

# 1. INTRODUCTION

## 1.1 Introduction

This Environmental Impact Assessment Report (EIAR) has been prepared by MKO on behalf of Maughanaclea Ltd, who intends to apply to An Coimisiún Pleanála for planning permission to construct a renewable energy development comprising 14 no. wind turbines and associated infrastructure in the townlands of Maughanaclea and adjacent townlands, near Kealkill in Co. Cork, including a 110kV onsite substation and associated works, and underground 110kV cabling to connect to the national grid at the existing Dunmanway 110kV substation, located approximately 13.8km southeast of the Proposed Wind Farm site. A detailed description of the Proposed Project is provided in Ch. 4: Description of the Proposed Project of this EIAR.

The Proposed Wind Farm will comprise 14 no. turbines with an overall blade tip height of 169 metres (m), rotor diameter of 133 m, across two clusters of turbines and will have an estimated installed generating capacity of 67.2 MW. The Proposed Project meets the threshold for Strategic Infrastructure Development (SID) as set out in the Seventh Schedule of the Planning and Development Act 2000, as amended, being “*An installation for the harnessing of wind power for energy production (a wind farm) with more than 25 turbines or having a total output greater than 50 megawatts*”) and is therefore being submitted directly to An Coimisiún Pleanála (ACP) as a Strategic Infrastructure Development in accordance with Section 37E of the Planning and Development Act 2000, as amended. This approach has been confirmed following consultations with the Commission under the provisions of Section 37B of the Planning and Development Act 2000 as amended (case reference PC04.321826). This EIAR accompanies the planning application for the Proposed Project submitted to ACP. The planning application is accompanied by this EIAR and a Natura Impact Statement (NIS).

Full details of the pre-application consultation undertaken with regards to the planning application can be found in Section 2.8.4 in Ch. 2: Background to the Proposed Project: Background to the Proposed Project of this EIAR.

### 1.1.1 References to Proposed Project

The Proposed Project, which will be known as the ‘Proposed Maughanaclea Renewable Energy Development’ is being brought forward in response to local, regional, national, and European policy regarding Ireland’s transition to a low-carbon economy, associated climate change policy objectives and to reduce Ireland’s dependence on imported fossil fuels for the production of electricity.

For the purposes of this EIAR:

- The ‘Proposed Project’ refers to the entirety of the project (the ‘Proposed Wind Farm’ and the ‘Proposed Grid Connection’, as described below) for the purposes of this EIAR in accordance with the EIA directive. The Proposed Project is described in detail in Ch. 4: Description of the Proposed Project of this EIAR and is the subject of the accompanying planning application under Section 37E of the Planning and Development Act 2000, as amended;
- The ‘Proposed Wind Farm’ refers to the 14 no. and associated foundations and hardstanding areas, including site access roads and entrances, underground 33kV internal cabling, meteorological mast, temporary construction compounds, peat and spoil management areas, borrow pits, biodiversity enhancement areas, tree felling and vegetation removal, site drainage, operational stage signage, 110kV onsite substation, and all ancillary works and apparatus. A detailed description of the Proposed Wind Farm is provided in Ch. 4: Description of the Proposed Project of this EIAR.

- The ‘proposed turbines’ refers to the 14 no. turbines associated with the Proposed Wind Farm as outlined above;
- The ‘Proposed Grid Connection’ refers to the 110kV underground cabling connection from the proposed 110kV onsite substation to the existing Dunmanway 110kV substation, and all ancillary works and apparatus. The Proposed Grid Connection will facilitate the connection of the Proposed Wind Farm to the national electricity grid;
- The ‘Site’ refers to the primary study area for the EIAR, as delineated by the EIAR site boundary in green as shown in Figure 1-1 of the EIAR, and encompasses an area of approximately 1,175 hectares; and,
- The ‘Proposed Wind Farm site’ refers to the portion of the Site surrounding the Proposed Wind Farm but excluding the portion of the Site surrounding the Proposed Grid Connection underground cabling route.

This EIAR, along with the NIS, will accompany the planning application for the Proposed Project which will be made to An Coimisiún Pleanála in accordance with the provisions of 37E of the Planning and Development Act 2000, as amended. Both the EIAR and NIS contain the information necessary for An Coimisiún Pleanála to complete the Environmental Impact Assessment and Appropriate Assessment as required for this planning application. Both the EIAR and NIS take into account the combined impacts identified across the various EIAR disciplines of the Proposed Project.

For clarity in this EIAR, all elements of the Proposed Project will be assessed cumulatively and in combination with other plans and projects to aid the competent authority in carrying out an EIA.

The Site identifies the primary EIAR study area for the Proposed Project and was defined in consideration to appropriate buffers and natural onsite features. However, each individual topic, i.e. chapter, has its own study area for assessment purposes relevant to that topic which will be clearly identified in the relevant chapters. The actual planning application site outline (red line planning application boundary) for the purposes of this planning application occupies a smaller area within the Site boundary. The EIAR Site Boundary, i.e. the Site is delineated in green on Figure 1-1 below, and encompasses an area of approximately 1,175 hectares. The permanent footprint of the Proposed Project measures approximately 14.67 hectares, which represents approximately 1.25% of the Site.

The Proposed Project is described in detail in Ch. 4: Description of the Proposed Project of this EIAR.

## 1.1.2 Site Location

As defined in Section 1.1.1, the Site is made up of two distinct elements, the Proposed Wind Farm and the Proposed Grid Connection. The Proposed Wind Farm site is located within a rural setting in west Co. Cork, approximately 2.3km east of the village of Kealkill, 9.5km northeast of the town of Bantry, and 12.2km west of Dunmanway. The Proposed Wind Farm site is made up of two clusters, a northern turbine cluster and a southern turbine cluster. Corine land cover maps describe the Site as primarily consisting of peat bogs, with portions of coniferous forestry, and moors and heathland. The southern turbine cluster is accessed via an existing commercial forestry road off the R585. It is proposed to access the northern cluster via a new site entrance road off the R585 in the townland of Maughanaclea. The Site location context is shown on Figure 1-1. The Site is shown overlain on aerial imagery in Figure 1-2.

The Proposed Grid Connection includes for 110kV underground cabling from the proposed 110kV onsite substation, in the townland of Maughanaclea, Co. Cork, to the existing Dunmanway 110V substation in the townland of Ballyhalwick, Co. Cork. The Proposed Grid Connection is approximately 20.5km in length and is located primarily within the curtilage of the public road corridor. One section (approximately 940m) of the Proposed Grid Connection is located in private land within the southern turbine cluster of the Proposed Wind Farm site, primarily within an access road.

The Proposed Wind Farm is located within an area designated in the Cork County Development Plan 2022-2028 as ‘Open to Consideration’ (OTC) for wind energy development. Areas that are OTC are “*locations that may have potential for wind farm developments but there are also some environmental issues to be considered*”. It is noted that a small portion of the Proposed Grid Connection is located within an area designated as ‘Normally Discouraged’, however, this is not relevant in the policy context.

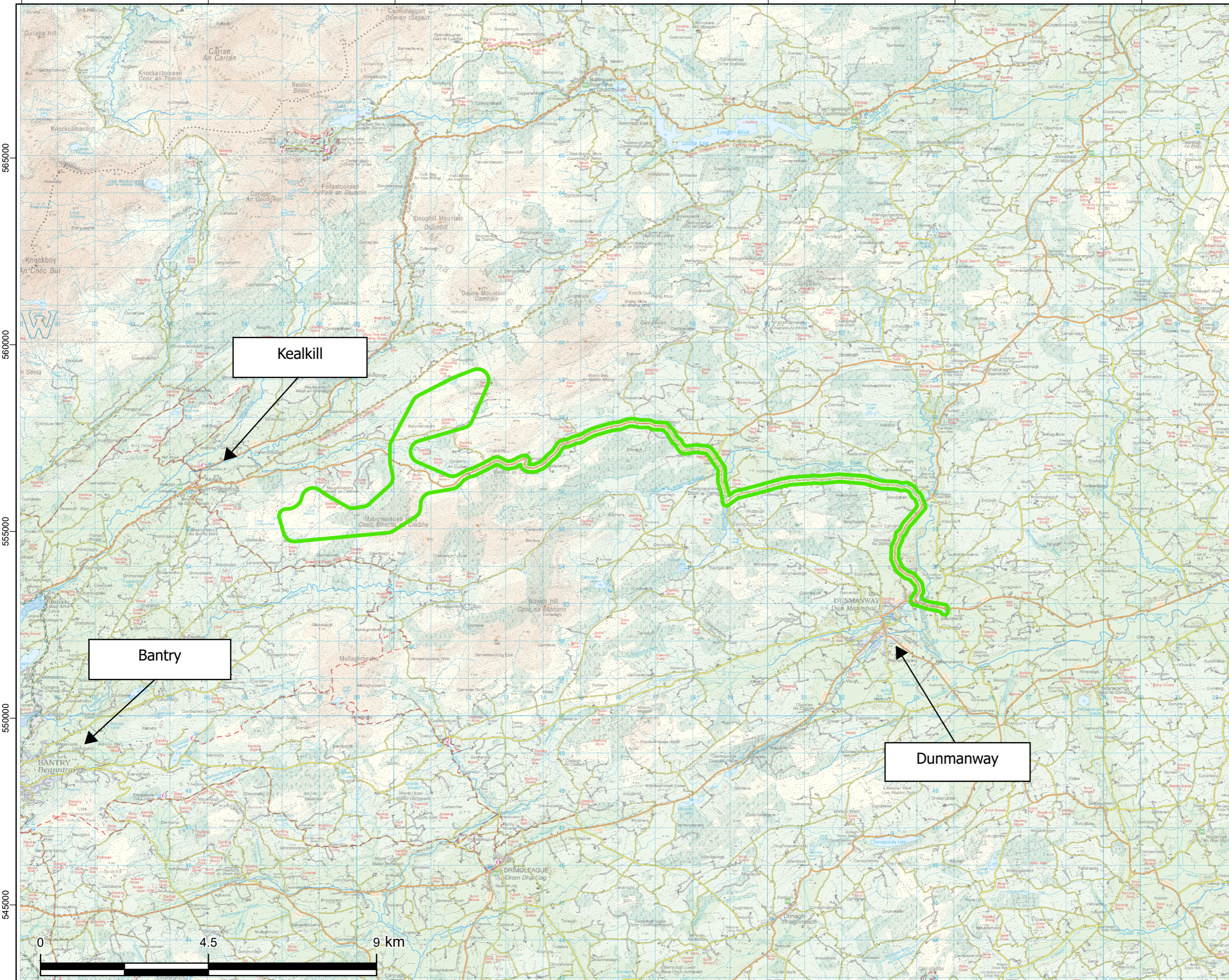
The townlands in which the Proposed Project is located are listed in Table 1-1 below.

Table 1-1 Townlands related to the Proposed Project

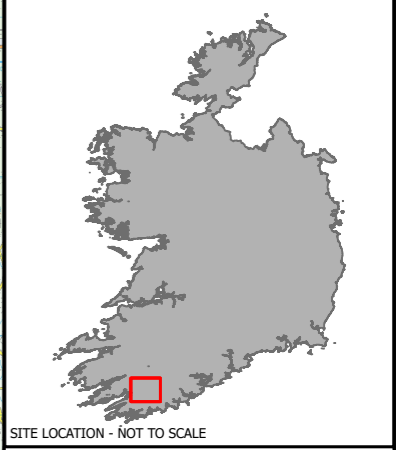
Project Component		Townlands
Proposed Project	Proposed Wind Farm	Kealkill*, Maularaha*, Ardrah, Maughanaclea, Gortnacowly*, Coomleagh West*, Ballynamought, Gortloughra, Cousane, Coomclogh
	Proposed Grid Connection	Maughanaclea, Cousane, Glanycarney, Derragh, Shanacrane East*, Keenrath, Derrynacaheragh, Inchireagh*, Shiplough, Coolsnaghtig, Mallabracka, Derrylahan, Keelaraheen*, Gortanure*, Derreens, Demesne, Dunmanway North, Milleenanannig, Ballyhalwick

\*Townlands located within Site, but not within planning application boundary

50000 50500 51000 51500 52000 52500 53000



Map Legend  
EIAR Site Boundary

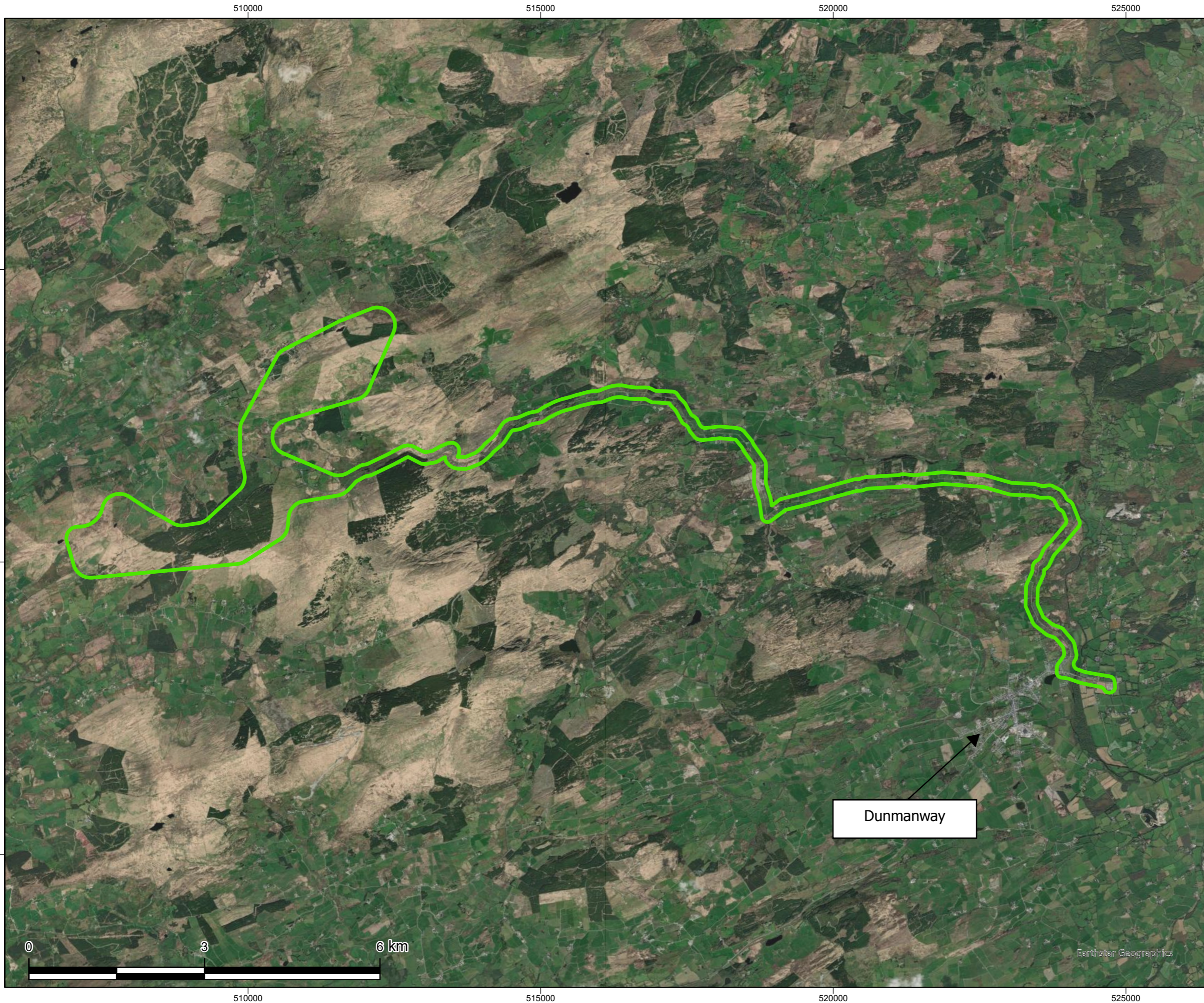


Drawing Title <b>Site Location</b>		
Project Title <b>Maughanaclea Renewable Energy Development</b>		
Project No. <b>240225</b>	Drawing No. <b>Figure 1-1</b>	Scale <b>1:95,000</b>
Drawn By <b>SOR</b>	Checked By <b>RK</b>	Date <b>16/02/2026</b>



50000 50500 51000 51500 52000 52500 53000

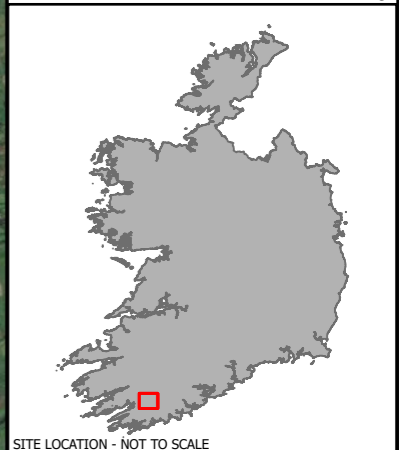
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**Map Legend**

- EIA Site Boundary

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**Site Location - Aerial**

Project Title  
Maughanaclea Renewable Energy Development

<small>Project No.</small> 240225	<small>Drawing No.</small> 1-2	<small>Scale</small> 1:60,000
<small>Drawn By</small> SOR	<small>Checked By</small> RK	<small>Date</small> 23/03/2026

Earthstar Geographics

Email: [info@mkofireland.ie](mailto:info@mkofireland.ie) / Website: [www.mkofireland.ie](http://www.mkofireland.ie)

## Legislative Context of Environmental Impact Assessment

The consolidated European Union Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (the ‘EIA Directive’), has been transposed into Irish planning legislation by the Planning and Development Act 2000 as amended and the Planning and Development Regulations 2001 as amended. Directive 2011/92/EU was amended by Directive 2014/52/EU which has been transposed into Irish law with the recent European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018); amending the Planning and Development Act, 2000 and the Planning and Development Regulations 2001. Most of the provisions of the new regulations came into operation on the 1st of September 2018 with a number of other provisions coming into operation on the 1st of January 2019.

This EIAR complies with the EIA Directive and its transposing legislation.

The Environmental Impact Assessment (EIA) will be undertaken by An Coimisiún Pleanála, as the competent authority.

Article 5 of the EIA Directive as amended by Directive 2014/52/EU provides that where an EIA is required, the developer shall prepare and submit an environmental impact assessment report (EIAR). The information to be provided by the developer shall include at least:

- a) *a description of the project comprising information on the Site, design, size and other relevant features of the project;*
- b) *a description of the likely significant effects of the project on the environment;*
- c) *a description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment;*
- d) *a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment;*
- e) *a non-technical summary of the information referred to in points (a) to (d); and*
- f) *any additional information specified in Annex IV relevant to the specific characteristics of a particular project or type of project and to the environmental features likely to be affected.*

In addition, Annex IV of the EIA Directive provides further detail on the information to be included in an EIAR. These requirements are transposed under Article 94 and Schedule 6 of the Planning and Development Regulations 2001 (as amended), with which this EIAR complies.

MKO was appointed as lead planning and environmental consultant on the Proposed Project and commissioned to prepare this EIAR in accordance with the requirements of the EIA Directive 2011/92/EU as amended by Directive 2014/52/EU.

Part 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended, identifies classes and scales of development that require Environmental Impact Assessment (EIA). The relevant class of development in this case relates to “*installations for the harnessing of wind power for energy production (wind farms) with more than 5 turbines or having a total output greater than 5 megawatts*”, as per Item 3(i) of the Schedule. The Proposed Project exceeds 5 Megawatts in scale and proposes more than 5 turbines and therefore is subject to EIA.

The EIAR provides information on the receiving environment and assesses the likely significant effects of the Proposed Project on it and proposes mitigation measures to avoid or reduce these effects. The

function of the EIAR is to provide information to allow the competent authority to conduct the EIA of the Proposed Project.

All elements of the Proposed Project, i.e. the Proposed Wind Farm and Proposed Grid Connection have been assessed as part of this EIAR.

### 1.2.1 EIAR Guidance

The Environmental Protection Agency (EPA) published its ‘*Guidelines on the Information to be Contained in Environmental Impact Assessment Reports*’ (EPA, 2022) (hereafter referred to as ‘EPA, 2022’) in May 2022, which is intended to guide practitioners preparing an EIAR in line with the requirements set out in the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018). This guidance has been followed.

In preparing this EIAR regard has also been taken of the provisions of the ‘*Guidelines for Planning Authorities and An Bord Pleanála on Carrying out Environmental Impact Assessment*’, published by the Department of Housing, Planning and Local Government (DHPLG) in August 2018.

The European Commission also published a number of guidance documents in December 2017 in relation to Environmental Impact Assessment of Projects (Directive 2011/92/EU as amended by 2014/52/EU) including ‘*Guidance on Screening*’, ‘*Guidance on Scoping*’ and ‘*Guidance on the preparation of the Environmental Impact Assessment Report*’. MKO has prepared this EIAR in accordance with these guidelines also.

### 1.2.2 Wind Energy Development Guidelines for Planning Authorities

The relevant considerations under the ‘*Wind Energy Development Guidelines for Planning Authorities*’ (hereafter referred to as ‘the Guidelines (DoEHLG, 2006) (Department of the Environment, Heritage and Local Government (DOEHLG), 2006) have been taken into account during the preparation of this EIAR.

The Guidelines (DoEHLG, 2006) were the subject of a targeted review. The proposed changes to the assessment of impacts associated with onshore wind energy developments were outlined in the document Draft Wind Energy Development Guidelines (December 2019) (hereafter referred to as the ‘Draft Guidelines (DoHPLG, 2019)’. A consultation process in relation to the Draft Guidelines (DoHPLG, 2019) closed on 19<sup>th</sup> February 2020. The proposed changes presented in the Draft Guidelines (DoHPLG, 2019) give certain focus on the setback distance from residential properties (four times the proposed maximum tip height), along with shadow flicker and noise requirements relative to sensitive receptors.

At time of writing, the Draft Guidelines (DoHPLG, 2019) have not yet been adopted, and the relevant guidelines for the purposes of section 28 of the Planning and Development Act 2000, as amended, remain to be the Guidelines (DoEHLG, 2006). Notwithstanding this, however, due to the timelines associated with the planning process for renewable energy projects and the commitment within the Climate Action Plan 2025 (CAP25) Annex of Actions<sup>1</sup> to develop revised wind energy development guidelines for onshore wind in Q1 2025, it is possible that the Draft Guidelines (DoHPLG, 2019) may be adopted during the consideration period for the current planning application. Although, the Climate Action Plan 2025 (CAP25) was published in April 2025, it does not provide an update on the commitments published in CAP24 relating to the publication timeline of the Draft Guidelines (DoHPLG, 2019). Should the Draft Guidelines (DoHPLG, 2019) be adopted in advance of a planning

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<sup>1</sup> Department of the Environment, Climate and Communications (April 2025) Climate Action Plan 2025 Annex of Actions (EL/24/5)

decision being made on this application, the Proposed Wind Farm will be capable adhering to the relevant noise and shadow flicker standards. While the final, updated guidelines have not yet been published it should be noted that noise and shadow Flicker are entirely controllable and are discussed further in Ch. 1: Introduction<sup>2</sup> and Ch. 5: Population and Human Health, respectively. The Proposed Wind Farm achieves the recommended distance of 4 times turbine tip height from proposed turbines to third party sensitive receptors, which has become a recognised standard for the purposes of protecting residential visual amenity, as currently outlined in the Draft Guidelines (DoHPLG, 2019).

### 1.3 The Applicant

The Applicant for the Proposed Project, Maughanaclea Ltd, is an associated company of Enerco Energy Ltd., which is an Irish-owned, Cork based company with extensive experience in the design, construction and operation of wind energy developments throughout Ireland, with projects currently operating or in construction in Counties Cork, Kerry, Limerick, Clare, Galway, Mayo and Donegal.

By the end of 2025, Enerco associated companies had over 975 Megawatts (MW) of wind generating capacity in commercial operation or in construction, with a further c.400MW of projects at various stages in its portfolio to assist in meeting Ireland's renewable energy targets.

### 1.4 Brief Description of the Proposed Project

The Proposed Project will comprise the construction of 14 no. turbines with an overall blade tip height of 169m and all associated works, including an 110 kV onsite substation and associated underground 110kV cabling to connect to the national grid at the existing Dunmanway 110kV substation. The full description of the Proposed Project is detailed in Ch. 4: Description of the Proposed Project of this EIAR.

The current planning application, relating to the Proposed Project, is being made to An Coimisiún Pleanála under Section 37E of the Planning and Development Act, 2000, as amended.

The Proposed Project description for the current planning application as appears in the public notices is as follows:

*The Proposed Project will consist of the provision of the following:*

- i. 14 no. wind turbines with an overall turbine tip height of 169 metres, a rotor blade diameter of 133 metres, and turbine hub height of 102.5 metres, and a meteorological mast with a height of 30 metres, and subsequent decommissioning of the wind turbines and meteorological mast, following a thirty five-year operational life from the date of full commissioning of the wind turbines;*
- ii. Associated wind turbines and meteorological mast foundations and hardstanding areas;*
- iii. A 110kV substation compound (Including control buildings (with a combined floor area of 594Sq.m) with welfare facilities, all associated electrical plant and apparatus, security fencing, underground cabling, lightening protection poles, underground wastewater holding tank, site drainage and all ancillary works);*
- iv. Underground electrical (110kV) and communications cabling from the proposed 110kV substation to the existing Dunmanway 110kV substation in the townland of Ballyhalwick (including joint bays, communication chambers, earth sheath links, and ancillary works along the underground electrical cabling route). This cabling route is primarily located within the public road corridor;*
- v. Underground electrical (33kV) and communications cabling connecting the wind turbines and meteorological mast to the proposed 110kV substation;*
- vi. 3 no. temporary construction compounds (including site offices and welfare facilities (with a combined floor area of 585Sq.m);*
- vii. 2 no. temporary security cabins (with a combined floor area of 28.8Sq.m);*

- viii. *Junction accommodation works to facilitate turbine delivery and construction access to the site, including the upgrade of an existing site entrance off the R585 regional road, and the construction of a new access road off the R585 regional road, crossing the L8777 Local Road; including new permanent gated site entrances;*
- ix. *Upgrade of existing site tracks/ roads and provision of new site access roads, junctions and hardstand areas (including upgrade of a short section of the L8777 local road);*
- x. *4 no. borrow pits;*
- xi. *Peat and Spoil Management;*
- xii. *Site Drainage;*
- xiii. *Tree felling and vegetation removal;*
- xiv. *Biodiversity Enhancement measures (peatland habitat enhancement, Kerry slug habitat enhancement, and native woodland planting);*
- xv. *Operational stage site signage and;*
- xvi. *All associated site development works and apparatus.*

The application is seeking a ten-year planning permission. Current and future wind turbine generator technology will ensure that the wind turbine model, chosen for the Proposed Project, will have an operational lifespan greater than the 35-year operational life that is being sought as part of the planning application.

Modern wind turbine generators currently have a typical generating capacity in the 4 to 7 MW range, with the generating capacity continuing to evolve upwards as technology improvements are achieved by the turbine manufacturers. For the purposes of this EIAR it is assumed that the wind turbine model installed as part of the Proposed Project will have a generating capacity of 4.8MW. Therefore, on this basis, the proposed 14 no. turbines would have a combined generating capacity of 67.2MW. The actual turbine procured as part of a competitive tender process may have a power output that is marginally lower or greater than the 4.8MW turbine described in the EIAR. Irrespective of the power output of the actual turbine procured, the conclusions of the EIAR will not be materially affected.

As detailed in Section 3.2.5 of Chapter 3: Site Selection & Reasonable Alternatives: Consideration of Reasonable Alternatives, the layout of the Proposed Project has been led by consideration of constraints and facilitators, thereby avoiding, where possible, the environmentally sensitive parts of the Site. The roads layout for the Proposed Wind Farm makes use of the existing onsite access roads and tracks where possible, with approximately 2.1km of existing roadway/tracks requiring upgrading and approximately 12.1km of new access road to be constructed.

There are 35 no. sensitive properties located within 1 km of the proposed turbine locations, with 11 no. of these sensitive receptors belonging to the landowners who are participating in the Proposed Project. The closest inhabitable property to the proposed turbines is H03, which is located approximately 682m from T03.

All elements of the Proposed Project (the Proposed Wind Farm and Proposed Grid Connection) have been assessed as part of this EIAR.

## 1.5 Need for the Proposed Project

### 1.5.1 Overview

In July 2021, the Climate Action and Low Carbon Development (Amendment) Act 2021 was signed into law, committing Ireland to reach a legally binding target of net-zero emissions no later than 2050, and a cut of 51% by 2030 (compared to 2018 levels). On this pathway to decarbonisation, the Government published the Climate Action Plan 2025<sup>2</sup> reaffirming the renewable electricity target of 80% by 2030, without compromising security of energy supply. The Proposed Project is expected to be operational before 2030 and would therefore contribute to this 2030 target.

In July 2025 the EPA published ‘Ireland’s Provisional Greenhouse Gas Emissions 1990-2024’<sup>3</sup> which stated a provisional total of national greenhouse gas emissions (excluding Land Use, Land Use Change and Forestry (LULUCF)) for 2024 to be 53.75 million tonnes carbon dioxide equivalent (MtCO<sub>2</sub>eq) which is 2% lower than emissions in 2023 (55.01 MtCO<sub>2</sub>eq). Ireland’s 2024 emissions were below the 1990 baseline for the second consecutive year.

In 2024, the energy industries, transport and agriculture sectors accounted for 73% of total greenhouse gas emissions. Agriculture is the single largest contributor to the overall emissions, at 38%. Transport, energy industries and the residential sector are the next largest contributors, at 21.7%, 13.3% and 10.4%, respectively. The report further states that renewables provided 1.3% more electricity in 2024 but, due to increasing demand, there was a decrease in the renewable share in electricity generation from 40.7% in 2023 to 39.6% in 2024, with wind accounting for 31.7% of electricity supply (down from 33.7%). Natural gas accounted for 42.1% of electricity generated in 2024, with coal and oil together accounting for 3.4% of electricity generated. The report highlights that whilst emissions are beginning to reduce, transformative measures will be needed to meet national climate ambitions.

Despite the progress in 2024 noted above, Ireland continues to face highly complex climate challenges, as detailed in a recent EPA publication from July 2024 titled ‘Ireland’s State of the Environment Report 2024’<sup>4</sup>. This report states that “Ireland has set a national objective to transition by 2050 to a climate-resilient, biodiversity-rich, environmentally sustainable and climate-neutral economy. Achieving this multifaceted objective will be the most complex and interconnected societal challenge for the next 25 years, and each step towards its achievement will present opportunities and challenges. Efficiencies will not get us there. Incrementalism will not get us there. Collectively we must shift our society to a sustainable trajectory.” The report further notes that the overall current assessment for climate in Ireland is ‘poor’ and “largely not on track to meet policy objectives and targets” and urges the full implementation of actions set out in the Climate Action Plan 2025 in addition to various other actions, for Ireland to have any chance of meeting its 2030 and 2050 climate targets. According to a SEAI report<sup>5</sup> published in November 2024, there are significant projected gaps to all legally binding targets in Ireland, including national carbon budgets and sectoral emissions ceilings, and EU obligations on renewable energy, energy efficiency and greenhouse gas emissions. The report highlights the risks faced over the delayed achievement of the majority of Climate Action Plan targets, including renewable electricity, and that “actions to address these risks are critically important”.

It is noteworthy that numerous sources have made it clear that based on our current trajectory, Ireland will fall short on our legally binding renewable energy targets. For example, an opinion published by

<sup>2</sup> Department of Environment, Climate and Communications (2025) Climate Action Plan 2025

<sup>3</sup> Ireland’s Provisional Greenhouse Gas Emissions (1990-2024) <<https://www.epa.ie/publications/monitoring-assessment/climate-change/air-emissions/EPA-Provisional-1990-2024-GHG-Report-1716.pdf>>

<sup>4</sup> <https://www.epa.ie/publications/monitoring-assessment/assessment/state-of-the-environment/EPA-SOE-Report-2024-BOOK-LOWRES-FINALfor-WEB.pdf>

<sup>5</sup> <https://www.seai.ie/sites/default/files/publications/National-Energy-Projections-Report-2024.pdf>

the European Commission in February 2024<sup>6</sup> indicated that Ireland is projected to fall short of the target of 43% of energy coming from renewable sources. While that figure in 2021 was 12.5%, Ireland’s target of 31.4% is “*significantly below the share of 43% resulting from the formula in Annex II of Regulation (EU) 2018/1999 on the Governance Regulation of the Energy Union and Climate Action (‘Governance Regulation’)*”.

The critical need for renewable energy is underscored by European legislation. RED III<sup>7</sup> contains a presumption in favour of renewable projects being in the ‘*overriding public interest and serving public health and safety*’. This presumption was introduced prior to the enactment of RED III in the Council Regulation (EU) 2022/2577 (laying down a framework to accelerate the deployment of renewable energy) detailed below in Section 1.5.2.2. The prioritisation of renewable energy projects in European law has been acknowledged by the Irish judicial system, most recently in the Carrownagowan Wind Farm judgement ([2024] IEHC 549), the Toole II judgment ([2024] IEHC 610) and in particular the Coolglass Wind Farm judgement, in which the High Court ([2025] IEHC 1) emphasised the importance of national climate and renewable energy policy when assessing renewable energy projects, and the Supreme Court subsequently confirmed that public bodies must have regard to their statutory climate obligations when exercising their planning functions. RED III was transposed into Irish Law in August 2025.

As such, the Proposed Project is critical to helping Ireland address these challenges as well as addressing the country’s over-dependence on imported fossil fuels. The need for the Proposed Project is driven by the following factors:

1. *A legal commitment from Ireland to limit greenhouse gas emissions under the Kyoto protocol to reduce global warming;*
2. *A requirement to increase Ireland’s national energy security as set out in Ireland’s Transition to a Low Carbon Energy Future 2015-2030.*
3. *A requirement to diversify Ireland’s energy sources, with a view to achievement of national renewable energy targets and an avoidance of significant fines from the EU (the EU Renewables Directive);*
4. *Climate Action Plan 2025 which aims to ensure that Ireland achieves its legally binding target (the Climate Action and Low Carbon Development (Amendment) Act 2021) of net-zero greenhouse gas emissions no later than 2050, and a reduction of 51% by 2030;*
5. *Increasing energy price stability in Ireland through reducing an over reliance on imported fossil fuels;*
6. *Provision of cost-effective power production for Ireland which would deliver local benefits; and*
7. *To facilitate the Government in meeting its ambitious 80% renewable energy target by 2030.*

These factors are addressed in further detail below. Section 2.3 of Ch. 2: Background to the Proposed Project: Background to the Proposed Project, presents a full description of the international and national renewable energy policy context for the Proposed Project. Section 2.4 of Ch. 2: Background to the Proposed Project addresses climate change, including Ireland’s current status with regard to meeting greenhouse gas emission reduction targets.

In November 2025, the World Meteorological Organisation (WMO) published the ‘*State of the Climate Update for COP30*’<sup>8</sup> The report provides a summary on the state of the climate indicators in 2025,

<sup>6</sup> [https://commission.europa.eu/publications/commission-recommendation-assessment-swcd-and-factsheet-draft-updated-national-energy-and-climate-20\\_en](https://commission.europa.eu/publications/commission-recommendation-assessment-swcd-and-factsheet-draft-updated-national-energy-and-climate-20_en)

<sup>7</sup> Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652.

<sup>8</sup> World Meteorological Organisation (2025) *State of the Climate Update for COP30* <<https://wmo.int/publication-series/state-of-climate-update-cop30>>

between January and August, with sections on key climate indicators, extreme events and impacts. The key messages in the report include:

- Greenhouse gases reached record observed levels in 2024 and continue to rise in 2025.
- January – August 2025 global mean surface air temperature was  $1.42\text{ °C} \pm 0.12\text{ °C}$  above the pre-industrial average.
- In the hydrological year 2023/2024, glaciers lost an observed record 1.3 metres water equivalent of ice. The hydrological year 2023/2024 was the third consecutive year that all monitored glaciated regions around the world recorded net mass loss.
- Arctic sea-ice extent in March 2025 was the lowest annual maximum in the satellite record. Antarctic sea-ice extent has remained well below average throughout 2025 to date.
- Weather- and climate-related extreme events to August 2025 had cascading impacts on lives, livelihoods and food systems, and contributed to displacement across multiple regions, undermining sustainable development.

Following this in March 2026, the WMO published the ‘*State of the Global Climate 2025*’<sup>9</sup> which contains the following key messages:

- The period 2015-2025 was the warmest 11 years since observations started.
- 2025 was the second or third warmest year (depending on the dataset) in the 176-year observational record, reflecting the shift to La Niña conditions that temporarily cool the planet. The annually averaged global near-surface temperature was about  $1.43 \pm 0.13\text{ °C}$  above the 1850–1900 pre-industrial average.
- The Earth’s energy imbalance has increased since its observational record began in 1960, particularly over the last 20 years. It reached a new high in 2025.
- The Earth’s oceans have been absorbing approximately eighteen times the annual human energy use each year for the past two decades. Despite La Niña conditions, around 90% of the ocean surface area experienced at least one marine heatwave in 2025. There is very high confidence that present-day ocean surface pH values are unprecedented for at least 26,000 years.
- Extreme weather impacts millions globally and costs billions.

There has been a substantial worldwide energy transition, with renewable capacity additions increasing by nearly 60% from 2022, totalling 565 gigawatts (GW).<sup>10</sup> This growth represents the highest rate observed in the past two decades, signalling a significant momentum toward achieving the clean energy goal set at the United Nations Framework Convention on Climate Change (UNFCCC) 28<sup>th</sup> Conference of the Parties (COP28) meeting in 2023, and reiterated at the 29<sup>th</sup> Conference of the Parties (COP29) in Azerbaijan in 2024 and at the 30<sup>th</sup> Conference of the Parties (COP30) in Belem in 2025, to triple renewable energy capacity globally to at least 11,000 GW by 2030. Considering existing policies and market conditions, the International Energy Agency (IEA) predicts that there will be approximately 5,500GW of new renewable capacity becoming operational by 2030. This implies that global renewable capacity additions will continue to increase every year, reaching almost 940GW annually by 2030. Solar PV and wind together account for 95% of all renewable capacity growth through the end of this decade due their growing economic attractiveness in almost all countries.

The joint publication of WMO and International Renewable Energy Agency on Climate-driven Global Renewable Energy Potential Resources and Energy Demand in 2023<sup>11</sup> underscores the inherent links

<sup>9</sup> World Meteorological Organisation (2026) *State of the Global Climate 2025*

<[https://library.wmo.int/viewer/69807/download?file=WMO-1391-2025\\_en.pdf&type=pdf&navigator=1](https://library.wmo.int/viewer/69807/download?file=WMO-1391-2025_en.pdf&type=pdf&navigator=1)>

<sup>10</sup> IEA (2024), *Renewables 2023*, IEA, Paris <<https://www.iea.org/reports/renewables-2023>>

<sup>11</sup> International Renewable Energy Agency + WMO (2024) *2023 Year in Review: Climate-driven Global Renewable Energy Potential Resources and Energy Demand* <<https://wmo.int/publication-series/2023-year-review-climate-driven-global-renewable-energy-potential-resources-and-energy-demand>>

between renewable energy resources and weather and climate conditions. It calls for better integration of climate variability considerations into energy resource operation, management, and planning to enhance effectiveness and sustainability in these regions.

### 1.5.1.1 Climate Change and Greenhouse Gas Emissions

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 avoid dangerous climate change by limiting global warming to well below 2°C above pre-industrial levels. 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 most recent climate conference (COP28) in December 2023 in Dubai resulted in the first agreement explicitly calling for the transition away from fossil fuels, the United Arab Emirates (UAE) Consensus. This text raised concerns over the achievement of limiting warming below 1.5°C, as the text to ‘phase out as soon as possible inefficient fossil fuel subsidies’ does not address energy poverty or the just transition. The UAE Consensus further calls for more explicit near-term goals in the lead up to 2050, calling for the world to cut greenhouse gas emissions by 43% as compared to 2019 levels. The most recent climate conference (COP29) took place in Azerbaijan in November 2024 and 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 COP29 with developed nations agreeing to triple finance to developing countries, with commitments increasing from USD 100 billion annually to USD 300 billion annually by 2035. 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. The adoption of these rules is seen as a crucial step towards operationalising a robust and credible carbon market.

The most recent climate conference (COP30) took place in Belém, Brazil in November 2025 and focused on implementation, aiming to turn the promises of the Paris Agreement and 2023’s Global Stocktake into real action. Adaptation to climate change was a top priority during COP30, whilst countries built on the NCQG agreed as part of COP29, aimed at providing developing countries with support for adaptation. The EU renewed its commitment to the COP28 pledges to transition away from fossil fuels, triple renewable energy capacity and double energy efficiency by 2030, as agreed in Dubai. COP30 also saw the launch and strengthening of several important initiatives, including the establishment of an Open Coalition on Compliance Carbon Markets - a new global effort to improve the effectiveness of carbon pricing and market mechanisms, and two initiatives relating to tropical forests, to fund conservation and reverse deforestation. The decisions taken in Belém are seen to mark a transition from climate promises to real-world implementation.

In March 2021 the government approved the Climate Action and Low Carbon Development (Amendment) Bill which provide plans to facilitate the “*transition to a climate resilient and climate neutral economy by the end of year 2050*”<sup>12</sup> and includes for a 51% reduction in emissions by 2030. Furthermore, government approval was given in February 2021 to draft amendments to the Petroleum and Other Minerals Development Act 1960 which will give statutory effect to ending the issuing of new licences for the exploration and extraction of gas. The Bill, now an Act, was passed into law in July 2021 and will manage the implementation of a suite of policies to assist in achieving a 7% average yearly reduction in overall greenhouse gas emissions over the next decade.

The Climate Action and Low Carbon Development (Amendment) Act 2021 also outlines the obligations of An Coimisiún Pleanála (then An Bord Pleanála) and/or local authority in assisting the country reach these targets. Section 15 of the Act states as follows:

<sup>12</sup>Rialtas na hÉireann 2021. Climate Action and Low Carbon Development (Amendment) Bill 2021  
<https://www.gov.ie/en/publication/984d2-climate-action-and-low-carbon-development-amendment-bill-2020/>

*‘Section 15. F33 (1) A relevant body shall, in so far as practicable, perform its functions in a manner consistent with—*

- a) the most recent approved climate action plan,*
- b) the most recent approved national long term climate action strategy,*
- c) the most recent approved national adaptation framework and approved sectoral adaptation plans,*
- d) the furtherance of the national climate objective, and*
- e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State.’*

The International Panel on Climate Change (IPCC) put forward its clear assessment in their Fifth Assessment Report<sup>13</sup>, 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 below 2 degrees and in accordance with the COP 21 agreement to limit global warming to well below 2° C above pre-industrial levels. Former Minister Kelly remarked in 2015 that *“As a nation we must do everything in our power to curb our emissions”*.

In February 2022, the IPCC released the report ‘Working Group II-Climate Change 2022: Impacts, Adaptation and Vulnerability’ regarding the impacts of climate change on nature and human activity. The report states that global warming of 1.5° C and 2° C will be exceeded during the 21st century unless deep reductions in CO2 and other greenhouse gas emissions occur in the coming decades. The report identifies four key risks for Europe, with most becoming more severe at 2° C global warming levels (GWL) compared with 1.5° C GWL. From 3° C GWL, severe risks remain for many sectors in Europe. The four key risks identified are:

- Key Risk 1: Mortality and morbidity of people and changes in ecosystems due to heat.
- Key Risk 2: Heat and drought stress on crops.
- Key Risk 3: Water scarcity.
- Key Risk 4: Flooding and sea level rise

In April 2022, the IPCC released the report ‘Working Group-III – Climate Change 2022: Mitigation of Climate Change’, which assesses literature on the scientific, technological, environmental, economic, and social aspects of mitigation of climate change. The report reflects new findings in the relevant literature and builds on previous IPCC reports, including the WGIII contribution to the IPCC’s Fifth Assessment Report (AR5), the WGI and WGII contributions to Sixth Assessment Report (AR6) and the three Special Reports<sup>14</sup> in the Sixth Assessment cycle. This report outlines developments in emission reduction and mitigation efforts, assessing the impact of national climate pledges in relation to long-term emissions goals in a global context.; and states that *“Unless there are immediate and deep emissions reductions across all sectors, limiting global warming to 1.5° C will be beyond reach.”*

In November 2023, the IPCC published the ‘AR6 Synthesis Report: Climate Change 2023<sup>15</sup>, and is the final product of the AR6 of the IPCC. It summarizes the state of knowledge of climate change, its widespread impacts and risks, and climate change mitigation and adaptation. It confirms that the unsustainable and unequal energy and land use as well as historical use of fossil fuels have unequivocally caused global warming, with global temperatures approximately 1.1° C above 1850-1900 levels. A substantial ‘emissions gap’ exists between global greenhouse gas emissions in 2030 associated

<sup>13</sup> IPCC Fifth Assessment Synthesis Report, Intergovernmental Panel on Climate Change AR5 Report

<sup>14</sup> The three Special Reports are: *Global Warming of 1.5° C: an IPCC Special Report on the impacts of global warming of 1.5° C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty (2018); Climate Change and Land: an IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems (2019); IPCC Special Report on the Ocean and Cryosphere in a Changing Climate (2019)*

<sup>15</sup> IPCC Sixth Assessment Synthesis Report, Intergovernmental Panel on Climate Change AR6 Report: Climate Change 2023

with the implementation of NDCs announced prior to COP26, Parties to the Paris Agreement have two years to submit updated NDCs for the period up to 2035, ambition will need to be ratcheted up in order to limit warming to 1.5°C.

In May 2025, the EPA<sup>16</sup> reported, for the 2023 year, that the energy sector contributed to 14.3% of Ireland's total emissions. The latest EPA projections show that currently implemented policies and measures ('with existing measures' (WEM)) will result in Ireland achieving a total greenhouse gas emission reduction of 9.5% on 2005 levels by 2030, significantly short of Ireland's 2030 target under the EU Effort Sharing Regulation (ESR), i.e., 42% reduction of emissions compared to 2005 levels by 2030, and higher than the 9% reduction projected from the prior publication - the 2024 report.<sup>17</sup> If policies and measures in the higher ambition 'with additional measures' (WAM) scenario are implemented, EPA projections show that Ireland can achieve a reduction of 21.7% by 2030, still short of the 42% reduction target and also lower than the 25% reduction projected in last year's estimates. The EPA projections show that agriculture and transport emissions form the majority of ESR emissions. Decarbonisation of power generation is a key measure, not only in the energy sector, but for other energy intensive sectors, such as transport and agriculture, whose activities result in high levels of greenhouse gas emissions.

The 'Energy in Ireland 2025 Report'<sup>18</sup> published by the Sustainable Energy Authority of Ireland (SEAI), states that in 2024, 45.3% of all energy used in Ireland was from fossil fuels, whilst renewable generation accounted for 40.0%, (11.65% of which was from wind energy), and the remainder from others such as waste and electricity imports. As stated therein, the share of fossil fuel use in industry is projected to still be close to 50% by 2030, which would fall short of the CAP target to reduce the share to 23-40% by this date.

According to the 'National Energy Projections 2025'<sup>19</sup>, published annually by the Sustainable Energy Authority of Ireland (SEAI), by 2030, fossil fuels could still provide a significant portion of Ireland's energy, with Renewable Energy Share in Electricity (RES-E) estimated to range from 60% in the WEM scenario to 68% in the most ambitious WAM scenario. The deployment of renewables needs to outpace the growth of energy demand for the absolute reductions in greenhouse gas emissions that are required to be met. The SEAI National Energy Projections state that there was a notable reduction in greenhouse gas emissions from the electricity sector in 2024; 'Ireland's national energy-related emissions in 2024 were at a record low - their lowest level in over 30 years'. This reduction in fossil fuel use was primarily driven by an overall decrease in indigenous generation of electricity in Ireland, a decrease in indigenous generation of electricity from fossil fuels, and an increase in electricity imports with 2024 seeing a record level of electricity net imports. Over the four years of the first budget period, the total electricity sectoral emissions were 34.1MtCO<sub>2</sub>eq, meaning that remaining budget is 5.89MtCO<sub>2</sub>eq for 2025, which, if met, will result in the sectoral emissions ceiling (SEC) for electricity for the first carbon budget period being achieved, but is estimated to overshoot by 0.6 MtCO<sub>2</sub>eq of emissions. However, the electricity sectors SEC in the second carbon budget (2026-2030) is 20 MtCO<sub>2</sub>eq – precisely half of that in the first budget – which is equivalent to a nominal annual emission of just 4.0 MtCO<sub>2</sub>eq. The second carbon budget electricity sectoral ceiling is projected to be exceeded by 2.0 MtCO<sub>2</sub>eq or 3.3% in WAM scenario, and 4.0 MtCO<sub>2</sub>eq or 6.6% in the WEM scenario. While overall energy-related emissions have fallen steadily in recent years, SEAI's National Energy Projections report 2025 indicates that the pace of these reductions is not yet sufficient to deliver on Ireland's legally binding carbon budgets, even under the most optimistic scenarios considered under SEAI's modelling.

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<sup>16</sup> Ireland's Greenhouse Gas Emission Projections 2024-2055 <<https://www.epa.ie/publications/monitoring-assessment/climate-change/air-emissions/07875-EPA-GHG-Projections-Report-FINAL.pdf>>

<sup>17</sup> Ireland's Greenhouse Gas Emission Projections 2022-2024 (June 2023) <[https://www.epa.ie/publications/monitoring-assessment/climate-change/air-emissions/EPA-GHG-Projections-2022-2040\\_Finalv2.pdf](https://www.epa.ie/publications/monitoring-assessment/climate-change/air-emissions/EPA-GHG-Projections-2022-2040_Finalv2.pdf)>

<sup>18</sup> SEAI (December 2025) Energy in Ireland 2025 Report <<https://www.seai.ie/sites/default/files/publications/Energy-in-Ireland-2025.pdf>>

<sup>19</sup> SEAI National Energy Projections 2025 Report. <<https://www.seai.ie/sites/default/files/publications/National-Energy-Projections-Report-2025.pdf>>

CAP25<sup>20</sup> was published on 15<sup>th</sup> April 2025 by the Department of the Environment, Climate and Communications (DECC). Following on from Climate Action Plans 2019, 2021, 2023, and 2024, CAP25 sets out the roadmap to deliver on Ireland's climate ambition. It aligns with the legally binding economy-wide carbon budgets and sectoral ceilings that were agreed by Government in July 2022 following the Climate Action and Low Carbon Development (Amendment) Act 2021, which commits Ireland to a legally binding target of net-zero greenhouse gas emissions no later than 2050, and the reduction of 51% by 2030 mentioned above. CAP25 sets out an ambitious course of action over the coming years to address the impacts that climate may have on Ireland's environment, society, economic and natural resources. CAP25 clearly recognises that Ireland must significantly step up its commitments to tackle climate disruption and identifies the need to increase the share of electricity demand generated from renewable sources by to up to 80% where achievable and cost effective, without compromising security of electricity supply. The CAP also reaffirms targets for renewable electricity deployment of 9 GW of onshore wind capacity by 2030. In 2023, Ireland had 4.74GW of installed wind capacity, up 4.5% on the previous year. As of December 2025, Ireland's installed capacity for wind generation in December 2025 was over 5GW, according to Wind Energy Ireland reporting<sup>21</sup>.

CAP25 presents clear and unequivocal support for the provision of additional renewable energy generation and presents yet further policy support for increased wind energy.

CAP25 has set out the following targets for electricity generation and transmission:

- Share of electricity demand generated from **renewable sources to up to 80%** where achievable and cost effective, without compromising security of electricity supply;
  - Onshore Wind Capacity: up to 9GW
  - Offshore Wind Capacity: 5GW (minimum)
  - Solar PV Capacity: 8GW
  - Ensure that 20-30% of system demand is flexible by 2030; and,
  - Ensure electricity generation grid connection policies and regular rounds of connection offers which facilitate timely connecting of renewables, provides a locational signal and supports flexible technologies.

It is estimated that the Proposed Project, with an estimated installed generating capacity of 67.2MW (based on a 4.8MW turbine model) will result in the net displacement of approximately 44,498 tonnes of carbon dioxide equivalent (CO<sub>2</sub>e) per annum. The carbon offsets resulting from the Proposed Project are described in detail in Chapter 11: Climate.

## 1.5.2 Energy Security

At a national level, Ireland currently has one of the highest external dependencies on imported sources. In August 2025 the SEAI published 'Ireland's Energy Supply and Security of Supply in 2024'<sup>22</sup>, which identifies that in 2024, Ireland's national primary energy requirement remained heavily fossil dependent, with 81.4% of energy requirement satisfied by fossil fuels, reducing by only 1.4% from 2023 figures. Conversely, 2024 saw record high use of renewable energy in Ireland, with 14.5% of the national energy requirement satisfied by renewables, an increase of 0.5% from 2023. Overall, Ireland's total primary energy requirement in 2024 was 168.0 TWh, a 4.19 TWh (2.6%) increase from 2023 figures, with energy requirements predicted to continue to increase in the coming years. The Department of the Environment, Climate and Communications (DECC) report 'Energy Security in Ireland to 2030'<sup>23</sup>

<sup>20</sup> Government of Ireland (2025) Climate Action Plan 2025 <<https://www.gov.ie/en/department-of-the-environment-climate-and-communications/publications/climate-action-plan-2025/>>

<sup>21</sup> Wind Energy Ireland (February 2026) Wind Energy Report Annual & December 2025 <<https://windenergyireland.com/blog/irish-wind-farms-provided-a-third-of-our-power-in-2025/>>

<sup>22</sup> SEAI (August 2025) Ireland's Energy Supply and Security of Supply in 2024 <<https://www.seai.ie/data-and-insights/seai-statistics/key-publications/energy-supply-security>>

<sup>23</sup> Department of the Environment, Climate and Communications (2023) Energy Security in Ireland to 2030. <<https://assets.gov.ie/276471/2d15ce6d-e555-4ada-a3cf-b325a5d7ba20.pdf>>

states that ‘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 in Europe’s energy systems.’ The DECC report proposes a package of a wide range of measures to implement to 2030 to improve Ireland’s energy security. Ireland is currently one of the most energy import dependent countries in the EU, having imported 79.7% of its energy supply in 2024.<sup>24</sup>

The ‘Energy Security in Ireland to 2030’ report provides a roadmap to energy security in Ireland, on the basis of current energy policies and project and to implement the measures proposed as part of the energy security package. EirGrid in their ‘All Island Generation Capacity Statement 2023 - 2032’ (January 2024), states that new wind farms commissioned in Ireland in 2022 brought total wind installed capacity to over 4,500MW, contributing to the overall RES-E percentage of 36.8% with wind energy accounting for 32.9%. Prior to 2015, Ireland’s import dependency of energy was over 90% but dropped to 71% in 2016 with the Corrib gas field starting production. Since 2018, Ireland’s import dependency has been increasing as the output from the Corrib gas field reduces faster than we are adding new renewable sources.

In December 2025 the SEAI published their ‘Energy in Ireland 2025 Report’<sup>25</sup>, stating that energy related emissions in 2024 were at their lowest level in over 30 years. Energy related emissions in 2024 were 30.9 MtCO<sub>2</sub>eq, down 0.47 MtCO<sub>2</sub>eq or 1.5% on 2023-levels. In 2024, electricity accounted for just over one fifth (22.5%) of energy-related emissions, with transport accounting for a further 37.7%. Heat emissions accounted for the remaining 39.8%. The net reduction of overall emissions came from a 0.63 MtCO<sub>2</sub>eq (-8.3%) drop in electricity emissions, a 0.29 MtCO<sub>2</sub>eq (+2.4%) increase in heat emissions, and a 0.14 MtCO<sub>2</sub>eq (-1.2%) decrease in transport emissions. In 2024, Ireland generated 11.65 TWh of renewable energy from wind generation, a drop of 0.05 TWh from the previous year. In exceeding the previous record of 11.6 TWh set in 2020 by 0.1 TWh. Currently, the SEAI website has published value of 204.3gCO<sub>2</sub>/kWh for electricity generation and 226.3gCO<sub>2</sub>/kWh for electricity consumption<sup>26</sup>. When all data from 2024/2025 is recorded, an updated carbon intensity factor for the Irish national grid will be published.

Electricity demand in Ireland was 32.9 TWh, up 1.29 TWh or 4.1% on the previous year. This net-increase was strongly led by a 0.74 TWh or 5.8% increase in demand from the commercial services sector, which includes data centres. The Energy in Ireland 2025 Report states: ‘(Ireland) must accelerate delivery of renewables and major infrastructure such as grid enhancements, public transport and district heating.’

Ireland continues to be hugely energy import-dependent leaving it exposed to large energy price fluctuations and possibility of fuel shortages if a major energy crisis were to occur. The international fossil fuel market is growing increasingly expensive and is increasingly affected by international politics which can add to price fluctuations. This volatility will be increased as carbon prices increase in the future. This has implications for every Irish citizen.

The SEAI has stated that Ireland’s heavy dependence on imported fossil fuels, “is a lost opportunity in terms of keeping this money here in Ireland and further developing our abundant renewable resources”<sup>27</sup>.

The cost of carbon credits is included in all electricity traded, and the price of electricity generated by coal is particularly vulnerable due to its high carbon emissions per unit of electricity generated. Coal and peat generate almost 3% of Ireland’s electricity, while gas generates 29.6%, and oil generates 48.9%. At a time when the energy system is under severe pressure to ensure security of supply, amid

<sup>24</sup> SEAI (August 2025) Ireland’s Energy Supply and Security of Supply in 2024 < <https://www.seai.ie/data-and-insights/seai-statistics/key-publications/energy-supply-security> >

<sup>25</sup> Sustainable Energy Authority Ireland (2025) Energy in Ireland 2025 Report < <https://www.seai.ie/sites/default/files/publications/Energy-in-Ireland-2025.pdf> >

<sup>26</sup> <https://www.seai.ie/data-and-insights/seai-statistics/conversion-factors/>

<sup>27</sup> Dr Eimear Cotter, Head of Low Carbon Technologies, SEAI - “Energy Security in Ireland 2015”

projections of rapid electricity demand growth over the coming decade, any steps to reduce Ireland's dependence on imported fossil fuels will add to financial autonomy and stability in Ireland. The use of Ireland's indigenous energy resources, such as wind, will contribute to a reduction in energy imports.

The Energy White Paper 2015<sup>28</sup> notes that “there will be a substantial increase in the cost of carbon in the short and medium term, through the EU Emissions Trading Scheme”. Any steps to reduce dependence on imported fossil fuels will add to financial autonomy and stability in Ireland. As the White Paper notes:

*“In the longer term, fossil fuels will be largely replaced by renewable sources”.*

### 1.5.2.1 REPowerEU

In a Communication from the European Parliament on Joint European Action for more affordable, secure and sustainable energy<sup>29</sup>, the European Commission proposed an outline of a plan to make Europe independent from Russian fossil fuels well before 2030 in light of Russia's invasion of Ukraine. Commission President Ursula von der Leyen stated:

*“We must become independent from Russian oil, coal and gas. We simply cannot rely on a supplier who explicitly threatens us. We need to act now to mitigate the impact of rising energy prices, diversify our gas supply for next winter and accelerate the clean energy transition. The quicker we switch to renewables and hydrogen, combined with more energy efficiency, the quicker we will be truly independent and master our energy system.”.*

In May 2022, the EU published the REPowerEU Plan<sup>30</sup> in light of Russia's invasion of Ukraine in February 2022. The core purpose of the plan, in addition to accelerating the EU's transition from the use of fossil fuel to renewable energy sources, is to end the dependence on Russian fossil fuels.

In April 2022, the Government published the National Energy Security Framework (NESF) providing a single overarching and initial response to address Ireland's energy security needs in the context of the war in Ukraine. This framework mirrors that of the EU, in which accelerating Ireland's transition from the use of fossil fuel to renewable energy sources is a key objective.

### 1.5.2.2 Council Regulation (EU) 2022/2577 and 2024/223

Arising from REPowerEU, Council Regulation (EU) 2022/2577 laying down a framework to accelerate the deployment of renewable energy was adopted on the 22 December 2022. Regulation 2022/2577 came into effect on the 23 December 2022 and has effect until the 30 June 2024. The Regulation made provision for a review by the commission within 12 months. Following this review the Council introduced Regulation 2024/223 on the 22 December 2023 amending Regulation 2022/2577. Regulation 2022/2577 and 2024/223 recognises the relative importance of renewable energy deployment in the current difficult energy context and provides significant policy and legislative support to enabling renewable energy projects.

Article 2(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. An analogous provision is not present in Directive (EU) 2018/2001. 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

<sup>28</sup> Ireland's Transition to a Low Carbon Energy Future 2015-2030 (Department of Communications, Energy & Natural Resources, 2015)

<sup>29</sup> European Commission (March 2022) REPowerEU: Joint European Action for more affordable, secure and sustainable energy. Strasbourg. [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_22\\_1511](https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1511)

<sup>30</sup> [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_22\\_3131](https://ec.europa.eu/commission/presscorner/detail/en/IP_22_3131)

the energy market which the Union is facing, to further accelerate renewable energy projects since it requires Member States to promote those renewable energy projects 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 beyond the specific objectives of the derogations foreseen in the Directives referred to in Article 3(1) of Regulation (EU) 2022/2577. (emphasis added).

Further detail is provided in Section 2.3.1 in Ch. 2: Background to the Proposed Project of this EIAR. As such, the Proposed Project, a renewable energy project, is critical to helping Ireland, and the EU in addressing energy security challenges as well as addressing the country's over-dependence on imported fossil fuels.

### 1.5.3 Competitiveness of Wind Energy

While Ireland has a range of renewable resources, as the White Paper states “[Onshore Wind] 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”.

In fact, the cost of support is more than offset by the fact that adding large quantities of wind to the wholesale market drives down auction prices in any half hour trading period when the wind is blowing, i.e. for 80% of the hours of the year. Wind has a capacity factor of approx. 35%, which is its average output throughout the year relative to its maximum output. However, wind is generating power at some level for 80% of the hours of the year. A Pöyry study from 2015 showed that reaching our targets in 2020 would reduce wholesale prices by more than costs of new grid infrastructure, backup and the subsidies paid to wind, resulting in a net saving of €43m per year in 2020. The EU has noted that Ireland has one of the lowest costs of supporting renewables mainly because onshore wind is on a par with the cost of power from conventional generation when a full cost-benefit analysis is undertaken.

### 1.5.4 European Renewable Energy Policy and Targets

#### 1.5.4.1 Renewable Energy Directive

The burning of fossil fuels for energy creates greenhouse gases, which contribute significantly to climate change. These and other emissions also create acid rain and air pollution. Sources of renewable energy that are utilised locally with minimal impact on the environment are necessary to meet the challenges of the future. The EU adopted the Renewable Energy Directive (2018/2001 EU) on the Promotion of the Use of Energy from Renewable Sources in December 2018 which sets EU 2030 Renewable Energy Targets. The Directive sets a legally binding mandatory national target for the overall share of energy from renewable sources for each Member State. This package is designed to achieve the EU's overall 20:20:20 environmental target, which consists of a 20% reduction in greenhouse gases, a 20% share of renewable energy in the EU's total energy consumption and a 20% increase in energy efficiency by 2020. To ensure that the mandatory national targets are achieved, Member States must follow an indicative trajectory towards the achievement of their target as outlined in Ireland's National Renewable Energy Action Plan (NREAP).

The first Renewable Energy Directive (RED)<sup>31</sup> is legislation that influenced the growth of renewable energy in the EU and Ireland for the decade ending in 2020. From 2021, RED was replaced by the

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<sup>31</sup> Directive 2009/28/EC on the promotion of the use of energy from renewable sources. Available from: <https://eur-lex.europa.eu/legalcontent/EN/ALL/?uri=celex%3A32009L0028>

second Renewable Energy Directive (REDII),<sup>32</sup> which continues to promote the growth of renewable energy out to 2030. Ireland's mandatory national target for 2020 was to supply 16% of its overall energy needs from renewable sources. This target covered energy in the form of electricity (RES-E), heat (RES-H) and transport fuels (RES-T). Ireland fell just short of this target with total GFC reaching 13.5%. REDII introduced a binding EU-wide target for overall RES of 32% in 2030 and requires Member States to set their national contributions to the EU-wide target. As per the National Energy and Climate Plan (NECP) 2021-2030, Ireland's overall RES target is 34.1% in 2030.

Under RED, the RES-E target was for 40% of gross electricity consumption to come from renewable sources in 2020. The actual RES-E achieved in 2020 by Ireland was 39.1%, falling just short of the national target. Under REDII, Ireland's National Energy and Climate Plan 2021-2030 included a planned RES-E of 70% in 2030, which has been replaced by the 80% by 2030 RES-E target as detailed in the more recent Climate Action Plan (2024), which will ensure that renewable electricity continues to form the backbone of Irish renewable energy use for the coming decade and beyond.

Given the need to accelerate the EU's clean energy transition, RED was revised in 2023, and the amending Directive EU/2023/2413 (RED III)<sup>33</sup> entered into force on 20 November 2023 and transposed into Irish law in August 2025. RED III amended the EU-wide overall 2030 RES target from 32% to at least 42.5%, with an ambition to reach 45% by 2030<sup>34</sup>. Article 3(4a) of RED III requires Member States to establish a framework to enable the deployment of renewable energy to a level consistent with its national contribution to the EU's target and at a pace that is consistent with the indicative trajectories in Climate Action Regulation 2018/1999.

Ireland's statutory national climate objective and 2030 targets are aligned with Ireland's obligations under the Paris Agreement and with the European Union's objective to reduce GHG emissions by at least 55% by 2030, compared to 1990 levels and to achieve climate neutrality in the European Union by 2050.

## 1.5.5 National Renewable Energy Targets

The Climate Action and Low Carbon Development (Amendment) Act 2021 commits Ireland to reach a legally binding target of net-zero emissions no later than 2050, and a cut of 51% by 2030 (compared to 2018 levels). Under the 2021 Act, Ireland's national climate objective requires the state to pursue and achieve, by no later than the end of the year 2050, the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy.

Ireland's statutory national climate objective and 2030 targets are aligned with Ireland's obligations under the Paris Agreement and with the European Union's objective to reduce GHG emissions by at least 55% by 2030, compared to 1990 levels and to achieve climate neutrality in the European Union by 2050.

In April 2025, the Government published the most recent Climate Action Plan (CAP25), reaffirming the renewable electricity target of 80% by 2030 for Ireland. This is in line with targets previously announced in the Climate Action Plan 2021, 2023, and 2024.

CAP25 states that in order to meet the required level of emissions reduction by 2030 and the 80% renewable electricity generation target by 2030, the installed generation capacity of onshore wind will need to reach 9GW, with a further 5GW of offshore wind required. As stated above, in 2023, Ireland

<sup>32</sup> Directive (EU) 2018/2001 on the promotion of the use of energy from renewable resources (recast). Available from: <https://eurlex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32018L2001>

<sup>33</sup> Directive (EU) 2023/2413 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources and repealing Council Directive (EU) 2015/652. Available from: [https://eurlex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L\\_202302413](https://eurlex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202302413)

<sup>34</sup> European Commission 2023 Renewable Energy Directive <[https://energy.ec.europa.eu/topics/renewable-energy/renewable-energy-directive-targets-and-rules/renewable-energy-directive\\_en](https://energy.ec.europa.eu/topics/renewable-energy/renewable-energy-directive-targets-and-rules/renewable-energy-directive_en)

had 4.74GW of installed wind capacity, up 4.5% on the previous year; the SEAI provisional estimate for installed wind capacity in 2024 is 4.85GW, based on EirGrid data to the end of August, and ESB-Networks data to the end of September.<sup>35</sup> Ireland's installed capacity for wind generation in December 2025 was over 5GW, according to Wind Energy Ireland reporting<sup>36</sup>. As noted previously, Ireland missed its 2020 renewable energy target of 40% with a renewable share in electricity of 39.1%, and by the end of 2021, Ireland's renewable energy share for electricity generation was 32.5%. With a renewable share of electricity generation at 80% in mind and a target of 9GW installed onshore wind by 2030, it is now more critical than ever that we continue to progress renewable energy development in Ireland so that we are successful in meeting our 2030 targets. Further detail on the EU 2030 targets is provided in Section 2.3.1 of Ch. 2: Background to the Proposed Project.

## 1.5.6 Increasing Energy Consumption

As detailed above, CAP25 reaffirms the need for 9GW of onshore wind generation in order for Ireland to meet its 2030 targets. CAP25 further identified that the revised National Planning Framework<sup>37</sup> includes policy support for the development and upgrading of electricity grid infrastructure, the delivery of renewable electricity generation capacity, and the introduction of regional renewable electricity capacity allocations for each of the three Regional Assemblies by 2030. In accordance with the relevant National Policy Objectives, Regional Assemblies and Local Authorities must plan for sufficient wind and solar energy development in order to achieve the targeted regional renewable electricity capacity allocations outlined in the draft National Planning Framework, taking into account factors influencing delivery including attrition rates and changes to energised capacity levels, in addition to current installed energised capacity.<sup>38</sup>

In their 'All Island Generation Capacity Statement 2023 - 2032' (January 2024), EirGrid estimate that installed capacity of wind generation is set to increase to at least 12 GW between onshore and offshore capacity as Ireland endeavours to meet its renewable targets in 2030 and beyond.

Failure to meet Ireland's targets for renewable energy will result in substantial EU sanctions. The Department of Public Expenditure and Reform (DPER) in their report 'Future Expenditure Risks associated with Climate Change/Climate Finance'<sup>39</sup> concluded that '*potential costs of purchasing non-Emission Trading Scheme (ETS) [greenhouse gas] compliance for the Irish Exchequer for the 2020 to 2030 period could have a cumulative total in the billions in the absence of any further policy changes*'. If Ireland decided to backfill shortfalls in the RES-H target with additional renewable electricity this could significantly reduce these costs.

It is noted that the key driver for electricity demand in Ireland for the next number of years is the connection of new large energy users, such as data centres. This statement notes that '*Large industrial connections normally do not dominate a country's energy demand forecast but this is the case for Ireland at the moment*'. EirGrid analysis shows that demand from data centres could account for 28% of all demand by 2031 in a median demand scenario (accounts for the connection of all 1400MVA of potential demand in the connection process). The median demand scenario is now higher than for last year's forecast for high demand, indicating the progression of many of the data centre projects.

In 2015, IWEA commissioned a study '*Data Centre Implications for Energy Use in Ireland*' which concluded that an extra approx. 1 Gigawatt (GW) of electricity demand could materialise between 2015

<sup>35</sup> SEAI (December 2024) Energy in Ireland 2024 Report <<https://www.seai.ie/sites/default/files/publications/energy-in-ireland-2024.pdf>>

<sup>36</sup> Wind Energy Ireland (February 2026) Wind Energy Report Annual & December 2025 <<https://windenergyireland.com/blog/irish-wind-farms-provided-a-third-of-our-power-in-2025/>>

<sup>37</sup> Department of Housing, Local Government and Heritage (2025) Draft Revision of National Planning Framework <<https://www.gov.ie/en/department-of-housing-local-government-and-heritage/press-releases/draft-revision-of-national-planning-framework-open-for-public-consultation/>>

<sup>38</sup> Ibid.

<sup>39</sup> <https://igees.gov.ie/wp-content/uploads/2013/10/Future-Expenditure-Risks-associated-with-Climate-Change-Climate-Finance1.pdf>

and 2020 due to growth in data centres. More recently, data available from Bitpower<sup>40</sup> at the end of 2020 noted that there are currently 66 operational data centres in Ireland, totalling 834MW; with an additional 778MW having received planning approval and 295MW under construction. The increase in growth of data centres means an increase in electricity demand, with many of the proposed data centres committing to using 100% renewable energy which will result in an increased demand for renewable electricity as detailed above.

In the context of increasing energy demand and prices, uncertainty in energy supply and the effects of climate change, our ability to harness renewable energy such as wind power plays a critical role in creating a sustainable future. The Department of Climate, Energy and the Environment (DCEE) have set a target for Ireland of 80% of total electricity consumption to come from renewable resources by 2030, a target that forms part of the Government's strategy to make the green economy a core component of its economic recovery plan for Ireland. It is envisaged that wind energy will provide the largest source of renewable energy in achieving this target, with a target of 9GW onshore wind installed generation capacity and a target of 5GW offshore wind installed generation capacity.

The Department of Communications, Energy & Natural Resources (DCENR) noted in their Draft Bioenergy Plan 2014, that achieving the anticipated renewable energy usage in the three energy sectors will be challenging, with the 12% for renewable heat being particularly so. SEAI estimate that the shortfall could be in the region of 2% to 4% of the 12% RES-H target. Given that individual member states 2030 targets are set at a more challenging level than 2020, fines could persist for an extended number of years, and so the total cost to Ireland could run to billions. For comparison, the entire wholesale electricity market has an annual value of around €3bn.

In the medium-term, with the introduction of electric vehicles and uptake of smart demand such as storage heating and heat pumps, emissions in the heat and transport sector will be substantially reduced. A high renewables electricity system is the foundation of such a transformation.

The White Paper published by DCENR in December 2015 expanded on the vision set out above. It outlines a radical transition to a low carbon future which will involve amongst other things, *'generating our electricity from renewable sources of which we have a plentiful indigenous supply'* and *'Increasing our use of electricity and biogas to heat our homes and fuel our transport'*.

The DCENR confirmed in the publication of the White Paper *'Ireland's Transition to a Low Carbon Future' 2015 – 2030*, that wind is the cheapest form of renewable energy:

*"(Onshore wind) 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."*

EU countries have agreed on a new 2030 Framework for climate and energy, including EU-wide targets and policy objectives for the period between 2020 and 2030. These targets aim to help the EU achieve a more competitive, secure and sustainable energy system and to meet its long-term 2050 greenhouse gas reductions target. It is noted that a binding EU target of 32% for renewable energy by 2030 has been set by the EU 2030 Framework for Climate and Energy, with Ireland confirming its own targets for 2030 as detailed below.

Ireland will therefore have to meet even more demanding climate change and renewable energy supply obligations in order to play its part in achieving the European climate and energy ambitions. As announced in December 2022, the Irish Government have pledged to generate 80% of the country's electricity supply from renewable sources by 2030. The development of additional indigenous wind energy generating capacity, such as the Proposed Project, will not only help to reduce carbon emissions but will also improve Ireland's security of energy supply. Such penetration levels of wind are technically

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<sup>40</sup> [http://www.bitpower.ie/images/Reports/2020\\_H2\\_Report.pdf](http://www.bitpower.ie/images/Reports/2020_H2_Report.pdf)

and economically feasible once paired with other energy system changes such as increasing electric vehicle penetration and electrification of heat. Further information on the 2030 commitments for Ireland are noted in Ch. 2: Background to the Proposed Project, Section 2.2.

These sources of ‘flexible demand’ allow the system to match intermittent renewable energy resources with minimal extra cost. Additional interconnection is also planned with the UK and France, further assisting in the integration of wind (and in the future solar) on the power system.

A number of alternative energy types have been examined when considering how best to meet this renewable energy target.

In 2014, a report prepared by UK consultant BW Energy for the Rethink Pylons campaign group has suggested that converting Moneypoint generation station (which runs solely on coal) from coal to biomass would have enabled Ireland to meet 2020 renewable energy targets. Dr Brian Motherway, Chief Executive SEAI<sup>41</sup> refutes this claim. While Dr Motherway agrees that biomass offers benefits and is helping Ireland to move away from fossil fuels, he states that “*the conversion of Moneypoint to biomass has been considered a number of times over the years, including actual trials of small amounts of biomass in the station. However, the technical and economic challenges have proven far greater than some would have us believe*”.

The reason being that the move of Moneypoint from coal to biomass would not entail a clean swap. In fact, ‘*to allow for combustion of biomass, a full redesign and rebuild of much of the station would be required*’. In the UK where this has been done, energy generation stations have required significant financial support to make the process viable and with each unit of energy in the UK being worth approx. 13 cents, almost double that of Ireland which is approx. 7 cents, wind energy works out cheaper in Ireland. Also, the amount of biomass required to feed Moneypoint would require 300,000ha of land; an equivalent area of Counties Wexford and Carlow being planted with willow which is far more than Ireland currently produces which means we would need to import.

Importation raises the question; would this be cost effective? As prices are volatile and availability of biomass is difficult to predict Ireland would become dependent on the uncertainty of imported biomass. It is also noted that there will be emissions from transport and distribution. The further the biomass is transported, the greater the greenhouse gas emissions<sup>42</sup>. So, while biomass is currently contributing to a move to renewable energy production, on its own it is not the sole answer to meeting Ireland’s renewable energy targets. Ireland has a legal obligation to diversify its energy sources requiring the development of renewable energy to avoid substantial fines. It should be noted that Moneypoint ceased burning of coal on the 20<sup>th</sup> of June 2025<sup>43</sup> and has converted to the use of Heavy Fuel Oil. It will be used as a back-up, out of market generator that EirGrid can call on when extra generation capacity is needed, to ensure a stable supply of electricity for the Irish market.

The Joint Committee on Climate Action published its cross-party report entitled, ‘*Climate Change: A Cross-Party Consensus for Action*’ (March 2019). This report highlights the requirements for alternate energy production. More specifically, the report notes that it is currently planned to stop burning coal at Moneypoint by 2025 as well as peat at Bord na Mona and ESB stations by 2030. In April 2025, the Department of Environment, Climate and Communications published its Climate Action Plan (CAP), which notes the need for renewable alternatives to coal and peat. Further information on the CAP can be seen in Ch. 2: Background to the Proposed Project, Section 2.2.

CAP25 states that as electrification and decarbonisation of other sectors continues, there will be an increase in electricity demand, and a transferring of emissions from those sectors to the electricity sector. The deployment of renewables needs to outpace the growth in energy demand for it to deliver the absolute reductions in greenhouse gas emissions required. Therefore, the timing of the delivery of

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<sup>41</sup> [http://www.seai.ie/News\\_Events/Press\\_Releases/2014/Biomass-is-a-big-part-of-the-solution-but-not-the-whole-solution.html](http://www.seai.ie/News_Events/Press_Releases/2014/Biomass-is-a-big-part-of-the-solution-but-not-the-whole-solution.html)

<sup>42</sup> *Sustainability Criteria Options and Impacts for Irish Bioenergy Resources (SEAI 2019)*

<sup>43</sup> <https://www.rte.ie/news/2025/0620/1519429-moneypoint-power-station/>

the renewable energy generation relative to the scale and pace of growth in electricity demand is a critical factor. In the high demand scenario outlined in the Programme for Government, electricity demand will almost double by 2030, while electricity emissions are to be reduced by 60-80% at the same time.

Underlying drivers of changes in electricity demand include:

- Data centres are forecast to continue to grow by up to ~9 TWh in 2030 (~2316% of total demand).
- Transport electricity demand is forecast to grow (~23% p.a.) as a result of fast uptake of EV charging.
- Electrical heating in industry will increase by more than 2.5 times in 2030 from 2017 levels.
- Building energy efficiency improvements from an extensive retrofit programme will moderate the growth in electricity demand from new heat pumps in buildings.

Against this backdrop, the importance of wind energy as the main component of Ireland's renewable energy development is acknowledged, and wind energy is accepted as the main contributor to meeting the Country's national climate change and energy supply obligations. Notwithstanding this, it must also be acknowledged that not every part of Ireland is well endowed with wind resources and therefore, not all counties will be able to deliver wind-based renewable energy. Furthermore, whilst it is accepted that there are other renewable energy technologies in operation, for the foreseeable future many areas will be unable to deliver significant renewable energy output. This primarily applies to the more populous areas.

National and international renewable energy and climate change targets must be achieved, and it is crucial that these are appropriately translated and implemented at regional and local levels. Wind farm development and design involves balancing the sometimes-conflicting interests of constraints (e.g., natural and built heritage, human beings, ecological, ground conditions, hydrological, etc.) with visual amenity and the technological/economic requirements/realities of the specific project and turbines. As detailed in Section 1.5.2.2 above, EU Regulation 2022/2577 as amended by Regulation 2024/223 identifies the priority that should be afforded renewable energy development whenever the balancing of legal interests is required in individual cases and where those projects introduce additional compensation requirements for species protection. While Article 3(1) of the Regulation is mirrored in Article 16(f) of REDIII, the wider obligation placed on competent authorities engaged in the consenting of renewable energy projects under Article 3(2) of Regulation 2022/2577 is not and as explained in Recital 14 of Regulation 2024/223, is an appropriate additional temporary measure given the particular difficulties which the Union is currently facing in the supply of energy. In considering applications for the development of such projects planning authorities are obliged to give effect to this legislative imperative.

### 1.5.7 Reduction of Carbon Emissions and Other Greenhouse Gases

The production of renewable energy from the Proposed Project will assist in achieving the Government's and EU's stated goals of ensuring safe and secure energy supplies, promoting an energy future that is sustainable and competitively priced to consumers whilst combating energy price volatility and the effects of climate change. The White Paper in 2015 outlines an ambitious Greenhouse gas reduction target of between 80% to 95% compared to 1990 levels out to 2050. Furthermore, if national carbon emissions targets are divided out amongst each county, each Local Authority may be responsible for meeting its own targets.

In addition to a reduced dependence on oil and other imported fuels, the generation of electricity from wind power by the Proposed Project will displace approximately 44,498 tonnes of carbon emissions per

annum from the largely carbon-based traditional energy mix, the detail of which is presented in Section 11.4.3.2 in Chapter 11: Climate of this EIAR.

The World Health Organisation (WHO) in 2019 estimated that ambient (outdoor) air pollution caused 4.2 million deaths worldwide in 2019.<sup>44</sup> The Environmental Protection Agency (EPA) report ‘Air Quality in Ireland 2022’<sup>45</sup> noted that in Ireland, the premature deaths attributable to poor air quality are estimated at 1,300 people per annum. The European Environmental Agency (EEA) Report, ‘Air Quality in Europe – 2022 Report’<sup>46</sup> highlights the negative effects of air pollution on human health. The report assessed that poor air quality in Europe accounted for premature deaths of approximately 238,000 people in the 27 EU Member States in 2021. The estimated impacts on the population in Europe of exposure to NO<sub>2</sub> and O<sub>3</sub> concentrations in 2021 were around 49,000 and 24,000 premature deaths per year, respectively. Of these numbers, 610 deaths due to poor air quality were estimated in Ireland in 2020 with 490 Irish deaths attributed to PM<sub>2.5</sub>, 50 Irish deaths attributed to nitrogen oxides (NO<sub>x</sub>) and 70 Irish deaths attributed to Ozone (O<sub>3</sub>). These emissions, along with others, including sulphur oxides (SO<sub>x</sub>), are produced during fossil fuel-based electricity generation in various amounts, depending on the fuel and technology used, emissions from industry and power plants, vehicles emissions and transport fuels.

The EPA 2016 report ‘Ireland’s Environment – An Assessment’<sup>47</sup> states that the pollutants of most concern are NO<sub>x</sub>, (the collective term for the gases nitric oxide and nitrogen dioxide, PM (particulate matter) and O<sub>3</sub> (ozone). The EPA 2016 report goes on to state that:

*“Ireland has considerable renewable energy resources, only a fraction of which are utilised to address our energy requirements.*

*Wind, ocean, solar, hydro and geothermal energy do not produce GHG emissions or emissions of air pollutants such as particulates, sulphur dioxide and nitrogen dioxide. Use of these renewable resources can have **considerable co-benefits for human health and ecosystems**. Meeting energy requirements from renewable resources can provide significant economic and employment benefits at local to national scales.”*

The Proposed Project therefore represents an opportunity to further harness Ireland’s significant renewable energy resources, with valuable benefits to air quality and in turn to human health. The consumption of fossil fuels for energy results in the release of particulates, sulphur dioxide and nitrogen dioxide to our air. The use of wind energy, by providing an alternative to electricity derived from coal, oil or gas-fired power stations, results in emission savings of carbon dioxide (CO<sub>2</sub>), oxides of nitrogen (NO<sub>x</sub>), and sulphur dioxide SO<sub>2</sub>, thereby resulting in cleaner air and associated positive health effects.

## 1.5.8 Economic Benefits

In addition to helping Ireland avoid significant fines and reducing environmentally damaging emissions, the Proposed Project will have significant economic benefits. At a national level, Ireland currently has one of the highest external dependencies on imported sources of energy, such as coal, oil and natural gas. As detailed in the SEAI report ‘Energy in Ireland 2024 Report’, Ireland has a high import dependence on oil and gas and is essentially a price-taker on these commodities. Ireland’s import dependency decreased slightly from 80% in 2022 to 78% in 2023 due to reduced net imports, which were only partially offset by the reduction in primary energy requirement.<sup>48</sup> From September 2023 to September 2024, Ireland imported 78% of its gas supply and supplied 22% of its gas supply from indigenous sources.

<sup>44</sup> [https://www.who.int/news-room/fact-sheets/detail/ambient-\(outdoor\)-air-quality-and-health](https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health)

<sup>45</sup> Air Quality in Ireland Report 2022 <[https://www.epa.ie/publications/monitoring-assessment/air/Air\\_Quality\\_Report\\_22\\_v8v2.pdf](https://www.epa.ie/publications/monitoring-assessment/air/Air_Quality_Report_22_v8v2.pdf)>

<sup>46</sup> Air Quality in Europe 2022 <<https://www.eea.europa.eu/publications/air-quality-in-europe-2022>>

<sup>47</sup> Ireland’s Environment – An Assessment (2016) <<https://epawebapp.epa.ie/ebooks/soe2016/files/assets/basic-html/page-1.html#>>

<sup>48</sup> SEAI (2024) Energy in Ireland – 2024 <<https://www.seai.ie/sites/default/files/publications/energy-in-ireland-2024.pdf>>

The ‘*Energy in Ireland 2024 Report*’ stated that Ireland’s national energy-related emissions in 2023 were at their lowest level in over 30 years, with 14.1% of Ireland primary energy being sourced from renewables, the highest value to date. The SEAI estimates electricity emissions to be 7.6MtCO<sub>2e</sub> in 2023, down 22% from 2022. Current predictions for 2024 electricity emissions are estimated to be 6.9 MtCO<sub>2e</sub>. The 5-year 2021-2025 sectoral emission ceiling for electricity is 40MtCO<sub>2e</sub>; therefore, if the SEAI estimate for 2024 electricity emissions is accurate, there will only be 5.9MtCO<sub>2e</sub> of emissions available for the electricity sector in 2025.

The 2014 report ‘*The Value of Wind Energy to Ireland*’, published by Póry, stated that growth of the wind sector in Ireland could support 23,850 jobs (construction and operational phases) by 2030. If Ireland instead chooses to not develop any more wind, then by 2030 the country will be reliant on natural gas for most of our electricity generation, at a cost of €671 million per annum in fuel import costs.

A 2021 MaREI report<sup>49</sup> includes a prospective view of Ireland’s energy sector in 2050 whereby an additional 25,000 jobs would be created in the development of onshore and offshore wind to meet the zero carbon targets as pledged in the Climate Action and Low Carbon Development Act 2021 discussed in Section 1.5.1 above.

In April 2021, Wind Energy Ireland published a report produced by KPMG on the ‘*Economic Impact of Onshore Wind in Ireland*’ stating that Irish wind farms are worth €400 million to the economy every year, which is expected to rise to €550 million by the end of the decade. The report notes that if Ireland is to achieve the 8,200 MW target set in the Climate Action Plan 2021 (the existing target and Climate Action Plan at that time), the total industrial output across operating and capital activities would rise from €1.1bn in 2020 (from the 4,200 MW installed capacity) to €1.5bn in 2030.

The Proposed Project will be capable of providing power to over 51,800 households every year, as presented in the calculations in Section 4.4.1.1.6 of this EIAR.

The Proposed Project will help to supply the rising demand for electricity, resulting from renewed economic growth. The EirGrid report ‘*All-Island Generation Capacity Statement 2022 – 2031*’ (December 2022) notes that the median electricity demand forecast on the island of Ireland is expected to grow by 21% in 2030. Much of this growth is expected to come from new data centres in Ireland.

The Proposed Project will have both long-term and short-term benefits for the local economy including income to local landowners, job creation, work opportunities for local businesses and service providers, local authority commercial rate payments, and a Community Benefit Scheme.

Commercial rate payments from the Proposed Project will be provided to Cork County Council each year during the construction phase, which will be redirected to the provision of public services within Co. Cork. These services include provisions such as road upkeep, fire services, environmental protection, street lighting, footpath maintenance etc. along with other community and cultural support initiatives.

It is estimated that the Proposed Project has the potential to create up to 100 jobs during the construction phase and 3-4 jobs during operational and maintenance phases of the Proposed Project. During construction, additional indirect employment will be created in the region through the supply of services and materials to the Proposed Project. There will also be income generated by local employment from the purchase of local services i.e. travel, goods and lodgings. Further details on employment associated with the Proposed Project are presented in Ch. 5: Population and Human Health of this EIAR.

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<sup>49</sup> MaREI 2021 *Our Climate Neutral Future: Zero by 2050*. <https://www.marei.ie/wp-content/uploads/2021/03/Our-Climate-Neutral-Future-Zero-by-50-Skillnet-Report-March-2021-Final-2.pdf>

Should the planning application for the Proposed Project be granted, there would be substantial opportunities available for the local area in the form of Community Benefit Funds. Based on the current proposal, should the Proposed Project enter the Renewable Energy Support Scheme (RESS), the proposed Community Benefit Fund would attract a community contribution in the region of approximately €410,000/year for the first 15 years of operation, to be used by the local community over the lifetime of the Proposed Project (based on the current RESS T&C's). The value of this fund will be directly proportional to the energy produced at the Site and will support and facilitate projects and initiatives in the area.

Further details on the proposed Community Gain proposals are presented in Appendix 2-1 and Section 4.10 in Ch. 4: Description of the Proposed Project of this EIAR.

## 1.6 Purpose and Scope of the EIAR

The purpose of this EIAR is to document the current state of the environment on and in the vicinity of the Site and to quantify the likely significant effects of the Proposed Project on the environment. The compilation of this document serves to highlight any areas where mitigation measures may be necessary in order to protect the surrounding environment from the possibility of any significant effects arising from the Proposed Project.

It is important to distinguish the Environmental Impact Assessment (EIA) to be carried out by An Coimisiún Pleanála, from the EIAR accompanying the planning application. The EIA is the assessment carried out by the competent authority, which includes an examination of the information contained in the EIAR, any supplementary information provided where necessary and any relevant information received through consultation and the formation of a reasoned conclusion by the competent authority on the significant effects on the environment of the Proposed Project. It includes an examination, analysis and evaluation by An Coimisiún Pleanála that identifies, describes and assesses in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 11 of the Environmental Impact Assessment Directive, the direct and indirect significant effects of the Proposed Project on the following:

- a) *population and human health*
- b) *biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC*
- c) *land, soil, water, air and climate*
- d) *material assets, cultural heritage and the landscape*
- e) *major accidents and natural disasters*
- f) *the interaction between the factors referred to in points (a) to (e)*

The EIAR submitted by the Applicant provides the relevant environmental information to enable the EIA to be carried out by the competent authority. The information to be contained in the EIAR is prescribed by Article 5 of the revised EIA Directive described in Section 1.2 above.

## 1.7 Structure and Content of the EIAR

### 1.7.1 General Structure

This EIAR uses the grouped structure method to describe the existing environment, the likely significant effects of the Proposed Project thereon and the proposed mitigation measures. Background information relating to the Proposed Project, scoping and consultation undertaken and a description of the Proposed Project are presented in separate sections. The grouped format sections describe the likely significant effects of the Proposed Project in terms of population and human health, biodiversity, with specific attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EEC; land, soils and geology, water, air quality, climate, noise and vibration, landscape and

visual, cultural heritage and material assets such as traffic and transportation, vulnerability to major accidents and natural disasters, together with the interaction of the foregoing and schedule of mitigation and monitoring.

The chapters of this EIAR are as follows:

- > Introduction
- > Background to the Proposed Project
- > Site Selection & Reasonable Alternatives
- > Description of the Proposed Project
- > Population and Human Health
- > Biodiversity (excluding Ornithology)
- > Ornithology
- > Land, Soils and Geology
- > Hydrology and Hydrogeology
- > Air Quality
- > Climate
- > Noise and Vibration
- > Landscape and Visual
- > Cultural Heritage
- > Material Assets (including Traffic and Transport, Telecommunications and Aviation)
- > Major Accidents and Natural Disasters
- > Interactions of the Foregoing
- > Schedule of Mitigation and Monitoring Measures

The EIAR also includes a Non-Technical Summary, which is a condensed and easily comprehensible version of the EIAR document. The non-technical summary is laid out in a similar format to the main EIAR document and comprises a description of the Proposed Project, followed by the existing environment, any likely significant effects of the Proposed Project, and mitigation measures presented in the grouped format.

## 1.7.2 Description of Likely Significant Effects and Impacts

As stated in the ‘*Guidelines on the Information to be Contained in Environmental Impact Assessment Reports*’ (EPA, 2022), an assessment of the likely significant effects of the potential impacts of a development is a statutory requirement of the EIA process. The statutory criteria for the presentation of the characteristics of potential impacts requires that the likely significant effects of potential impacts are described with reference to the extent, magnitude, complexity, probability, duration, frequency, reversibility and trans-boundary nature (if applicable) of the impact.

The classification of effects in this EIAR follows the definitions provided in the Glossary of Impacts contained in the EPA, 2022 document.

Table 1-2 presents the glossary of impacts as published in the EPA, 2022 document. Standard definitions are provided in this glossary, which permit the evaluation and classification of the quality, significance, duration and type of impacts associated with a Proposed Project on the receiving environment. The use of pre-existing standardised terms for the classification of impacts ensures that the EIA employs a systematic approach, which can be replicated across all disciplines covered in this EIAR. The consistent application of terminology throughout this EIAR facilitates the assessment of the Proposed Project on the receiving environment.

*Table 1-2 Impact Classification Terminology (EPA, 2022)*

Effect Characteristic	Term	Description
<b>Quality of Effects</b>	Positive	A change which improves the quality of the environment
	Neutral	No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.
	Negative	A change which reduces the quality of the environment
<b>Significance of Effects</b>	Imperceptible	An effect capable of measurement but without significant consequences
	Not significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.
	Slight	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities
	Moderate	An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends
	Significant	An effect, which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment
	Very significant	An effect which, by its character, magnitude, duration or intensity significantly alters most of a sensitive aspect of the environment
	Profound	An effect which obliterates sensitive characteristics
<b>Extent &amp; Context of Effects</b>	Extent	Describe the size of the area, number of sites and the

Effect Characteristic	Term	Description
		proportion of a population affected by an effect
	Context	Describe whether the extent, duration, or frequency will conform or contrast with established (baseline) conditions
Probability of Effects	Likely	Effects that can reasonably be expected to occur because of the planned project if all mitigation measures are properly implemented
	Unlikely	Effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented
Duration and Frequency of Effects	Momentary	Effects lasting from seconds to minutes
	Brief	Effects lasting less than a day
	Temporary	Effects lasting less than a year
	Short-term	Effects lasting one to seven years
	Medium-term	Effects lasting seven to fifteen years
	Long-term	Effects lasting fifteen to sixty years
	Permanent	Effect lasting over sixty years
	Reversible	Effects that can be undone, for example through remediation or restoration
	Frequency	Describe how often the effect will occur. (once, rarely, occasionally, frequently, constantly – or hourly, daily, weekly, monthly, annually)

Effect Characteristic	Term	Description
Type of Effects	Indirect	Impacts on the environment, which are not a direct result of the project, often produced away from the project site or because of a complex pathway
	Cumulative	The addition of many minor or significant effects, including effects of other projects, to create larger, more significant effects.
	'Do Nothing'	The environment as it would be in the future should the subject project not be carried out
	'Worst Case'	The effects arising from a project in the case where mitigation measures substantially fail
	Indeterminable	When the full consequences of a change in the environment cannot be described
	Irreversible	When the character, distinctiveness, diversity, or reproductive capacity of an environment is permanently lost
	Residual	Degree of environmental change that will occur after the proposed mitigation measures have taken effect
	Synergistic	Where the resultant effect is of greater significance than the sum of its constituents

Each effect is described in terms of its quality, significance, duration and type, where possible. A 'Do-Nothing' effect is also predicted in respect of each environmental theme in the EIAR. Residual effects are also presented following any impact for which mitigation measures are prescribed. The remaining effect types are presented as required or applicable throughout the EIAR. Any potential interactions between the various aspects of the environment assessed throughout this EIAR are presented in Ch. 1: Introduction7: Interaction of the Foregoing.

## 1.8 Project Team

### 1.8.1 Project Team Responsibilities

The companies and staff listed in Table 1-3 were responsible for completion of this EIAR of the Proposed Project. Further details regarding project team members are provided below.

The EIAR project team comprises a multidisciplinary team of experts with extensive experience in the assessment of wind energy developments and in their relevant area of expertise. The qualifications and experience of the principal staff from each company involved in the preparation of this EIAR are summarised in Section 1.8.2 below. Each chapter of this EIAR has been prepared by a competent expert in the subject matter.

Table 1-3 Companies and Staff Responsible for EIAR Completion

Consultants	Principal Staff Involved in Project	EIAR Input*
<b>MKO</b>  Tuam Road, Galway, H91 VW84	Brian Keville Michael Watson Colm Ryan Sean Creedon Robert Kennedy Ciarán Fitzgerald Eoin McCarthy Sophie O'Rourke Sean McCarthy Alan Clancy Alan McBride Adrian Moran Pat Roberts John Hynes Rachel Walsh Juliane Kohlstruck Aran von der Geest Moroney Niamh Rowan Aoife Joyce Sara Fissolo Clare Mifsud Dervla O'Dowd Pdraig Cregg Susan Doyle Ciarán McKenna Jack Bousfield Thamires Sandonatto Jack Workman Dija Mazonaite Kilian Devereux Gabriela Oliveira	Project Managers, Scoping and Consultation, Preparation of Natura Impact Statement, EIAR Report Sections:  1. Introduction 2. Background to the Proposed Project 3. Site Selection & Reasonable Alternatives 4. Description of the Proposed Project 5. Population & Human Health 6. Biodiversity 7. Ornithology 10. Air Quality 11. Climate 13. Landscape & Visual 15. Material Assets (non-Traffic) 16. Major Accidents and Natural Disasters 17. Interactions of the Foregoing 18. Schedule of Mitigation
<b>Hydro Environmental Services Ltd.</b>  22 Lower Main Street Dungarvan Co. Waterford	Michael Gill David Broderick	Flood Risk Assessment, Drainage Design, Preparation of EIAR Sections: 8. Land, Soils & Geology 9. Hydrology and Hydrogeology

Consultants	Principal Staff Involved in Project	ELAR Input*
<b>Fehily Timony &amp; Company Ltd</b>  Carlow: Unit 6. Bagenalstown Industrial Park, Royal Oak Road, Muine Bheag, Co. Carlow, R21 XW81, Ireland	Ian Higgins	> Geotechnical & Peat Stability Assessment > Peat and Spoil Management Plan
<b>AWN Consulting Ltd</b>  The Tecpro Building IDA Business and Technology Park Clonshaugh Dublin 17	Alistair MacLaurin Miguel Cartuyvels Mike Simms	Baseline Noise Survey, Preparation of ELAR Section 12. Noise and Vibration
<b>IAC Archaeology Ltd.</b>  Unit G1, Network Enterprise Park, Kilcoole, Co Wicklow, A63 KT32, Ireland	Faith Bailey Jonny Small Elizabeth Di Vincenzo Johnnie Gallacher	Preparation of ELAR Section 14. Cultural Heritage
<b>Alan Lipscombe Traffic and            Transport Consultants</b>  Claran, Headford, Co. Galway	Alan Lipscombe	Swept Path Analysis, Preparation of ELAR Section 15. Material Assets - Traffic and Transport

\* (A Statement of Authority is included in each chapter of this ELAR detailing the experts who contributed to the preparation of this report, identifying for each such expert the part or parts of the report which he or she is responsible for or to which he or she contributed, his or her competence and experience, including relevant qualifications in relation to such parts, and such additional information in relation to his or her expertise that demonstrates the expert's competence in the preparation of the report and ensures its completeness and quality.

## 1.8.2 Project Team Members

### 1.8.3 MKO

#### Brian Keville B.Sc. (Env.)

Brian Keville has over 20 years' professional experience as an environmental consultant having graduated from the National University of Ireland, Galway with a first-class honours' degree in Environmental Science. Brian was one of the founding directors of environmental consultancy, Keville & O'Sullivan Associates Ltd., prior to the company merging in 2008 to form McCarthy Keville

O'Sullivan Ltd. Brian's professional experience has focused on project and environmental management, and environmental impact assessments. Brian has acted as project manager and lead-consultant on numerous environmental impact assessments, across various Irish counties and planning authority areas. These projects have included large infrastructural projects such as roads, ports and municipal services projects, through to commercial, mixed-use, industrial and renewable energy projects. The majority of this work has required liaison and co-ordination with government agencies and bodies, technical project teams, sub-consultants and clients.

### Michael Watson, MA; MIEMA, CEng, PGeo

Michael Watson is a Director of Environment in MKO. Michael has over 20 years' experience in the environmental sector. Following the completion of his master's degree in environmental resource management, Geography, from National University of Ireland, Maynooth he worked for the Geological Survey of Ireland and then a prominent private environmental & hydrogeological consultancy prior to joining MKO in 2014. Michael's professional experience includes managing Environmental Impact Assessments, EPA License applications, hydrogeological assessments, environmental due diligence and general environmental assessment on behalf of clients in the wind farm, waste management, public sector, commercial and industrial sectors nationally. Michael's key strengths include project strategy advice for a wide range and scale of projects, project management and liaising with the relevant local authorities, Environmental Protection Agency (EPA) and statutory consultees as well as coordinating the project teams and sub-contractors. Michael is a key member of the MKO senior management team and as head of the Environment Team has responsibilities to mentor various grades of team members, foster a positive and promote continuous professional development for employees. Michael also has a Bachelor of Arts Degree in Geography and Economics from NUI Maynooth, is a Member of IEMA, a Chartered Environmentalist (CEnv) and Professional Geologist (PGeo).

### Colm Ryan BA (Hons) MSc

Colm Ryan is the Planning Director of MKO, Planning & Environmental Consultants, with over 16 years of experience as a planner in both private practice and public sector combined. Prior to joining MKO, Colm worked as a planner with a UK and Ireland based Renewable Energy developer. Colm has also spent part of his career in local authority as a planner with Laois County Council. Colm has significant experience in a wide range of projects and extensive experience in large scale residential, renewables and marine based developments. Colm currently heads up the Planning Division in MKO with responsibility for Planning, Project Management, Health & Safety and Project Communications. Colm holds BA (Hons) in Geography & Irish and Masters in Civic Design Town & Regional Planning. Prior to taking up his position with MKO in May 2017, Colm worked as a Senior Planner with Lightsource Renewable Energy Ltd. and held previous posts with Partnerships for Renewables, South Kesteven District Council, Planning Aid, Frank O Gallachoir & Associates in Bray and Laois County Council. Colm is a chartered town planner with specialist knowledge in renewable energy, mixed use development and residential. Colm's key strengths and areas of expertise are in large scale renewable energy development particularly in the ground mounted solar, delivery of local community engagement processes on contentious planning applications, management of community and developers' interest through the planning process and post or pre-planning due diligence. Since joining MKO as a Senior Planner Colm has been overseeing and managing a wide range of development projects such as large-scale solar applications, site feasibility work for potential wind energy projects, large scale housing and mixed use schemes. Within MKO Colm plays a large role in the management of staff members including several aspects of business development. Colm has proven negotiation skills and stakeholder relationship building across numerous development projects in Ireland and the UK and is a corporate member of the Irish Planning Institute.

### Robert Kennedy B.Sc. (Hons), MSc

Robert is a Project Environmental Scientist working as part of MKO's Renewables Team, having joined the company in June 2022. Robert holds a BSc in Environmental Biology and an MSc in Environmental

Policy, both from University College Dublin. Robert's key strengths and areas of expertise are in project management, environmental impact assessment, renewable energy, report writing, and research. Since joining MKO, Robert has worked with and coordinated large multi-disciplinary teams involved in the production of EIA Reports for large-scale renewable energy developments. Robert's experience spans a broad range of wind energy developments, including applications for new onshore and offshore wind farms, lifetime extension and repowering projects, and substitute consent. Robert also played a key role in developing MKO's new service offering around Biodiversity Net Gain and other nature-positive mechanisms. Prior to taking up his position with MKO, Robert worked in various roles in Canada and Ireland, giving him a broad mix of skills and experience to apply to his current role with MKO. Robert also holds a membership with the Institute of Sustainability and Environmental Professionals (ISEP).

### Ciarán Fitzgerald B.Sc. (Hons) PG Dip

Ciarán Fitzgerald is an Environmental Scientist who has been working with MKO since June 2024. Ciarán holds a B.Sc. (Honours) in Marine Science from the National University of Ireland Galway and a First-Class Honours PG. Dip in Geographic Information Systems from University College Cork. Ciarán works as part of the Environmental Renewables team as well as a larger multidisciplinary team. Ciarán's role involves undertaking tasks such as report writing, EIAR chapter writing, and QGIS mapping. Prior to joining MKO, Ciarán spent time aboard the research vessel "Celtic Explorer," working as part of a team undertaking chemical water data, pelagic species abundance and sorting, bathymetric GIS mapping, data collection, and report writing. Ciarán's key strengths lie in GIS mapping and communication. Since joining the company, Ciarán has been involved in a range of projects, including onshore wind, offshore wind, and solar, contributing by reviewing EIAR chapters and assisting with project development. Ciarán holds a membership from the Institute of Sustainability and Environmental Professionals (ISEP).

### Eoin McCarthy B.Sc. (Env.)

Eoin is a Project Director within the Environment Renewables team of MKO with over 14 years of environmental consultancy experience. Eoin holds a B.Sc. (Hons) in Environmental Science from NUI, Galway. Eoin took up his position with McCarthy Keville O'Sullivan in June 2011. Eoin's key strengths and areas of expertise are in project management, environmental impact assessment, wind energy site selection and feasibility assessment. Since joining MKO, Eoin has progressed from Graduate to Senior level and has been heavily involved on a significant range of energy infrastructure, tourism, waste permit, flood relief scheme and quarrying projects. He has overseen the design phase and applications of some of the largest wind energy projects in Ireland. In his role as project manager, Eoin works with and co-ordinates large multidisciplinary teams including members from MKO's Environmental, Planning, Ecological and Ornithological departments as well as sub-contractors from various fields in the preparation and production of EIARs. Eoin is also involved in the development of project strategy for the projects that he manages. He has held the role of project manager and EIAR co-ordinator on over 700MW worth of wind energy projects. Within MKO Eoin plays a large role in the management of and sharing of knowledge with junior members of staff and works as part of a large multi-disciplinary team to produce EIA Reports.

### Sophie O'Rourke

Sophie O'Rourke is a Graduate Environmental Scientist with MKO. Sophie holds a first-class honours master's degree in environmental science at Trinity College Dublin. As part of MKO's Renewables team, Sophie is involved with the production of EIARs for a variety of wind energy projects. Sophie's areas of expertise include environmental policy, high quality report writing, and geographic information systems.

### Sean McCarthy

Sean McCarthy is a Project Director in the Planning Team at MKO with over 10 years of experience in both private practice and local authorities. Sean holds a BSc. (Hons) in Property Studies from ATU and a Masters in Regional & Urban Planning for Heriot Watt University in Edinburgh. Prior to taking up his position with McCarthy Keville O'Sullivan in September 2015, Sean worked as a Planning Officer with the Western Isles Council in Scotland in the UK and prior to that worked as a Graduate Planner with Tipperary County Council. Sean is a chartered member of the Royal Town Planning Institute with extensive experience in renewable energy, residential, commercial, industrial, quarries and healthcare development projects.

Sean has been involved in complex and large-scale development projects from inception through to planning permission both as a project manager and working as part of wider design teams. Sean has extensive experience in working on EIAR projects. Within MKO, Sean plays a large role in the management and confidence building of junior members of staff and works as part of a large multi-disciplinary team to produce planning applications.

### Alan Clancy BA (Hons), MA

Alan Clancy is a Planner with MKO with over 8 years of experience in private practice. Alan holds a BA (Hons) in Geography & History from University of Galway and a Masters in Planning and Sustainable Development from University College Cork. Prior to taking up his position with MKO in February 2022, Alan worked as a Planner for Indigo Telecom Group in Limerick Ireland where he assisted with management of all planning aspects of new telecommunications network roll out programmes, retentions of existing sites and all aspects of dealing with planning applications and appeals for leading telecommunications operators. Prior to this, Alan worked in the UK with the JTS Partnership LLP, where he gained experience as a graduate planner through to planner level. Alan has experience across a range of sectors including commercial, residential and industrial, as well as having experience with providing development advice and undertaking background research for clients, preparing planning applications of varying sizes as well as planning appeals and conditions compliance and managing all aspects of the planning process for commercial, educational and Infrastructural projects. Alan's key strengths and areas of expertise are in development management, provision of planning advice and project management of small and medium sized projects.

Alan's key strengths and areas of expertise are in development management, provision of planning advice and project management. Since joining MKO, Alan has assisted with various projects including Strategic Infrastructure Developments, lodgement and management of Planning Applications, Development Plan Submissions and preparing Development Potential Reports. Alan is a corporate member of the Irish Planning Institute.

### Alan McBride

Alan is a Project Planner within the Industrial and Commercial team at MKO with over 9 years of experience in both private practice and local authorities in Ireland and the UK. Alan holds BA (Hons) in Geography & History and Postgraduate Diploma in Urban and Regional Planning. Prior to taking up his position with MKO in November 2024, Alan worked as a Planner with Gravis Planning in Dublin and held previous posts with the London Borough of Bexley and the London Borough of Newham in England. Alan has experience in strategic planning, development management, environmental assessment, and research and analysis. Within MKO, Alan project manages and provides planning support on a variety of development management projects including for large-scale residential developments, infrastructure developments, and renewable energy projects. Alan also works as part of large, multidisciplinary teams preparing planning applications and is responsible for the preparation of the planning policy elements of EIARs.

### Adrian Moran BA (Hons) MSc

Adrian Moran is a Planner with MKO having joined the company in April 2024. Adrian holds a BA (Hons) in History and Archaeology from University of Galway and an MSc (Hons) in Planning and Development from University of Galway. Since joining MKO, Adrian has been involved in a range of renewable energy projects including onshore and offshore wind, solar and grid infrastructure developments. His main responsibilities include preparing planning application documents and reports, preparing inputs for Environmental Impact Assessment Reports and liaising with multidisciplinary project teams.

### Pat Roberts B.Sc. (Env.)

Pat Roberts is Principal Ecologist with MKO with over 20 years post graduate experience of providing ecological services in relation to a wide range of developments at the planning, construction and monitoring stages. Pat holds B.Sc. (Hons) in Environmental Science. Pat has extensive experience of providing ecological consultancy on large scale industrial and civil engineering projects. He is highly experienced in the completion of ecological baseline surveys and impact assessment at the planning stage. He has worked closely with construction personnel at the set-up stage of numerous construction sites to implement and monitor any prescribed best practice measures. He has designed numerous Environmental Operating Plans and prepared many environmental method statements in close conjunction with project teams and contractors. He has worked extensively on the identification, control and management of invasive species on numerous construction sites. Prior to taking up his position with MKO in June 2005, Pat worked in Ireland, USA and UK as a Tree Surgeon and as a nature conservation warden with the National Trust (UK) and the US National Park Service. Pat's key strengths include his depth of knowledge and experience of a wide range of ecological and biodiversity topics and also in his ability to understand the requirements of the client in a wide range of situations. He is currently responsible for staff development, training and ensuring that the outputs from the ecology team are of a very high standard and meet the requirements of the clients and relevant legislation and guidelines. He is a full member of the Chartered Institute of Ecologists and Environmental Managers (CIEEM).

### John Hynes M.Sc. (Ecology), B.Sc.

John Hynes is the Ecology Director at MKO, with over 13 years' professional experience in the public and private sector. John oversees MKO's Ecology, Ornithology, Forestry, Bats, and GIS teams. John holds a B.Sc. in Environmental Science and a M.Sc. in Applied Ecology.

John's key strengths and areas of expertise are in Appropriate Assessment of plans and projects, Ecological Impact Assessment, Flora and Fauna survey methods and design, project management and project strategy. John is experienced as a coordinator or large multi-disciplinary teams on complex ecological projects. John has been involved as a lead Ecologist on a range of energy infrastructure, commercial, transport, housing, forestry, biodiversity net gain and nature restoration projects. John is a Full member of the Chartered Institute of Ecology and Environmental Management, a member of Galway County Council Climate and Biodiversity Special Policy Committee (SPC) and a contributor to the Wind Energy Ireland (WEI) Biodiversity and Sustainability Working Group.

### Rachel Walsh BSc (Hons)

Rachel is a Senior Ecologist with over 5 years' experience in professional ecological consultancy, is a full member of CIEEM (MCIEEM) and holds a First-Class Honours BSc in Environmental Science. Rachel's key strengths are in terrestrial flora and fauna ecology, including Irish Vegetation Classification surveys, habitat mapping, invasive species surveys, mammal surveys, Appropriate Assessment reporting and Ecological Impact Assessment. Since joining MKO, Rachel has worked widely on renewable energy infrastructure projects, wastewater infrastructure projects, extractive industry and residential projects. She has been the lead consultant on an ongoing contract with Irish Rail since 2020 and works

closely with Irish Rail environmental staff and ground staff to carry out ecological assessment and supervision of asset maintenance and line upgrade works. She also manages a team of ecologists within the company.

### Juliane Kohlstruck

Julie is a Project Ecologist with MKO with over five years of experience in professional ecological consultancy. Julie holds a BSc in Landscape Ecology from the University of Muenster, Germany and a MSc in Landscape Ecology from the University of Oldenburg, Germany. Prior to taking up her position with MKO in September 2025, Julie worked as a Senior Ecologist with Woodrow APEM Ltd. Julie has broad ecological field skills including habitat surveys, invasive species surveys, rare plant surveys, Annex 1 habitat assessments, mammal surveys, and bird surveys. Julie has strong technical reporting skills, with experience preparing ecological reports including Appropriate Assessment Screening Reports, Natura Impact Statements, Biodiversity Management and Enhancement Plans, Ecological Impact Assessments and biodiversity chapters of Environmental Impact Assessment Reports for a wide range of projects.

### Aran Von Der Geest Moroney B.Sc

Aran von der Geest Moroney is a Senior Ecologist with MKO having joined the company in February 2021 and having over 5 years' experience in professional ecological consultancy. Aran holds a first-class honours BSc (Hons) in Ecology and Environmental Biology from University College Cork. Aran has also completed a Level 8 Special Purpose Award in Digital Mapping and GIS. Aran's key strengths and areas of expertise are wintering bird surveying and identification, freshwater macroinvertebrate identification and sampling, freshwater pearl mussel surveying, white-clawed crayfish surveying, electric fishing, bat surveys, GIS, habitat mapping, preparation of Stage 1 and Stage 2 Appropriate Assessment reports and Ecological Impact Assessment. Since joining MKO, Aran has been involved in a range of mixed use, residential, industrial, nature restoration, public services, wind energy and forestry projects. Aran has carried out a wide range ecological field surveys in accordance with NRA Guidelines, bat surveys, bird surveys, recording vegetation relevés and freshwater quality analysis using bioindicators. Aran has provided supervision as an ecological clerk of works in residential and wastewater infrastructure projects. Aran is trained in carrying out bat surveys, non-volant mammal surveys, bird surveys, freshwater pearl mussel surveys, white-clawed crayfish surveys, electric fishing surveys, river condition assessment surveys and in taking vegetation relevés of vascular plants and has experience in habitat identification and habitat mapping. Within MKO, Aran is responsible for independently carrying out and planning a range of ecological field surveys in accordance with NRA Guidelines and carrying out Appropriate Assessment screenings, Natura Impact Statements, Ecological Impact Assessments, Biodiversity chapters for EIARs, Invasive Species Management Plans and Aquatic reports as part of the ecology team. Aran is a member of CIEEM, holds a current Bat Roost Disturbance licence and holds an IFM Certificate in Electric Fishing.

### Niamh Rowan BSc (Hons)

Niamh Rowan is an Aquatic Ecologist at MKO. Niamh holds a first-class honours BSc (Hons) in Biological Sciences from Queen's University Belfast. Prior to taking up her position with MKO in March 2024, Niamh worked as an Assistant Scientific Officer at Loughs agency, and held previous roles as a Scientific writer in Novartis Ireland Ltd. Niamh's key strengths and areas of expertise include macroinvertebrate identification, electrofishing, River Hydromorphology Assessment Technique (RHAT) surveys and chemical water parameter monitoring. Since joining MKO, Niamh has been involved in residential and wind energy projects and has carried out freshwater analysis surveys using bioindicators. Within MKO, Niamh is responsible for carrying out a range of ecological field surveys and supporting with Appropriate Assessment screenings, Natura Impact Statements, Biodiversity chapters for EIARs and Aquatic Reports as part of the ecology team.

### Aoife Joyce M.Sc. (Agribioscience), B. Sc

Aoife Joyce is a Project Director (Ecology) with over 6 years' professional experience in ecological assessments and has completed CIEEM and BCI courses in Bat Impacts and Mitigation, Bat Tree Roost Identification and Endoscope training, Bat ID, Trapping and Handling and Kaleidoscope Pro Analysis. She is a graduate of Environmental Science (Hons.) at University of Galway, complemented by a first-class honours MSc in Agribioscience. Prior to taking up her position with MKO in 2019, Aoife held previous posts with Inland Fisheries Ireland and Treemetrics Ltd. She has a wide range of experience from bat roost identification, acoustic sampling, sound analysis, electrofishing, mammal and habitat surveying to GIS, soil and water sampling, Waste Acceptability Criteria testing, Environmental Impact Assessments (EIAs) and mapping techniques. Since joining MKO, Aoife has been involved in managing bat survey requirements for a variety of renewables planning applications, as well as commercial, residential and infrastructure projects. This includes scope development, project coordination, roost assessments, remote bat detector deployment, dawn and dusk bat detection surveys, bat handling, sonogram analyses, mapping, impact assessment, mitigation design inputs and report writing. Within MKO, she oversees the bat team and works as part of a wider multidisciplinary team to help in the production of ecological reports and assessments. Aoife is a member of Bat Conservation Ireland and CIEEM and holds current Bat Roost Disturbance and bat photography licenses.

### Sara Fissolo B.Sc

Sara Fissolo is a Project Ecologist with MKO with over 6 years' experience in ecological consultancy. Sara holds a BSc. (Hons) in Ecology and Environmental Biology from University College Cork. Sara first joined MKO in 2019 and has since worked as a member of MKO's dedicated bat unit, where she scopes and manages bat survey requirements for a variety of projects, including wind-farms planning applications. She has specialised in carrying out bat survey requirements for developments and nature conservation projects, including habitat appraisals and roost assessments, manual/static activity surveys and data analysis, and produces bat report outputs to inform Ecological Impact Assessments, Environmental Impact Assessments and Appropriate Assessments. Sara's role includes keeping up to date with scientific literature and guiding her team and the rest of the ecology team on how to assess impacts on bats. She attended Wildlife Acoustics, Bat Conservation Ireland (BCI), Bat Conservation Trust (BCT) and CIEEM courses on surveying heritage buildings for bats, on performing advanced survey techniques and identification, on bats and lighting, on performing bat care, on assessing the impact of developments on bats and on the use of Kaleidoscope Pro Software. Sara is a member of BCI, for which she carries out volunteer surveys, is a qualifying member of CIEEM.

### Clare Mifsud

Clare Mifsud (Ph.D.) is a Project Bat Ecologist at MKO with over 15 years' experience in bat research and conservation. Clare completed her PhD in Conservation Biology of Bats at the University of Malta, where her research focused on bat genetics, ecology and bioacoustics. She has since specialised in bat survey design and delivery for wind farm and infrastructure projects, including static detector, transect, emergence and re-entry surveys, as well as acoustic analysis and reporting. Clare has prepared numerous EIARs and bat reports, advises on mitigation design, and contributes to biodiversity management planning. Prior to joining MKO in February 2025, she worked as a Biological Expert and Consultant on an EU-funded marine conservation project between Malta and Sicily, and as a Lecturer at the University of Malta. She remains actively engaged with conferences and professional networks to stay at the forefront of bat research and applied conservation practice.

### Dervla O'Dowd B.Sc. (Env.)

Dervla O'Dowd is Associate Director with responsibility for MKO's dedicated Ornithology Team with over 20 years of experience in environmental consultancy as a Senior Ecologist and Project Manager. Dervla graduated with a first-class honours B.Sc. in Environmental Science from NUI, Galway in 2005 and joined Keville O'Sullivan Associates in the same year. Dervla has gained extensive experience in

project management and ecological assessment of the impacts of various infrastructural projects including wind energy projects, water supply schemes, road schemes and housing developments nationwide and has also been involved in the compilation of Environmental Impact Reports and acted as EIAR coordinator on many of these projects. Dervla has also extensive experience in the provision of ecological site supervision for infrastructural works within designated conservations areas, in particular within aquatic habitats, and has also been involved in the development of environmental/ecological educational resource materials. Currently, Dervla is responsible for the management of MKO's dedicated Ornithology Team coordinating MKO's portfolio of bird survey and assessment work required on major infrastructural projects, with emphasis on wind energy projects. Dervla's key strengths and areas of expertise are in project management, project strategy, business development and survey co-ordination to ensure the efficient operation of the Ornithology team's field survey schedule. Dervla holds full membership of the Chartered Institute of Ecology and Environmental Management and current Safe Pass card.

### Padraig Cregg M.Sc., B.Sc.

Padraig is a Principal Ornithologist with MKO and has over 12 years of experience working in environmental consultancies. The natural world has been a lifelong passion for Padraig. He has pursued this passion from boyhood through his academic study and career with MKO. In his role, he acts as technical advisor for the ornithology team, helping to take projects through their entire lifecycle, from site selection through survey design, constraints studies, impact assessment and lodgement of the planning application. He is responsible for training the ornithology team and keeping his colleagues updated on all emerging guidance, legislation, policies, initiatives, industry best practices, emerging trends, and market opportunities.

### Susan Doyle

Susan Doyle is a senior ornithologist at MKO. She completed her primary degree in Zoology (moderation in Natural Science) at Trinity College Dublin in 2013 and her master's degree in Ecological Assessment in University College Cork in 2014. Susan has seven years' experience in ecological consultancy and has worked on wind farm projects, solar farm projects, residential developments, data centres, county council projects and National Parks and Wildlife Service projects. She specialises in ornithological consulting, including Environmental Impact Assessments and operational monitoring. Prior to joining MKO in October 2020, Susan gained experience through her involvement in several bird conservation projects, including protected curlew, seabirds, waders and waterfowl, as well as research into breeding hen harrier, satellite telemetry in migrant birds and avian diseases in Ireland, providing her with extensive experience in a wide variety of bird survey methods, data management and reporting.

### Ciarán McKenna BSc. (Hons)

Ciarán is a Project Ornithologist with MKO, bringing over 8 years of experience in ecological consultancy. Ciarán holds a BSc. (Hons) in Wildlife Biology and joined MKO in March 2018. Prior to this, he worked as a consultant ecologist with Malachy Walsh & Partners, where he completed numerous ecological surveys, including ornithological, habitat, and bat surveys, and conducted Appropriate Assessment screenings. Ciarán specialises in managing ornithological monitoring for operational wind farms, overseeing large-scale surveys, and ensuring condition compliance. His key strengths and areas of expertise include ornithological survey methods, and species-specific surveys (e.g., barn owl, hen harrier, red grouse). He is also highly skilled in the use of QGIS for digital mapping, GenEst for mortality estimates, and regularly produces high-quality monitoring reports for clients. Since joining MKO, Ciarán has taken on the role of managing the ornithological operational monitoring projects across Ireland. He is responsible for liaising with clients, landowners, and multidisciplinary teams to ensure projects run smoothly and efficiently. Ciarán plays an integral role within the operational monitoring team at MKO. His commitment to clear communication and collaboration ensures clients are kept up to date on all key findings and project developments.

### Jack Bousfield

Jack is a Project Director specialising in GIS for MKO with over 8 years' experience in industry. This has spanned working in the public sector, private sector and as a GIS software supplier. Having graduated from Northumbria University in 2015 Jack has focussed on providing high quality GIS outputs and support to software users. This varies from traditional data management, drawing production and analysis skills to more contemporary digital reporting, surveying and application configuration. Jack has worked across a variety of disciplines providing GIS support for projects relating to hydrology and flooding, geotechnical investigation, ecology, environment, engineering, active travel and more recently for renewables projects focal to wind and solar. Jack is a team lead and efficiently organises and delegates tasks.

### Thamires Sandonato BA MA

Thamires Sandonato is a Project GIS Technician with MKO with over 10 years of experience in both private practice and local authorities. Thamires holds a BA in Cartographic Engineering and master's in Environmental Engineering. Prior to taking up her position with MKO in April 2023, Thamires worked as a GIS Analyst with Brookfield (Orsted) Renewable Energy in Brazil. She has also worked freelance for researchers at Fiocruz and other environmental consultancies, supporting them with their GIS requirements. Thamires has specialist knowledge in geospatial data, spatial analysis, data analysis, renewable energy data, environmental impact assessment, and geoprocessing. Thamires's key strengths and areas of expertise are in the development, construction, and operation of renewable energy projects, delivering high-quality mapping, management, and maintenance of geodatabases. Since joining MKO Thamires has been involved as a Project GIS Technician on a significant range of renewable energy, environmental, ecological, and planning projects. Within MKO Thamires plays a large role in the management and junior members of staff and works as part of a large multi-disciplinary team to deliver high-quality GIS work to our clients

### Jack Workman MSc.

Jack is the Landscape & Visual Project Director at MKO and is a Technician Member with the British Landscape Institute. He is a Landscape and Visual Impact Assessment Specialist with an academic background in the field of Environmental Science and Geography. Jack's primary role at MKO is conducting Landscape and Visual Impact Assessment (LVIA) for Environmental Impact Assessment reports. 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 NUIG 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.

### Dija Mazonaite B.Sc. (Hons)

Dija Mazonaite is a Project Environmental Scientist and LVIA Specialist at MKO. Dija has a BSc (Hons) in Geography & Geosystems and was recognised as a University Scholar at the University of Galway. Dija was also a finalist in Undergraduate of the Year for Innovative Sustainable Thinking. Dija's primary role at MKO is producing the LVIA chapter of EIA reports for large infrastructure developments. Since joining MKO, Dija 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. Dija's key strengths include proficiency in GIS tools such as ArcGIS and QGIS, conducting landscape and visual impact assessments and capturing image data through drone surveys and photomontages. Dija is an affiliate

member with the Landscape Institute and is also a member with IEMA, with qualifications to fly drones in the A1/A3 subcategories.

### Killian Devereux BSc (Hons)

Killian is currently the Project CAD Technician at MKO he has over 9 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 Engineering 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.

### Gabriela Oliveira

Gabriela is a CAD Technician at MKO with over 8 years of drafting experience in various sectors of the building industry. She holds BSc (Hons) in Architecture and Urbanism from University of Fortaleza, Ceara, Brazil. Prior to taking up her position with MKO in July 2023, Gabriela worked as an Architect for Fergal Bradley & Co. and as an Architect Assistant Graphic Design for an engineer company. She was primarily involved in a variety of Commercial / Residential / Landscape projects where she was responsible for the planning drawing packages but also has experience working in FSC's /DAC's and one-off housing planning applications. Her key strengths and areas of expertise are in Auto CAD, Revit and SketchUp (3D).

## 1.8.3.2 Hydro Environmental Services Ltd

### Michael Gill

Michael Gill (P. Geo., B.A.I., MSc, Dip. Geol., MIEI) is an Environmental Engineer/Hydrologist with over 24 years' environmental consultancy experience in Ireland. Michael has completed numerous hydrological and hydrogeological impact assessments of wind farms in Ireland. He has also managed EIAR assessments for infrastructure projects and private residential and commercial developments. In addition, he has substantial experience in wastewater engineering and site suitability assessments, contaminated land investigation and assessment, wetland hydrology/hydrogeology, water resource assessments, surface water drainage design and SUDs design, and surface water/groundwater interactions. For example, Michael has worked on the EIS/EIARs for Slievecallan Wind Farm, Cahermurphy Wind Farm, and Carrownagowan Wind Farm, and over 100 other wind farm related projects across the country.

### David Broderick

David Broderick (P. Geo., BSc, H. Dip Env Eng, MSc) is a Hydrogeologist with over 19 years' experience in both the public and private sectors. Having spent two years working in the Geological Survey of Ireland working mainly on groundwater and source protection studies David moved into the private sector. David has a strong background in groundwater resource assessment and hydrogeological/hydrological investigations in relation to developments such as quarries and wind farms. David has completed numerous geology and water sections for input into EIARs for a range of commercial developments. David has worked on the EIS/EIARs for Carrigarierk Wind Farm, Curraglass Wind Farm, Esk Wind Farm and Shehymore Wind Farm, and over 60 other wind farm related projects across the country.

Nitesh Dalal

### 1.8.3.3 Fehily Timony & Company Ltd

The geotechnical aspects of the report, which were incorporated into the Geology & Soils and Water sections of the EIAR, were completed by Fehily Timoney. Fehily Timoney has extensive experience in the production of Peat Stability Assessments for wind energy developments. Fehily Timoney provides specialist geotechnical engineering and engineering geology advice to local authorities, contractors and consultants, particularly for infrastructure projects forming part of the National Development Plan and also for private commercial and residential developments as they move on to sites with more complex ground conditions.

#### Ian Higgins

Ian is a geotechnical engineer with over 18 years' experience in the design and supervision of construction of bulk earthworks, geotechnical foundation design, geotechnical monitoring and reviewing, reinforced earth design and 3rd party checking of piling and ground improvement designs. Ian's experience also includes the design, supervision and interpretation of ground investigations, including desk studies, walkover surveys, hazard mapping of rock excavations and slopes.

Ian has experience in many areas of civil engineering including highways, railways, energy projects and commercial developments. Ian's responsibilities include managing junior engineers, reviewing work carried out for ground investigation, reporting and design. Ian has also experience in using a number of geotechnical software packages including slope stability, finite element, pile design and retaining wall design.

### 1.8.4 AWN

#### Mike Simms

Mike Simms (Principal Acoustic Consultant) holds a BE and MEngSc in Mechanical Engineering and is a member of the Institute of Acoustics (MIOA) and of the Institution of Engineering and Technology (MIET). Mike has worked in the field of acoustics for over 20 years. He has extensive experience in all aspects of environmental surveying, noise modelling and impact assessment for various sectors including, wind energy, industrial, commercial, and residential.

#### Alistair MacLaurin

Alistair MacLaurin (Senior Acoustic Consultant) holds a BEng (Hons) in Sound Engineering, MSc in Applied Acoustics and has completed the Institute of Acoustics (IOA) Diploma in Acoustics and Noise Control. He has been working in the field of acoustics since 2008 and is a member of the Institute of Engineers Ireland (MIEI) and the Institute of Acoustics (MIOA). He has extensive knowledge and experience in relation to commissioning noise monitoring and impact assessment of wind farms as well as a detailed knowledge of acoustic standards and proprietary noise modelling software packages. He has commissioned noise surveys and completed noise impact assessments for numerous wind farm projects within Ireland.

#### Miguel Cartuyvels

Miguel Cartuyvels (Acoustic Consultant) holds a BEng (Hons) in Industrial Engineering and is a member (TechIOA) of the Institute of Acoustics. Miguel previously worked in the construction industry and has worked in the field of acoustics since 2021, where he has contributed to numerous projects related to environmental surveying, noise modelling, and impact assessment for various sectors, including wind energy, industrial, commercial, and residential.

Mike Simms (Principal Acoustic Consultant) holds a BE and MEngSc in Mechanical Engineering and is a member of the Institute of Acoustics (MIOA) and of the Institution of Engineering and Technology (MIET). Mike has worked in the field of acoustics for over 20 years. He has extensive experience in all aspects of environmental surveying, noise modelling and impact assessment for various sectors including, wind energy, industrial, commercial, and residential.

#### 1.8.4.2 IAC Archaeology

##### Faith Bailey

Faith is an Associate Director and Senior Archaeologist and Cultural Heritage Consultant with IAC. She holds an MA in Cultural Landscape Management (archaeology and architecture) and a BA in single honours archaeology from the University of Wales, Lampeter. She is a licence eligible archaeologist, a member of the Chartered Institute of Field Archaeologists, a member of the Institute of Archaeologists of Ireland and has over 19 years' experience working in commercial cultural heritage sector. Faith joined IAC in 2004 and in her capacity as Senior EIA Archaeologist, she has been responsible for the production and delivery of a large number of archaeological and built heritage desk top assessments, EIA, master plans, LAP/SEA and management plan associated with all sectors of development in the Republic and Northern Ireland. Faith's in-depth knowledge of the planning systems and heritage legislation within both the Republic of Ireland and Northern Ireland, twinned with the excellent working relationship she has developed between our clients and statutory authorities makes her one of the most experienced archaeological and cultural heritage consultants currently operating within the sector. Faith has significant experience in the assessment of Wind Energy Projects across the country and in the preparation of Briefs of Evidence and taking the stand as the expert witness at Oral Hearings. Projects that have successfully been brought through Oral Hearing include large infrastructural schemes and SID projects.

##### Jonny Small

Jonny (PhD Archaeology, MSci GIS and Cultural Heritage, NFQ Level 7 Cert Buildings Archaeology, MIAI) is an archaeological consultant and a member of the Institute of Archaeologists of Ireland. Jonny has over seven years of experience working in the archaeological and cultural heritage sector, both in research, fieldwork and consultancy. Jonny has been responsible for the production of impact assessments and EIARs. This includes renewable energy projects such as Ballyfasy Wind Farm (Co. Kilkenny), Cooloo Wind Farm (Co. Galway) and Gannow Wind Farm (Co. Galway). Jonny is also responsible for the production of Conservation Management Plans, built heritage reports and fieldwork reports, including large-scale, multi-period High Speed Two (HS2) sites.

##### Elizabeth Di Vincenzo

Elizabeth (MSc The Hellenistic World, BA Ancient History, Archaeology and Italian) has over three years of experience working in the archaeological and cultural heritage sector, both in fieldwork and consultancy, and has been responsible for the production of impact assessments and fieldwork reports.

##### Johnnie Gallacher

Johnnie (MA (Hons) Archaeology, MLitt Archaeological Studies, MIAI) is a member of the Institute of Archaeologists of Ireland and has over 5 years' experience working in the commercial cultural heritage sector.

### 1.8.4.3 Alan Lipscombe Traffic and Transport Consultants

#### Alan Lipscombe

In January 2007 Alan Lipscombe set up an independent traffic and transportation consultancy providing advice for a range of clients in the private and public sectors. Prior to this Alan was a founding member of Colin Buchanan's Galway office having moved there as the senior transportation engineer for the Galway Land Use and Transportation Study. Since the completion of that study in 1999, Alan has worked throughout the West of Ireland on a range of projects including: major development schemes, the Galway City Outer Bypass, Limerick Planning Land-Use and Transportation Study, Limerick Southern Ring Road Phase II, cost benefit analyses (COBA) and various studies for the NUI Galway. Before moving to Galway in 1997, Alan was involved in a wide variety of traffic and transport studies for CBP throughout the UK, Malta and Indonesia. He has particular expertise in the assessment of development related traffic and transport modelling, including for numerous wind farm developments, and is an accomplished analyst who has experience of a wide variety of modelling packages and methods.

## 1.9 Difficulties Encountered

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

## 1.10 Viewing and Purchasing of the EIAR

The EIAR will be available to view online on its dedicated SID website: <https://maughanacleapanning.com/>. Copies of this EIAR will be available online for the planning application, including the Non-Technical Summary (NTS), on the Planning Section of the An Coimisiún Pleanála website, under the relevant Planning Reference Number (to be assigned on lodgement of the application).

An Coimisiún Pleanála: <http://www.pleanala.ie/>

This EIAR and all associated documentation will also be available for viewing at the offices of An Coimisiún Pleanála, and Cork County Council. The EIAR may be inspected free of charge or purchased by any member of the public during normal office hours at the following address:

› An Coimisiún Pleanála,  
64 Marlborough Street,  
St. Rotunda,  
Dublin 1

› Cork County Council,  
Planning Section,  
Norton House,  
Cork Road,  
Skibbereen,  
Co. Cork  
P81 AT28

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 recently 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>)