

Assessment reports, as well as supporting the MKO graphics, CAD and drone surveying teams. Jack holds a BSc. in Psychology, and an MSc. in Coastal and Marine Environments (Physical Processes, Policy & Practice) where he was awarded the Prof. Máirín De Valéra distinction in science research award. Prior to taking up his position with MKO, Jack worked as a Geospatial Analyst and Research Assistant with the University of Galway and also held previous posts in the coastal engineering sector with Royal Haskoning DHV and Saltwater Technologies. Since joining MKO in February 2020, Jack has conducted and project managed all aspects of LVIA for a broad range of commercial infrastructure developments including wind and solar energy projects, grid infrastructure, extraction industry and Strategic Housing Developments. Jack holds a membership with the Chartered Institute of Water and Environmental Management and is also a member of the Landscape Research Group.

Saoirse Fitzsimons - Project Environmental Scientist - LVIA Specialist

Saoirse Fitzsimons is a Project Environmental Scientist and LVIA Specialist with MKO. Saoirse is an Affiliate Member of the British Landscape Institute. Her primary role at MKO is producing the LVIA chapter of EIA reports for large infrastructure developments. Saoirse holds an MSc. in Coastal and Marine Environments from the National University of Ireland, Galway where she was awarded The Prof Micheál O'Cinnéide Award for Academic Excellence. Since joining MKO, Saoirse has worked widely on renewable energy infrastructure, commercial, recreational, and residential projects. Saoirse holds an A1/A3 and A2 drone licence and is one of the lead drone pilots in MKO.

Killian Devereaux - Project CAD Technician

Killian is a Project CAD Technician at MKO with over 7 years of drafting experience in various sectors of the building industry. He holds BSc (Hons) in Architectural Technology from Galway Mayo Institute of Technology. Prior to taking up his position with MKO in October 2022, Killian worked as a Structural CAD/BIM Technician for Tobin Consulting Engineers and as an Architectural Technician for some smaller-scale Consultants. He was primarily involved in a variety of Commercial / Residential projects where he was responsible for the structural drawing packages but also has experience working in RC concrete Drawings, Architectural and Civil drawings, FSC's /DAC's and one-off housing planning applications. His key strengths and areas of expertise are in Auto CAD, Revit, Cads RC and Google Sketch up. Since Joining MKO Killian has been the lead CAD technician on multiple Renewable Energy Planning Applications.

1.9.2.2 Irwin Carr

Brendan O'Reilly

Brendan is a Director in Noise and Vibration Consultants Ltd, primarily responsible for environmental noise and noise monitoring. Brendan has extensive experience working in the private sector, especially in the field of wind farm noise level measurements.

Dr. Chris Jordan

Chris is a Technical Director in Irwin Carr Consulting, primarily responsible for environmental noise and noise modelling. He has over 20 years' experience working in both the public and private sectors having previously obtained a BSc (Hons) Degree in Environmental Health, a Post-Graduate Diploma in Acoustics and a PhD in the field of acoustics. Chris has been responsible for undertaking and reviewing noise impact assessments on numerous large scale wind farms throughout the UK and Ireland.



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1.9.2.3 Tobar Archaeological Services

Miriam Carroll

Miriam graduated from University College Cork in 1998 with a Masters degree in Methods and Techniques in Irish Archaeology. She is licensed by the Department of Housing, Local Government and Heritage (DHLGH) to carry out excavations and is a member of the Institute of Archaeologists of Ireland. Miriam has been working in the field of archaeology since 1994 and has undertaken numerous projects for both the private and public sectors including excavations, site assessments (EIAR) and surveys. Miriam Carroll is a director of Tobar Archaeological Services which has been in operation for over 20 years.



1.10 Difficulties Encountered

There were no technical difficulties encountered during the preparation of this EIAR.

Wiewing and Purchasing of the EIAR

Copies of this EIAR, including the Non-Technical Summary (NTS), will be available online, via the Wexford County Council Planning Website. The EIAR and all associated planning documentation will also be available for viewing at the offices of the Wexford County Council. The EIAR may be inspected free of charge or purchased by any member of the public during normal business hours, at the following address:

Wexford County Council Planning Department Newtown Rd, Carricklawn, Wexford, Y35 WY93

The EIAR will also be available to view online via the Department of Planning, Housing and Local Government's EIA Portal, which will provide a link to the planning authority's website on which the application details are contained. This EIA Portal was set up by the Department as an electronic notification to the public of requests for development consent which are accompanied by an EIAR (https://www.housing.gov.ie/planning/environmental-assessment/environmental-impact-assessment-eia/eia-portal).





2.

BACKGROUND AND POLICY

This chapter of the EIAR sets out the relevant energy and climate change related policy and targets along with the strategic, regional, and local planning policies relevant to the Proposed Development. It also summarises EIA scoping and consultation undertaken and the cumulative impact assessment process.

2.1 Introduction

The details below set out the need for the Proposed Development to aid Ireland in meeting its national targets and European commitments in relation to climate change and decarbonisation.

The planning application for the Proposed Development seeks to achieve planning permission to extend the operational life of the existing 11 no. turbine at Castledockrell Wind Farm and associated infrastructure (Pl. Ref. 2004/4702 & ABP Pl. Ref. PL26.211725), located in the townlands of Kilcullen, Sroughmore, Tomatee, Ballynelahillan, Knockduff and Carranroe, County Wexford. As detailed in Section 1.1, the existing Castledockrell Wind Farm became operational in 2011 and is connected to the National Grid at Lodgewood substation via approx. 7km of 110kV underground cable. It should be noted that the grid connection does not form part of the accompanying planning application and is assessed as a cumulative project only within this EIAR.

The existing wind farm consists of 12 No. Enercon 2.3 MW wind turbines with a maximum overall blade tip height of 120m, however, this application seeks the extension of 11 no. of these turbines, as presented fully in Chapter 4 of this EIAR. The existing wind farm as a total rated capacity of 25.3MW.

The turbines at the existing Castledockrell Wind Farm currently generate renewable energy and provides it for use onto the national grid. The need to decarbonise and reduce emissions has always been imperative, however, in recent years the urgency involved has become clearer to all stakeholders. The Climate Action Plan (CAP) published by the Government in December 2022 sets out a roadmap to halve emissions by 2030 and reach net zero no later than 2050. This is reiterated in the most recent CAP 24 released in December 2023. Central to this aim is the set of measures set out to increase the proportion of renewable electricity to up to 80% by 2030 and a target of 9GW from onshore wind. The CAP places front and centre the facts that without urgent action, global warming is likely to be more than 2°C above pre-industrial levels, threatening the health and livelihoods of people across the globe. Urgency of action is also a key focus of the CAP.

Furthermore, the Programme for Government released in June 2020 also highlights that *"the reliable supply of safe, secure and clean energy is essential in order to deliver a phase-out of fossil fuels. We need to facilitate the increased electrification of heat and transport. This will create rapid growth in demand for electricity which must be planned and delivered in a cost-effective way."*

The primary driver behind the Proposed Development is the continued provision of renewable energy to offset the use of fossil fuels within the electricity generating sector. The site of the Proposed Development is currently an operational wind farm which has been supplying renewable energy to the national electricity grid since being commissioned in 2011. The existing wind farm has therefore been contributing to Ireland's energy and climate targets over the past approximately 14 years.

The review of relevant policy contained in this chapter of the EIAR concluded that the continued operation of Castledockrell Wind Farm is consistent with the overarching planning framework with regard to facilitating the move away from dependency on fossil fuels and the promotion of proper planning and sustainable development.



2.2

Renewable Energy Resources 2.1.1

Renewable energy resources are constantly replenished through the cycles of nature, unlike fossil fuels, which are finite resources that are becoming increasingly scarce and expensive to extract. Renewable energy resources offer sustainable alternatives to our dependency on fossil fuels as well as a means of reducing greenhouse gas emissions and opportunities to reduce our reliance on imported fuels. These resources are abundantly available in Ireland, yet only a fraction has been tapped so far.

A gradual shift towards increasing our use of renewable energy is no longer viable. There is an urgency now to ensure real changes takes place without delay. Renewable energy development is recognised as a vital component of Ireland's strategy to tackle the challenges of combating climate change and ensuring a secure supply of energy. Ireland is heavily dependent on the importation of fossil fuels to meet its energy need. As of 2023, over 81% of energy used in Ireland was imported from abroad¹, higher than the EU average of almost 60%². This high dependency on energy imports is highly risky and Ireland is currently extremely vulnerable both in terms of meeting future energy needs and ensuring price stability. As such, expanding indigenous renewable energy supply is critical for climate action, energy security and price stability.

Climate Change Policy and Targets

International and national policy consistently identifies the need to reduce greenhouse gas (GHG) emissions and stresses the importance of reducing global warming. The context of international policy has altered over the last 30-years from being of a warning nature to the current, almost universally accepted belief, that there is a climate change emergency occurring both within Ireland and at a broader global scale. The Intergovernmental Panel on Climate Change (IPCC)'s Sixth Assessment Report³ published in 2021 provides a stark assessment of global climate change and presents evidence that climate changes will increase in all regions of the globe over the coming decades and that much of the damage caused by climate change up to this point is now likely irreversible, such as the rise in sea levels over the 21st century. The Synthesis Report⁴ of the IPCC Sixth Assessment Report published in March 2023 summarises the state of knowledge of climate change, its widespread impacts and risks. The Synthesis Report states that 'continued global warming is projected to further intensify the global water cycle, including its variability, global monsoon precipitation, and very wet and very dry weather and climate events and seasons'.

The IPCC's projections are evident in extreme climate events occurring across the world. According to the World Meteorological Organisation's State of the Global Climate Report published in November 2024 report⁵:

- Greenhouse gases reached record observed levels in 2023. Real time data indicate that > they continued to rise in 2024
- January September 2024 global mean surface air temperature was 1.54±0.12 °C above the pre-industrial 1850-1900 average. Boosted by El Niño, 2024 is on track to be the warmest year on record. Long term warming, measured over decades, still remains below 1.5°C

2.2

¹ Energy in Ireland 2023 (SEAI) https://www.seai.ie/publications/Energy-in-Ireland-2023.pdf

² National Energy Security Framework (DECC) https://www.gov.ie/pdf?file=https://assets.gov.ie/221399/86cb99/5-58e3-4821-bc4ce1bb1fa706fb.pdf#page=null

Climate Change 2021 'The Physical Science Basis' (Intergovernmental Panel on Climate Change, August 2021) https://www.ipcc.ch/report/ar6/wg1/ ⁴ Climate Change 2023 Synthesis Report (IPPC)

https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_FullVolume.pdf ⁵ State of the Global Climate 2024, Update for COP29 (World Meteorological Organisation, November 2024) https://library.wmo.int/records/tem/69075-state-of-the-climate-2024



Ocean heat content and sea level continue to rise. In 2023, the ocean absorbed around 3.1 million TWh of heat, equal to approximately 15 times the world's total energy consumption

According to the World Meteorological Organisation's State of the Global Climate Report published in March 2023⁶:

- In 2023, global mean sea level reached a record high in the satellite record (since 1993), reflecting continued ocean warming (thermal expansion) as well as the melting of glaciers and ice sheets.
- Antarctic sea-ice extent reached an absolute record low for the satellite era (since 1979) in February 2023 and remained at record low for the time of year from June till early November. The annual maximum in September was 16.96 million km², roughly 1.5 million km² below the 1991–2020 average and 1 million km² below the previous record low maximum.
- Combining the two main ice sheets (Greenland and Antarctic), the seven highest melt years on record are all since 2010, and average rates of mass loss increased from 105 Gigatonnes per year from 1992–1996 to 372 Gigatonnes per year from 2016–2020. This is equivalent to about 1 mm per year of global sea level rise attributed to the ice sheets in the latter period.

Extreme weather and climate events are having major impacts on all continents, also documented in the World Meteorological Organisation's State of the Global Climate Report:

- Flooding associated with extreme rainfall from Mediterranean Cyclone Daniel affected Greece, Bulgaria, Türkiye, and Libya with particularly heavy loss of life in Libya in September 2023.
- Tropical Cyclone Freddy in February and March 2023 was one of the world's longestlived tropical cyclones with major impacts on Madagascar, Mozambique and Malawi. Tropical Cyclone Mocha, in May, was one of the most intense cyclones ever observed in the Bay of Bengal.
- Extreme heat affected many parts of the world. Some of the most significant were in southern Europe and North Africa, especially in the second half of July where severe and exceptionally persistent heat occurred. Temperatures in Italy reached 48.2°C, and record-high temperatures were reported in Tunis (Tunisia) 49.0°C, Agadir (Morocco) 50.4°C and Algiers (Algeria) 49.2°C.
- Canada's wildfire season was well beyond any previously recorded. The total area burned nationally as of 15 October was 18.5 million hectares, more than six times the 10-year average (2013–2022). The fires also led to severe smoke pollution, particularly in the heavily populated areas of eastern Canada and the north-eastern United States.

The IPCC's Sixth Assessment Report does not, however, conclude that a climate catastrophe is inevitable, but rather, there remains a 'narrow path' to determine the future course of climate, mainly by cutting emissions down to net zero. The Proposed Development will continue to contribute to the decarbonisation of the energy sector and reduce harmful emissions. In this regard, it is in compliance with national and international climate change policy and targets.

⁶ State of the Global Climate 2023 (World Meteorological Organisation, March 2024) <u>https://library.wmo.int/records/item/08835-state-of-the-global-climate-2024</u>



2.2.1 International Climate Policy

United Nations Framework Convention on Climate Change

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

Kyoto Protocol

The Kyoto Protocol operationalises the UNFCCC by committing industrialised countries and economies in transition to limit and reduce GHG emissions in accordance with agreed individual targets. Ireland is a Party to the Kyoto Protocol, which came into effect in 2005, and as a result of which, emission reduction targets agreed by developed countries are now binding.

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 1st January 2013 to 31st 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.

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.

COP21 Paris Agreement

COP21 was the 21st session of the Conference of the Parties (COP) to the UNFCCC. Every year since 1995 (excluding 2020 due to COVID-19), the COP has gathered the 196 Parties (195 countries and the European Union) that have ratified the Convention in a different country, to evaluate its implementation and negotiate new commitments. COP21 was organised by the United Nations and held, in Paris, from 30th November to 12th December 2015. COP21 closed with the adoption of the first international climate agreement (concluded by 195 countries and applicable to all). The 12-page text, made up of a preamble and 29 articles, provides for a limitation of the global average temperature rise to well below 2°C above pre-industrial levels and **to limit the increase to 1.5°C**. It is flexible and takes into account the needs and capacities of each country. The IPCC's 6th Assessment Report (2021) further collaborates this need to limit any increase in global average temperature to 1.5°C, stating that (underlined for emphasis),

"<u>Humanity has emitted 2,560 billion equivalent tons of CO₂ since 1750, and we only have a</u> budget of 500 more if we want to limit warming to 1.5°C.

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By following a trajectory of very low GHG emissions (SSP1-1.9), the threshold of 1.5° C will be reached in the short term, between 2021 and 2040, before being very slightly exceeded (1.6° C anticipated over the period 2041-2060) then respected in the long term (1.4° C anticipated over the period 2081-2100).

Everything is not lost, but we must pursue the Paris Agreement's most ambitious goal of limiting warming to 1.5°C."

An article published by the IPCC on the 6^{th} October 2018 titled 'Global Warming of $1.5^{\circ}C$, notes the impacts of global warming of $1.5^{\circ}C$ above pre-industrial levels and related global greenhouse gas emission pathways; in the context of mitigation pathways, strengthening of the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. This special report is part of an invitation contained in the Decision of the 21^{st} 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.

COP27 Egypt

COP27 took place in Sharm el-Sheikh from the 6th of November to the 20th of November 2022. The Conference of the Parties (COP) is a supreme decision-making body of the United Nations Framework Convention on Climate Change (UNFCCC). COP 27 centred around three major topics:

- Closing the emissions gap to keep 1.5°C alive
- Loss and Damage
- Climate Finance

The most significant outcomes from COP 27 are outlined below:

- Phase down/out language: The final agreement contains a commitment to a 'phase down' of coal use, as opposed to a wider commitment to phase out all fossil fuels;
- 1.5°C Pathway: The 1.5°C warming limit has been retained and reassurances have been made that there is no room for backsliding;
- Climate Finance & Loss and Damage: There has been the launch of an initiative by the V20 and G7 known as the Global Shield Against Climate Risk (GSACR). The intention of this initiative has been framed almost as an insurance policy backed by the World Bank to prepare and protect those most vulnerable to climate change disasters.

COP 28 - United Arab Emirates

The 28th session of the COP to the UN Framework Convention on Climate Change, was held in Dubai from 30 November to 13 December 2023. The main objective of COP was to assess the progress made by all parties on the implementation of the 2015 Paris Agreement through the concluding phase of the 'global stocktake', which began after COP26 in 2021.

A key outcome from COP 28 was the agreement to phase out fossil fuels and increase renewable energy capacity. The agreement calls for a tripling of renewable energy capacity globally by 2030. This was the first time that the COP explicitly addressed the need to end the use of fossil fuels. The agreement was signed by the Irish government among 116 other nations. The acceleration of the permitting of renewable projects and related infrastructure is identified as a crucial enabler to achieve the renewable energy targets set out under the agreement.



COP29 – Azerbaijan

The 29th COP of the UNFCCC, (COP29), held in Baku, Azerbaijan, from November 11th 2024 to November 22nd 2024.

COP29 focused on accelerating global efforts to address climate change, in particular global efforts related to climate finance. The New Collective Quantified Goal on Climate Finance (NCQG) was agreed in the final days of COP; while developing countries advocated for at least USD 1 trillion annually by 2035, developed nations agreed to triples finance to developing countries, with commitments increasing from USD 100 billion annually to USD 300 billion annually by 2035. The NCQG has already drawn criticism for being inadequate given the global financial need of developing nations to mitigate and adapt to climate change effects and due to its lack of strong terminology in relation to the requirements of developed nations and detailed implementation strategies.

At COP29, significant progress was made in the discussions surrounding carbon markets, with nearly 200 nations agreeing on critical rules under Article 6 of the Paris Agreement. These rules aim to establish an UN-backed international carbon market. The adoption of these rules is seen as a crucial step towards operationalising a robust and credible carbon market. Despite the advances, concerns were expressed about the potential for weak governance and risks of exploitation in the system; these issues must be addressed to ensure the market's full functionality.

European Green Deal - European Climate Law (2021)

The European Green Deal, initially introduced by the European Commission in December 2019, sets out the 'blueprint' for a transformational change of the 27-country bloc from a high- to a low-carbon economy, without reducing prosperity and while improving people's quality of life, through cleaner air and water, better health and a thriving natural world. The Green Deal is intended to work through a framework of regulation and legislation setting clear overarching targets, e.g. **a bloc-wide goal of net zero carbon emissions by 2050 and a 55% cut in emissions by 2030 (compared with 1990 levels).** This is a substantial increase compared to the existing target, upwards from the previous target of at least 40% (2030 Climate & Energy Framework), and furthermore, these targets demonstrate the ambition necessary to keep the global temperature increase to well below 2°C and pursue efforts to keep it to 1.5°C as per the Paris Agreement. With regard to the energy sector, the Green Deal focuses on 3 no. key principles for the clean energy transition, which will help reduce greenhouse gas emissions and enhance the quality of life for citizens:

- > Ensuring a secure and affordable EU energy supply;
- > Developing a fully integrated, interconnected and digitalised EU energy market; and
- Prioritising energy efficiency, improving the energy performance of our buildings and developing a power sector based largely on renewable sources (e.g. the subject development)

The European Climate Law⁺ writes into law the objectives set out above in the European Green Deal for Europe's economy and society to become climate-neutral by 2050. Climate neutrality by 2050 means achieving net zero greenhouse gas emissions for EU countries as a whole, mainly by cutting emissions, investing in green technologies and protecting the natural environment. The Climate Law includes:

- A legal objective for the Union to reach climate neutrality by 2050;
- An ambitious 2030 climate target of at least 55% reduction of net emissions of greenhouse gases as compared to 1990, with clarity on the contribution of emission reductions and removals;
- A process for setting a 2040 climate target, taking into account an indicative greenhouse gas budget for 2030-2050 to be published by the Commission;
- A commitment to negative emissions after 2050;



- The establishment of European Scientific Advisory Board on Climate Change, that will provide independent scientific advice;
- > Stronger provisions on adaptation to climate change; and
- > Strong coherence across Union policies with the climate neutrality objective

The law aims to ensure that all EU policies contribute to this goal and that all sectors of the economy and society play their part. All 27 no. EU Member States have committed to turning the EU into the first climate neutral continent by 2050. One third of the 1.8 trillion-euro investments from the Next Generation EU Recovery Plan, and the EU's seven-year budget, will finance the European Green Deal. On 14th July 2021, the European Commission adopted a set of proposals⁵ to make the EU's climate, energy, transport and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels.

Achieving these emission reductions in the next decade which is crucial to Europe becoming the world's first climate-neutral continent by 2050 would clearly be assisted by the Proposed Development.

2.2.1.2 Project Compliance with International Climate Policy

From the review of the relevant policy documents, it is considered that the continued operation of the wind turbines at the Castledockrell wind farm will aid in reducing reliance on fossil fuels for electricity generation. This will help to achieve the United Nations Framework Convention on Climate Change goals of limiting global temperatures as a result of climate change and the goals of the Kyoto Protocol and the several Conference of Parties agreements as outlined above.

The continued operation of the proposed development is also considered to be in line with the European Green Deal which also aims to reduce carbon emissions and achieve net zero carbon emissions by 2050. These goals will not be met if projects, such as the one proposed, are not implemented. The construction of this development would also aid in ensuring energy security within the EU which is a target of the European Green Deal. As wind is an indigenous and abundant resource, countries can tap into their own wind potential, reducing the vulnerability to price fluctuations and geopolitical risks associated with fossil fuel imports.

2.2.2 National Climate Policy

Programme for Government (2025)

The Programme for Government 2025 (January 2025) places specific emphasis on climate change, stating The Government's approach will ensure continued climate progress while growing the economy. The programme states that the government are committed to delivering actions to achieve a reduction in greenhouse gas emissions by 51% from 2018-2030 and net-zero no later than 2050. The programme commits to publishing an annual Climate Action Plan, placing a focus on a smaller number of strategic and impactful actions across all sectors, and publish a quarterly progress report.

With regard to energy generation, the Programme notes that the government is committed to achieving 80% of Ireland's electricity generation from renewable sources by 2030 and states that the Government will "develop a comprehensive plan to accelerate energy generation, connectivity, and planning processes".

There is also a specific action included 'to ensure a policy is put in place to streamline repowering and life extension of existing onshore wind farms that are nearing end of life.'



The Climate Action and Low Carbon Development Act 2015 (as amended)

The Climate Action and Low Carbon Development 2015 (as amended) ('the Climate Act') legally binds Ireland to achieve net-zero emissions no later than 2050, and to a 51% reduction in emissions by the end of this decade.

The Act provides the framework for Ireland to meet its international and EU climate commitments and to become a leader in addressing climate change. As indicated by the premise of the legislation, the reduction of emissions is a key proponent of the Climate Act and incorporates the following key provisions:

- Embeds the process of setting binding and ambitious emissions-reductions targets in law;
- Provides for a national climate objective, which commits to pursue and achieve no later than 2050, the transition to a climate resilient, biodiversity-rich, environmentally sustainable and climate-neutral economy;
- Provides that the first two five-year carbon budgets proposed by the Climate Change Advisory Council should equate to a total reduction of 51% over the period to 2030, relative to a baseline of 2018;
- > The role of the Climate Change Advisory Council has been strengthened;
- > The government must adopt carbon budgets that are consistent with the Paris agreement and other international obligations;
- Actions for each sector will be detailed in the Climate Action Plan which must be updated annually; and
- Local Authorities must prepare individual Climate Action Plans which will include both mitigation and adaptation measures and will be updated every five years.

Under Section 15 of the Climate Act, public bodies are obliged to, in so far as practical, perform their functions in a manner consistent with the latest Climate Action Plan, the National Energy & Climate Plan 2021 – 2030 and other national climate mitigation and adaptation plans. Wexford County Council, as a public body, with consenting functions must comply with this obligation in determining the subject application.

A recent judgement of the High court delivered on 10th January 2025, provides clarity on the obligations imposed on public bodies under section 15 of the Climate Act (*Coolglass Wind Farm Limited v An Bord Pleanála [2025] IEHC 1*).

Mr Justice Humphreys undertook a detailed consideration of the interpretation of section 15 of the Climate Act and concluded that, when deciding upon an application relevant to the achievement of climate plans and objectives under S.15 of the 2015 Act, relevant bodies, in this case the Planning Authority, is required to:

- 1. Consider if the application, if granted, would contribute to achieving climate targets? In the case of renewable energy projects, the answer is invariably yes.
- Consider whether granting permission is "precluded by a mandatory and non-fixable legal requirement" that does give the decision maker any flexibility in reaching an outcome favouring climate goals, i.e. a grant of permission.
- If the decision maker is not precluded from granting permission, then how can the planning authority use its evaluative judgement and discretion to reach an outcome favouring policy goals.

As part of Mr Justice Humphrey's consideration of the interpretation of section 15 of the Climate Act, he states in his judgement that "an immediate end to business as usual is a precondition for planetary survival".



In summary, section 15 of the Climate Act requires relevant bodies to engage in its own independent consideration of the impact of a proposed development on the State achieving its climate targets and to exercise its discretion in a manner which supports the achievement of those targets.

The Proposed Development has the potential to continue to be an important wind energy generator, contributing to the 51% reduction in emissions being sought, which is, as outlined above, a legally binding requirement. The Proposed Development is therefore consistent with and needed to achieve the binding emissions reduction targets at a national level.

Carbon Budgets

To achieve the 51% emissions reduction target, the Climate Act, requires the Climate Change Advisory Council (CCAC) to recommend a proposed programme of economy-wide 5-year Carbon Budgets to the Minister for the Environment, Climate and Communications. The first national carbon budget programme proposed by the Climate Change Advisory Council, approved by Government and adopted by both Houses of the Oireachtas in April 2022 comprises three successive 5-year carbon budgets⁷. The total emissions allowed under each budget are shown in Table 2-1 below.

Table 2-1:	Carbon	Budgets	of the	Climate	Change Advisor	y Council
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	2021 – 2025 Carbon Budget 1	2026 – 2030 Carbon Budget 2	2031 – 2035 Provisional		
	Carbon Budget I	Carbon Budget 2	Carbon Budget 3		
	All Gases				
Carbon Budget (Mt CO.eq)	295	200	151		
Annual Average Percentage Change in Emissions	-4.8%	-8.3%	-3.5%		
The figures are consistent thus allowing compliant	nt with emissions in 201 ce with the 51% emission	8 of 68.3 Mt CO.eq reduc as reduction target by 2030	ting to 33.5 Mt CO ₂ eq in 2030,).		

Table 1.1 Proposed Carbon Budget of the Climate Change Advisory Council

Section 6C of the Climate Act provides that the Minister shall prepare, within the limits of the carbon budget, the Sectoral Emissions Ceilings. These ceilings set out the maximum amount of greenhouse gas emissions that are permitted in each sector. The Government approved Sectoral Emissions Ceilings on 28 July 2022. The electricity sector is allocated a sectoral ceiling of 40 Mt CO2 eq for the first budget (2021-2025) and a sectoral ceiling of 20 Mt CO2 eq for the second budget period (2026-2030). In 2022, the electricity sector emissions were 10.1 Mt CO2 eq.

Climate Action Plan 2023

The Climate Action Plan 2023 (CAP23) was published in December 2022 by the Department of the Environment, Climate and Communications. This outlines the actions required to 2035 and beyond to meet Ireland's commitment to becoming carbon neutral by 2050. CAP23 sets out a roadmap to deliver on Irelands climate ambition and is aligned to ensure that Ireland achieves its legally binding target under the Climate Act of net-zero greenhouse gas emissions no later than 2050. A target aims for a reduction in emissions of 51% over the period 2018 to 2030 and in doing so, prevent / mitigate the potentially devastating consequences of climate change on Ireland's environment, society, economic and natural resources.

⁷ Climate Change Advisory Council Carbon Budget Technical Report (October 2021) <u>https://www.gov.ie/en/publication/9af1b-carbon-budgets/</u>



The CAP23 states that to do so, Ireland must harness the untapped indigenous renewable resources, and has a target of achieving 80% of energy being produced from renewable sources by 2030 (unchanged from the previous Climate Action Plan, 2022) with a target of 9GW of that being produced by onshore wind. Measures set out in CAP23 to achieve these targets include to 'accelerate and increase the deployment of renewable energy to replace fossil fuels' (Section 12.1.4 CAP23). It is clear from the message and ambition of CAP23 that the drive to deploy renewable energy projects such as the Proposed Development in Ireland are critical to achieving the aims and objectives of CAP23 including the 9GW of onshore wind energy by 2030 and carbon neutrality by 2050.

"Achieving these ambitions will require a coordinated effort across Ireland and every economic sector will be involved. It requires no less than a national transformation over the coming years in how we work, travel, heat out homes, source our energy and use our land".

"Decarbonisation of the electricity sector is, as noted in CAP23, key to the decarbonisation of other sectors who will depend on electrification including transport, heating and industry. The increase in portion of renewable electricity of 80% by 2023 will come in part from a targeted 9GW of onshore wind. The plan notes: "Achieving further emissions reductions between now and 2030 requires a major step up in how we accelerate and increase the deployment of renewable energy to replace fossil fuels, deliver a flexible system to support renewables, and manage electricity demand".

Chapter 12 sets out the state of play, targets and actions for the decarbonisation of the Electricity sector. Carbon emissions from electricity have fallen by 45% between 2005 and 2020, falling by 19% between 2005-2012 and by 33% between 2012 and 2020. This trend is largely due to the availability of renewable energy generated electricity (a sixfold increase between 2005 and 2020) and an associated reduction in the use of carbon heavy fuels such as peat and coal.

Due to the scale of the challenge, and the recognition of central role of the electricity sector in achieving sector wide targets, the electricity sector has been allocated the smallest carbon budget and will require the steepest carbon emissions decline of all sectors – namely a reduction in carbon emission by -75% relative to 2018 baseline. Carbon budgets 1 and 2 allow for 30.02 MtCO2eq from the electricity sector up to 2025 and 20 MtCO2eq. from 2026-2030. This means an average of 8 MtCO2eq. per annum. Emissions for the period 2021 were 9.98 MtCO2eq., which is in exceedance of 8 MtCO2eq., which means that to keep on track, electricity will now have to achieve annual emissions of c. 7.5 MtCo2eq. from 2022 to 2025.

The measures set out for the electricity sector include inter alia.

- Reduce annual CO2eq. emissions from the sector to 3 MtCO2eq by 2031 (75% reduction compared to 2018);
- Accelerate and increase the deployment of renewable energy to replace fossil fuels;
- Accelerate the delivery of onshore wind, offshore wind and solar through a competitive framework to reach 80% of electricity demand from renewable energy by 2030;
- > Target 6GW of onshore wind and to 5 GW of solar by 2025;
- Target 9 GW onshore wind, 8 GW Solar and at least 5 GW of offshore wind by 2030;
- Align the relevant constituent elements of the planning and permitting system to support accelerated renewable energy development, supported by national policy and associated methodologies to inform regional and local planning policies, noting that Development Plans are obliged to set out objectives to facilitate energy infrastructure;

Having regard to the targets and measures set out above, it is clear that there is strong policy support for the provision of renewable energy generators, such as the Proposed Development.



Climate Action Plan 2024

The Climate Action Plan 2024 ('CAP 24') builds on CAP 23 by refining and updating the status of the actions required to deliver the decarbonisation required under the carbon budgets and sectoral emissions ceilings. The renewable electricity generation targets are unchanged from the CAP 23 (9GW of onshore wind & 80% renewable electricity share).

CAP 24 includes the latest trends in the electricity sector:

- In 2022, renewable generation accounted for 38.6% of electricity, an increase from 35% in 2021.
- > Electricity accounted for 14.4% of Ireland's greenhouse gas (GHG) emissions in 2022.
- To meet the first carbon budget the electricity sector requires a decarbonisation rate of 17.3% per annum in the period 2023-2025. For context, the decarbonisation rate between 2018 and 2022 was 1.4% per annum.

CAP 24 acknowledges the urgency and importance of the decarbonising the electricity sector. The plan states:

"Given that the programme of large-scale offshore wind deployment is expected to be realised towards end decade, deployment rates for onshore renewables will need to increase to match demand growth to ensure we keep electricity emissions within range of the carbon budgets. This requires a major upscaling and accelerating in current deployment of renewables, particularly onshore wind."

The scale of the challenge is apparent when quantified:

"As an example, the historical average deployment of onshore wind installed capacity connected between 2008 and 2020 inclusive was ~280 MW per annum from 19 projects (with an annual maximum of 612 MW). To achieve the necessary emissions abatement, an approximately eight-times increase of renewable energy deployment to 2.3 GW annually would be needed between 2024 and 2030."

CAP 24 identifies the alignment of local and national policy as a critical to accelerate renewable energy rollout.

"greater alignment between local plans and renewable energy targets at national and regional level to support investment in and delivery of onshore wind and solar renewable energy is also critical".

2.2.2.2 Project Compliance with Climate Policy

The existing Castledockrell Wind Farm is operational and has been since 2011 when it was commissioned. The wind farm has been generating renewable electricity and supplying to the national grid over the last 14 years. The proposal to extend the operational period of the development will therefore aid in the overall supply of renewables therefore increase the amount of renewable energy that will be available on the national grid and will contribute to Irelands efforts and stated policy to decarbonise the economy. The proposed renewable energy will help Ireland address the challenge of decarbonising electricity generation as well as addressing the country's over-dependence on imported fossil fuels. Therefore, it is considered that the Proposed Development is in compliance with climate policy.



2.3 Renewable Energy Policy and Targets

2.3.1 European Renewable Energy Policy

Renewable Energy Directive

The Renewable Energy Directive is the EU legal framework for the development of renewable energy across all sectors of the EU economy, supporting clean energy cooperation across EU countries. Since the introduction of the Renewable Energy Directive (RED) in 2009, it has undergone several revisions since then and these revisions. Since its adoption in 2009, the share of renewable energy sources in energy consumption has increased from 12.5% in 2010 to 23% in 2022⁸. Of the 27 EU member states the lowest proportion of renewable energy in gross final energy consumption was recorded in Ireland (13.1%). Crucially, the Renewable Energy Directive sets the overall target for renewable energy in the EU.

RED I - 2009

Renewable Energy Directive 2009 (RED I - the original RED) (2009/28/EC), adopted in 2009, set binding targets for EU member states to achieve a <u>20% share of renewable energy</u> in final energy consumption by 2020. It established a framework for national renewable energy action plans, sustainability criteria for biofuels and bioliquids, and a system of guarantees of origin for renewable energy.

RED II - 2018

RED II, the first major amendment to the RED, (2018/2001/EU) entered into force in December 2018, as part of the Clean Energy for all Europeans package. In RED II, the overall EU target for Renewable Energy Sources consumption by 2030 was raised to 32%.

RED III - 2023

In November 2023, a revision of the Renewable Energy Directive⁹ (RED III), came into force. RED III increases the EU wide renewable energy target from 32% set under the previous revision of the directive to at 42.5%, with an ambition to reach 45% by 2030. The increase was proposed under the publication of REPowerEU plan in May 2022. The Directive also introduces specific targets for Member States in the industry, transport, and building (district heating and cooling) sectors.

Under RED III, EU member states must identify areas for the acceleration of renewables where projects will undergo a simplified and fast-track procedure. The deployment of renewables will also be of "*overriding public interest*" in order to limit the number of legal challenges on new renewable energy installations. These measures came in response to REPowerEU which found that permitting is the biggest bottleneck for deploying wind at scale, with approximately 80 GW of wind power capacity stuck in permitting procedures across Europe.

There is an 18-month period to transpose most of the directive's provisions into national law, with a shorter deadline of July 2024 for some provisions related to permitting for renewables.

In September 2024, The European Commission opened infringement procedures against Ireland and 25 other member states by sending a letter of formal notice for failing to fully transpose the provisions

⁸ https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20231222-2

⁹ Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast)



of the revised Renewable Energy Directive relating to the simplification and acceleration of permitting procedures.

REPowerEU

The European Commission has proposed an outline of a plan to make Europe independent from Russian fossil fuels including oil and gas, due to the high and volatile energy prices, and security of supply concerns following Russia's unprecedented military attack on Ukraine. At the time of publication, the EU imported 90% of its gas consumption, with Russia providing around 45% of those inputs. Russia also accounted for around 25% of oil and 45% of coal imports. Phasing out dependence on fossil fuels can be done well before 2030, increasing the resilience of the EU-wide energy system based on two pillars:

- Diversifying gas supplies, via higher Liquefied Natural Gas (LNG) and pipeline imports of biomethane and renewable hydrogen production and imports from non-Russian suppliers
- 2. Reducing faster the use of fossil fuels by boosting energy efficiency, increasing renewables and addressing infrastructure bottlenecks.

With full implementation of the measures in REPowerEU plan, at least 155 bcm of fossil gas use could be removed, which is equivalent to the volume imported from Russia in 2021. Nearly two thirds of that reduction can be achieved within a year. A part of this plan includes 'Speeding up renewables permitting to minimise the time for roll-out of renewable projects and grid infrastructure improvements'. This will make the sector more efficient and reach the set goals faster.

As such, it is submitted that the continued operation of Castledockrell Wind Farm Proposed is strongly supported by EU energy policy. Many of the measures outlined in REPowerEU have been incorporated into national Policy through the National Energy Security Framework, which was published by the Government in April 2022, and discussed in further detail in Section 2.3.2.

Regulation 2022/2577

In December 2022 a text of the proposal for a Council Regulation laying down a framework to accelerate the deployment of renewable energy was agreed by the European Council and published by the European Council¹⁰. The Regulation (Council Regulation (EU) 2022/2577) specifically seeks to accelerate the deployment of renewable energy sources, by means of targeted measures which are capable of accelerating the pace of deployment of renewables in the European Union in the short term. The regulation focuses therefore on measures which are implementable rapidly at the Member State level, namely the streamlining of the permit-granting processes applicable to renewable energy projects.

In that regard, the Regulation introduces the presumption that, as per Recital 8 of the regulation -

"One of the temporary measures consists of the introduction of a rebuttable presumption **that renewable energy projects are of overriding public interest** and serving public health and safety for the purposes of the relevant Union environmental legislation, except where there is clear evidence that those projects have major adverse effects on the environment which cannot be mitigated or compensated for. Renewable energy plants, including heat pumps or wind energy, are crucial to fight climate change and pollution, reduce energy prices, decrease the Union's dependence on fossil fuels and ensure the Union's security of supply. Presuming renewable energy plants, including heat pumps, are of overriding public interest and serve public health and safety would allow such projects to benefit,

¹⁰ General Secretariat of the Council of the European Union, Outcome of Proceedings: Proposal for a COUNCIL REGULATION laying down a framework to accelerate the deployment of renewable energy (File no. 022/0367(NLE)) (22.12.2022)



where necessary, from a simplified assessment for specific derogations foreseen in the relevant Union environmental legislation with immediate effect." (Emphasis added)

While this Proposed Development is not seeking to utilise any derogations under European environmental legislation, the classification of renewable energy projects being '*in the overriding public interest*' highlights the strong support at a European Union wide level and the urgent need for developments such as the Project at a European wide level.

Wind energy in particular is identified as a significant future opportunity, as resources are stable and abundant, and public acceptance is higher. The plan states *"to further strengthen the EU wind sector's global competitiveness and achieve the REPowerEU ambition with fast wind energy deployment, supply chains need to be strengthened and permitting drastically accelerated."*.

The Proposed Development is directly supported through the REPowerEU framework. In this regard, the Project is clearly in the overriding public interest.

The regulation, which has immediate application in Member States, applies to "*all permit-granting processes that have a starting date within the period of its application*" and includes a number of tangible measures aimed at streamlining the permit-granting process and facilitating the accelerated deployment of renewable energy.

'A fast deployment of renewable energy sources can help to mitigate the effects of the current energy crisis, by forming a defence against Russia's actions. Renewable energy can significantly contribute to counter Russia's weaponisation of energy by strengthening the Union's security of supply, reducing volatility in the market and lowering energy prices.¹¹

Central to the regulation is the presumption that renewable energy development must be considered to be in the overriding public interest when addressing competing interests under the Habitats Directive (92/43/EEC), Birds Directive (2009/147/EEC) and the Water Framework Directive (2006/60/EC) and that renewable energy projects should be given priority when balancing legal interests in a given case – Article 3, part 2 states:

2) 'Member States shall ensure, at least for projects which are recognised as being of overriding public interest, that in the planning and permit-granting process, the construction and operation of plants and installations for the production of energy from renewable sources and the related grid infrastructure development are given priority when balancing legal interests in the individual case.... (emphasis added)'

The initial period of application of the Regulation which has since been extended (see below) is the 30 December 2022 to 29 June 2024. However, the Regulation included provision for the EU Commission to review the application of, and continued need for, the measures included in the Regulation. By Regulation 2024/223 of the 22 December 2023 the Council of the European Union, Regulation 2022/2577 was extended and amended, with Article 3 applying to all permit-granting processes commenced up to the 30 June 2025.

The importance, continued need and effectiveness of Article 3(2) of Regulation 2022/2577 in aiding the accelerated deployment of renewable energy is explained in Recital 14 of Regulation 2024/223:

"...Article 3(2) of Regulation (EU) 2022/2577 requires priority to be given to projects that are recognised as being of overriding public interest whenever the balancing of legal interests is required in individual cases and where those projects introduce additional compensation requirements for species protection... The first sentence of Article 3(2) of Regulation (EU) 2022/2577 has the potential, in the current urgent and still unstable energy situation on the energy market which the Union is facing, to further accelerate

¹¹ Council Regulation (EU) 2022/2577, at Recital 1



renewable energy projects since <u>it requires Member States to promote those renewable energy projects</u> by giving them priority when dealing with different conflicting interests beyond environmental matters in the context of Member States' planning and the permit-granting process. The Commission's report demonstrated the value of the first sentence of Article 3(2) of Regulation (EU) 2022/2577 which recognises the relative importance of renewable energy deployment in the current difficult energy context beyond the specific objectives of the derogations foreseen in the Directives referred to in Article 3(1) of Regulation (EU) 2022/2577. Given the particularly severe situation in the supply of energy which the Union is currently facing, it is appropriate to prolong the application of Article 3(2) of Regulation (EU) 2022/2577 in order to appropriately recognise the crucial role played by renewable energy plants to fight climate change and pollution, reduce energy prices, decrease the Union's dependence on fossil fuels and to ensure the Union's security of supply in the context of the balancing of legal interests carried out by permitgranting authorities or national courts. At the same time, it is also appropriate to keep the environmental safeguard that, for projects recognised as being of overriding public interest, appropriate species conservation measures, underpinned by sufficient financial resources, are adopted. (emphasis added)'

Energy Roadmap 2050

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

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

The analysis found that decarbonising the energy system is technically and economically feasible. The Roadmap notes that all scenarios show the biggest share of energy supply technologies in 2050 comes from renewables. In this regard, it should be noted that the Climate Change Advisory Council states within their 2022 Annual Review (August 2022) that to reach "*demanding emissions reductions targets required under our climate targets, wind and solar resources will need to be harnessed to a greater and faster extent than previously considered*". As such, a major prerequisite for a more sustainable and secure energy system is a higher share of renewable energy up to and beyond 2030 to 2050. Each of the scenarios assumes in the analysis that increasing the share of renewable energy and using energy more efficiently are crucial, irrespective of the particular energy mix chosen.

2.3.2 National Renewable Energy Policy

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

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



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

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

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

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

National Energy Security Framework

The National Energy Security Framework (DECC, April 2022) highlights clearly the impacts the Russian invasion of Ukraine and the resulting war has had on Europe's energy system. The resulting decision by the European Union to phase out the import of Russian gas, oil and coal (REPowerEU) has brought to the fore the importance of security of supply and how energy policy is designed for long-term resilience. It takes account of the need to decarbonise society and economy, to reduce Ireland's emissions by 51% over the decade to 2030 and reach net zero emissions by 2050. According to the SEAI's Energy in Ireland (2021) report, oil accounts for 45% of Ireland's primary energy requirement making it one of the highest rates of oil dependency in the EU. The International Energy Agency, of which Ireland is a member country, includes a 10-point plan to cut oil use which calls for an acceleration in the deployment of wind and solar projects. Ireland's response per the Framework is set out over three themes:

- > Theme 1 managing the impact on consumers and businesses
- > Theme 2 ensuring security of energy supply in the near-term
- Theme 3 reducing our dependency on imported fossil fuels in the context of the phasing out of Russian energy imports across the EU

In relation to theme 3, the Framework highlights that replacing fossil fuels with renewables, including wind energy, will be a focus area of work. The Framework calls for "Supportive policies across Government and State agencies" which "can reduce barriers and fast track permitting for renewable energy generation projects. Similarly, renewable energy developers need to match this through taking a leadership role in delivering high quality applications to relevant consenting authorities, meeting project milestones on time and minimising delays." There are a number of 'Responses' set out in the Framework aimed at reducing reliance on imported fossil fuels and increasing indigenous renewable energy generation, including Response 25 which seeks the alignment of all elements of the planning system to support accelerated renewable energy development.



Having regard to the above, it is clear that the provision of renewable energy, such as the electricity produced by the Proposed Development, is vital in helping to secure the State's energy supplies and reduce reliance on imported fossil fuels.

Energy Security in Ireland to 2030 – Energy Security Package

Published in November 2023, the energy security package titled 'Energy Security in Ireland to 2030' builds on the policies set out in the NESF. The energy security package is based on the recognition of the following fact:

"Ireland's future energy will be secure by moving from an oil-, peat-, coal- and gas-based energy system to an electricity-led system maximising our renewable energy potential, flexibility and being integrated into Europe's energy systems."

The energy security package includes a range of measures to implement this approach by the prioritisation of the following:

- 1. Reduced and Responsive Demand.
- 2. Renewables-Led System.
- 3. More Resilient Systems.
- 4. Robust Risk Governance.

Independent research undertaken as part of the package, the McCarthy Report, provides an analysis of developments in the electricity sector in Ireland. The McCarthy Report makes the following observation in relation to the consenting process:

"The problem of delays encountered by major infrastructure projects, including in the electricity system, due to planning and environmental consent issues was evident. They had been commented upon by the International Energy Agency in its 2019 review of Ireland which named planning delays as the principal challenge to delivery of policy for the sector."

A key finding from the technical analysis conducted as part of the energy security package is the interdependence of energy security on two essential pillars: 'harnessing our indigenous renewable energy resources at speed and at scale and the rapid electrification of energy demand'. As such, the energy security package provides additional measures to supplement the existing measures introduced under previously published government policy documents. Those additional measures most relevant to the Proposed Development are as follows:

"Action 10: To implement Planning and Consenting System Reforms and provide greater certainty to the sector."

The energy security package aims to ensure that the planning system is fully aligned and resourced to fully support accelerated renewable energy development. It also aims to ensure renewable energy projects are prioritised in line with the recast Renewable Energy Directive and RePowerEU.

The Proposed Development supports the government's objectives in ensuring the State's energy security. This Proposed Development serves as a domestic renewable energy generator capable of providing clean electricity to the national electricity grid, contributing to a renewables-led system.

2.3.2.2 Project Compliance with Renewable Energy Policy

At a European level, there is a clear upward trend in the revisions of renewable energy targets. With a current target of 42.5%, with an ambition to reach 45% by 2030, it is crucial that every existing renewable energy generator is retained where possible. The Proposed Development currently contributes to the 23% of energy currently sourced from renewable energy.



National Energy Policy aims to achieve two main gaols, 1) to decarbonise Ireland's national energy network, and 2) to increase Ireland's indigenous energy supply in order to improve the country's energy security. The Proposed Development is an existing, low carbon and indigenous energy supply which provides clean, renewable energy to the national electricity grid. Therefore, the continued operation of the Castledockrell Wind Farm is in accordance with and supported by national energy policy.

2.4

Climate and Renewable Energy Target Progress

At a European level, the latest data shows that, as of 2022, 23% of energy came from renewable energy sources¹². This represents an increase of 1.1% compared to 2021 levels. While progress is being made to increase the share of renewable energy, it is clear that all EU member states need to intensify their efforts to collectively comply with the target of 42.5% set in the latest revision of the renewable energy directive.

Of the 27 EU member states, Sweden has the highest share of energy from renewable sources. 66% of gross final energy consumption in Sweden comes from renewable energy sources. Ireland on the other hand, has the lowest proportion of renewables in the EU at 13.1%. It is evident that Ireland is not performing well when compared against our European counterparts and that urgent action is required increase the overall share of renewable energy in our gross final energy consumption.



When it comes to the share of renewable energy in electricity, Ireland does perform better. In 2022, 36.8% of Ireland's electricity was renewable. This puts Ireland below the EU average of 41.1%¹³.

Ireland's Greenhouse Gas Emissions Projections 2023 - 2050 (May 2024)

The Environmental Protection Agency (EPA) publish Ireland's Greenhouse Gas Emission Projections and at the time of writing, the most recent report, 'Ireland's Greenhouse Gas Emissions Projections 2023–2050' was published in May 2024. The report includes an assessment of Ireland's progress

¹² https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20231222-2

¹³ https://ec.europa.eu/eurostat/databrowser/view/nrg_ind_ren_custom_9264705/default/bar?lang=en



towards achieving its emission reduction targets out to 2050 set out under the EU emission reduction targets as set out under the Effort Sharing Regulation.

The EPA has produced two scenarios in preparing greenhouse gas emissions projections to 2050, a "With Existing Measures" (WEM) scenario and a "With Additional Measures" (WAM) scenario. These scenarios forecast Irelands greenhouse gas emissions in different ways. The WEM scenario assumes that no additional policies and measures, beyond those already in place by the end of 2022. This is the cut off point for which the latest national greenhouse gas emission inventory data is available, known as the 'base year' for projections. The WAM scenario has a higher level of ambition and includes government policies and measures to reduce emissions such as those in Ireland's Climate Action Plan 2024.

The EPA Emission Projections Update notes the following key trends:

- Ireland is not on track to meet the 51 per cent emissions reduction target (by 2030 compared to 2018) based on these projections which include most 2024 Climate Action Plan measures.
- Emissions from the Energy Industries sector are projected to decrease by between 57 and 62 per cent over the period 2022 to 2030. Renewable energy generation at the end of the decade is projected to range from 69 to 80 per cent of electricity generation as a result of a projected rapid expansion in wind energy and other renewables.
- Sectoral emissions ceilings for 2025 and 2030 are projected to be exceeded in almost all cases, including Agriculture, Electricity, Industry and Transport.
- The first two carbon budgets (2021-2030), which aim to support achievement of the 51 per cent emissions reduction goal, are projected to be exceeded by a significant margin of between 17 and 27 per cent.

As decarbonising electricity generation will have a significant positive contribution in achieving Ireland's emissions it is clear that additional renewable energy production such as that of the Proposed Development must be encouraged and supported if carbon saving targets are to be met.

National Energy Projections Report 2024

The National Energy Projections Report 2024, published in November 2024, sets out the latest renewable energy and climate projections by the SEAI. Based on the EPA projections outlined above which were published in May 2024, the report presents the findings of the 2024 national energy and climate modelling cycle.

The most notable conclusion drawn from this year's projections is the significant gap between projections across all scenarios and legally binding national and EU targets. Even with full implementation of CAP 24, Ireland is projected to miss its national and EU climate and energy targets for 2030.

In this year's projections, in addition to the 'WEM' and 'WAM' scenarios (defined in the previous Section), the SEAI has included a 'risk' scenario, which examines the risk of delays in achieving some of the most significant and ambitious targets set in CAP24, such as the renewable electricity targets. The risk scenario for variable renewable generation capacity was developed using forecasts from surveys of expert stakeholders. The survey results indicated that there is a risk of under-delivery of 2.8 GW onshore wind by 2030.

Energy in Ireland 2024 Report

In December 2024, the SEAI released in annual publication 'Energy in Ireland' report which looks at trends in national energy use and at the underlying driving forces, such as the economy and weather, and more recently the impacts of high energy prices. It also examines greenhouse gas emissions from



energy use, energy security, cost competitiveness, and our progress towards EU renewable energy targets.

The Report identifies that Ireland's national energy-related emissions in 2023 were at their lowest level in over 30 years. Energy-related emissions in 2023 were 31.4 MtCO2eq, down 8.3% on 2022 levels, and lower even than those observed during the height of COVID impacts in 2020. Energy-related emissions fell by over 2.8 MtCO2eq in 2023 - the largest annual reduction observed in 12 years. The following are some of the key points, relating to renewable energy and energy emissions:

- > Ireland's national energy-related emissions have fallen for seven of the last ten years.
- 14.1% of Ireland's primary energy was renewable in 2023, with fossil fuel remaining the dominant source of Ireland's energy.
- > Wind generation provided 33.7% of electricity supply in 2023.
- 2023 electricity emissions were 7.6 MtCO2eq, the lowest on record, down 22% on 2022 levels.
- 2023 was the first year in which fossil fuel generation accounted for less than half of Ireland's gross electricity supply.
- In 2023, Ireland had 4.74 GW of installed wind capacity, up 4.5% on the previous year.



Figure 2-2: Ireland's installed wind capacity with 2024 estimates, projections to 2030, CAP targets Source: SEAI Energy in Ireland 2024 Report, Figure 1.27

The Report states that over the last 10-years, Ireland has added wind capacity at an average rate of 0.26 GW per annum, although this has dropped to a rate of 0.14 GW over the last 5-years. To align to the pace of the 'With Additional Measures' projections needed to deliver on the 80% RES-E target, the rollout of onshore wind capacity needs to return to the rate previously achieved between 2016 and 2019. The Report then goes on to state the following:



"Increasing wind generation through added wind infrastructure is key to decarbonising Ireland's electricity supply. The decarbonisation of electricity maximised the positive impact of sustainability technologies like heat pumps and electric vehicles. The recent slow-down in added wind capacity is impacting Ireland's transition to a sustainable energy future. Renewable capacity must be added faster than electricity demand increases. We must do everything we can to support the roll-out of both onshore and offshore wind and grid-connected solar PV capacity". (emphasis added)

Ireland's Climate Change Assessment (January 2024)

In January 2024, the EPA published Irelands Climate Change Assessment (ICCA). This assessment provides a comprehensive overview and breakdown of the state of knowledge around key aspects of climate change with a focus on Ireland. The ICCA report is presented in four volumes.

- Volume 1: Climate Science Ireland in a Changing World
- Volume 2: Achieving Climate Neutrality in 2050
- Volume 3: Being Prepared for Irelands Future
- Volume 3: Realising the Benefits of Transition and Transformation

The ICCA Synthesis Report states that having peaked in 2001, Irelands greenhouse gas emissions have reduced in all sectors except agriculture. However, Ireland currently emits more greenhouse gases per person than the EU average. The report goes on to state that there has been an identified gap in policy that indicates that Ireland will not meet its statutory greenhouse gas emission targets. Achieving net zero carbon dioxide emissions by 2050 requires significant and unprecedented changes to Ireland's energy system. Policies tailored to suit different stages of technology development are critical for achieving a net zero energy system. Established technologies, such as wind energy, solar photovoltaics and bioenergy will be key in meeting short-term emission reduction targets (i.e. 2030), whereas offshore wind infrastructure is expected to be the backbone of future energy systems. This can only be achieved with appropriate support schemes, regulation and investments for synergistic growth of offshore wind and other renewable technologies.

There are well-established 'no-regret options' that need to happen now, which can get Ireland most of the way to net zero carbon dioxide emissions. Beyond that, there are 'future energy choices' relating to the scale and magnitude of technologies that will assist in achieving Ireland statutory climate targets. Ireland's no-regret options are demand reduction (e.g. through energy efficiency and reduced consumption), electrification (e.g. electric vehicles and heat pumps), deployment of market-ready renewables (e.g. wind energy and solar photovoltaics) and low-carbon heating options (e.g. district heating); Irelands future choices include hydrogen, carbon capture and storage, nuclear energy and electro-fuels. Renewable energy can increasingly provide our future energy needs but will need to be complemented with carbon dioxide removals to achieve a net zero energy system in hard-to-abate sectors.'

The Climate Change Advisory Council Electricity Sectoral Review 2024

The Climate Advisory Council published its annual review in May 2024, it outlines detailed observations and recommendations for the Electricity sector in Ireland. This review emphasises the urgent need for Ireland to accelerate its transition to renewable energy to meet its 2030 electricity capacity targes and adhere to sectoral emissions ceilings. The Climate Change Advisory Council states:

"Ireland needs to reduce and ultimately prevent emissions of greenhouse gases. to stay within the agreed carbon budget, the Electricity sector needs to achieve the largest reduction in sectoral emissions of all sectors: a 75% decrease by 2030 compared with 2018."

Key observations in relation to Renewable Electricity are outlined below:



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- Renewables accounted for 41% of electricity demand in 2023, up from 39% in 2022.
- By the end of 2023, the total renewable grid capacity in Ireland was 5.7 GW, with the majority (4.7 GW) from onshore wind turbine installations.
- In 2023, only onshore wind (0.2 GW) generation was connected. This is significantly below the annual average increase of 1.6 GW of onshore renewables required to meet 2030 capacity targets.
- In 2023, 0.5 GW of wind projects received planning permission; however, no onshore wind projects were awarded permission before September. Appeals and judicial reviews, including for all of An Bord Pleanála's approved projects, continue to delay the development of projects.



Figure 2-3 Renewable energy capacity and storage connected to the grid in Ireland, 2021-2023





2.5 Planning Policy Context

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

- > National Policy Context
- > Regional Policy Context
- Local policy Context

As a renewable energy project, the Proposed Development is consistent with the overall national policy objectives to increase penetration and deployment of renewable energy resources. The specific compliance with the County Development Plan provisions are dealt with in detail in the County Development Plan sections below.

2.5.1 National Planning Policy Context

National Policy Framework: Project Ireland 2040

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

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

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

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

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

- > A shift from predominantly fossil fuels to predominantly renewable energy sources.
- > Increasing efficiency and upgrades to appliances, buildings and systems.