme in which renewable energy projects bid for grid capacity. The noted document sets out the terms and conditions that apply to the first competition, RESS - 1.

Eligible projects under RESS include onshore wind, offshore wind, solar, hydro along with many other renewable generation methods. Should an applicant be successful under this system they will be invited to submit an offer price on their RESS project.

The results of the RESS-1 auction were published in August 2020. Successful onshore wind projects accounted for up to approximately 480MW of capacity. Applications for RESS-2, the second Renewable Energy Support Scheme auction, are currently being accepted, highlighting the governments push towards a transition to a low carbon economy and the achievement of renewable energy targets as set out in the Climate Action Plan (2019).

4.8 Conclusion

The policy as described throughout this chapter sets out significant international, European, national and local policy support for a move to renewable energy technologies and a reduction in greenhouse gas emissions. Ireland is committed to meeting International and European targets and if these targets are not met the government must purchase Carbon Credits to meet compliance with both emissions and renewable energy targets or face fines from the EU.



The SEAI report: Renewable Energy in Ireland (2020) sets out the nation's progress towards 2020 targets, with an overall shortfall expected as renewable energy production accounts for approximately 11% of the nation's energy production while a 16% target has been set for 2020. As detailed in the Comptroller and Auditor General's Report on the Accounts of the Public Services 2018, the shortfall of renewable energy could result in costs of the order of \leq 110 million per year, with up to approximately \leq 14 million to also be spent on purchasing credits to meet the 2020 targets. This is in addition to \leq 121 million that has already been spent as part of Ireland's strategy to meet its targets.

While Ireland has come a long way in increasing renewable energy generation, the targets are ever increasing from a European perspective. 2050 European targets effectively mean that Europe's energy production will have to be almost carbon-free by 2050, with an aim to increase reliance on renewables from 30% to 70% by 2030.

In response to this, Ireland produced the Climate Action Plan (2019) which aims to steer the country towards clean energy and reduce emissions. The CAP sets out an objective to more than double Ireland's onshore wind energy capacity to 8.2GW by 2030, greatly reducing the nation's dependency on fossil fuels.

Therefore, there is a clear national mandate to accommodate significant onshore wind within the next decade. Furthermore, the National Planning Framework emphasises a move to a low-carbon economy to reduce Ireland's carbon footprint by integrating climate action into the planning system in support of national targets.

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 as emphasised in the Climate Action Plan 2019. It is also a proven technology that will be critical to meeting the near term renewable targets in the EU Clean Energy Package in 2022, 2025 and 2027 as well as the 2030 target.

The Regional Spatial and Economic Strategy (RSES) supports the increased use of renewable energy sources to transition the Southern Region to a low carbon, climate resilient and environmentally sustainable economy. The Regional Planning Guidelines aim to leverage the Southern Region as a leader and innovator in sustainable renewable energy generation, which in turn supports the nature and location for the Croaghaun Wind Farm.

National and regional energy policies have been reinforced by the Carlow County Development Plan 2015-2021 which applies a plan-lead approach to wind energy development. The Croaghaun Wind Farm is located within an area considered to have capacity for wind energy development and is considered compatible with the existing land use on the site as discussed in detail in Chapter 11. Furthermore, the proposed development will actively achieve CDP objectives in providing enhanced tourism and recreation opportunities in the form of a looped walking route and upgraded forestry tracks.

In conclusion, the policy context for the site and surrounding area is considered favourable for the proposed Croaghaun Wind Farm Project, both from a national policy perspective with regard to renewable energy provision, and at a local level with respect to designations and the ability for the site to accommodate the proposed development.



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