Environmental Impact Assessment Report (EIAR)

Ballydermot Wind Farm, Co. Offaly & Co. Kildare

Chapter 1 – Introduction

Table of Contents

1. INTRODUCTION 1-1

1.1 Introduction 1-1
1.1.1 References to Proposed Project 1-1
1.1.2 Site Location 1-2
1.2 Legislative Context 1-6
1.2.1 Environmental Impact Assessment 1-6
1.2.2 Wind Energy Development Guidelines for Planning Authorities 1-8
1.3 The Applicant 1-8
1.4 BnM Onsite Activities 1-9
1.5 Brief Description of the Proposed Project 1-10
1.6 Need for the Proposed Project 1-12
1.6.1 Overview 1-12
1.6.2 Energy Security 1-20
1.6.3 Competitiveness of Wind Energy 1-23
1.6.4 European Renewable Energy Policy and Targets 1-23
1.6.5 National Renewable Energy Targets 1-24
1.6.6 Increasing Energy Consumption 1-25
1.6.7 Reduction of Carbon Emissions and Other Greenhouse Gases 1-29
1.6.8 Economic Benefits 1-30
1.7 Purpose and Scope of the EIAR 1-34
1.8 Structure and Content of the EIAR 1-34
1.8.1 Overview of EIAR 1-34
1.8.2 General Structure 1-35
1.8.3 Description of Likely Significant Effects and Impacts 1-36
1.8.4 Likely Future Receiving Environment 1-38
1.9 Project Team 1-45
1.9.1 Project Team Responsibilities 1-45
1.9.2 Project Team Members 1-47
1.10 Difficulties Encountered 1-62
1.11 Viewing and Purchasing the EIAR 1-62

TABLE OF TABLES

Table 1-1 Townlands within which the Proposed Project is located. 1-5

Table 1-2 Impact Classification Terminology (EPA, 2022) 1-36

Table 1-3: Likely future receiving environment and future environmental trends chapters and sections within the EIAR 1-40

Table 1-4 EIAR Project Team 1-45

TABLE OF FIGURES

Figure 1-1 Site Location Context 1-3

Figure 1-2 Project Site 1-4

GLOSSARY OF TERMS

Term	Definitions
WEDG 2006 Guidelines	The 2006 Wind Energy Development Guidelines. The current published wind energy development guidelines which addresses a variety of aspects relating to wind energy developments inclusive of noise, shadow flicker, setback distances and community obligations
Draft WEDG 2019 2019 Guidelines	The Draft 2019 Wind Energy Development Guidelines. A draft document of the updated Wind Energy Development Guidelines yet to be published.
Natura Impact Statement	NIS report prepared to assess the potential for a project to impact EU designated sites (i.e. Natura 2000 sites)
Renewable Energy Directive	An EU Directive which aims to accelerate the EU's renewable energy transition and promote energy independence
The Applicant	Bord na Móna Powergen Ltd.

GLOSSARY OF ACRONYMS

Acronym	Definition
AA	Appropriate Assessment
ACP	An Coimisúin Pleanála
BnM	Bord na Móna Energy Ltd.
CAP	Climate Action Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
COP	Conference of the Parties
DCENR	Department of Communications, Energy & Natural Resources
DECC	Department of the Environment, Climate and Communication
DoEHLG	Department of the Environment, Heritage and Local Government
DoHPLG	Department of Housing, Planning and Local Government
DPER	Department of Public Expenditure and Reform
EC	European Commission
EEA	European Environment Agency
EIA	Environmental Impact Assessment

EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
ESBN	Electricity Supply Board Network
EU	European Union
GFC	Gross Final Consumption
GW	Gigawatt
GWL	Global Warming Levels
IEMA	Institute of Environmental Management and Assessment
IPCC	International Panel on Climate Change
IPC	Integrated Pollution Control License
kV	Kilovolt
MW	Megawatt
NECP	National Energy and Climate Plan
NESF	National Energy Security Framework
NIS	Natura Impact Statement
NOx	Nitric Oxide and Nitrogen Dioxide
NPWS	National Parks and Wildlife Service
OCDP	Offaly County Development Plan
O3	Ozone
PM	Particulate Matter
RED	Renewable Energy Directive
REDIII	Third Revision of the Renewable Energy Directive
RES	Renewable Energy Share
RESS	Renewable Energy Support Scheme
SEAI	Sustainable Energy Authority of Ireland
SID	Strategic Infrastructure Development
SO2	Sulphur Dioxide
TWh	Terawatt Hour

UNFCCC	United Nations Framework Convention on Climate Change
WAM	With Additional Measures
WEM	With Existing Measures
WHO	World Health Organization

1. INTRODUCTION

1.1 Introduction

This Environmental Impact Assessment Report (EIAR) has been prepared by MKO on behalf of Bord na Móna Powergen Ltd. (BnM) (the Applicant), which intends to apply to An Coimisiún Pleanála (ACP) for planning permission for the construction of a wind energy development which will comprise of 46 no. turbines and associated infrastructure in the townlands of Ballydermot, Co. Offaly, Lullybeg Co. Kildare and adjacent townlands. The proposed project will also comprise of 220kV grid connection infrastructure to connect to the national grid via loop-in from the existing Maynooth-Dunstown 220kV overhead line in the townland of Killybegs in Co. Kildare.

The proposed project (described in detail in Chapter 4 of this EIAR) is being brought forward in response to local, national, regional 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.

The proposed project falls within the definition of 'renewable energy development' as listed in the Planning and Development Act 2000, as amended and is therefore subject to the requirements of the Renewable Energy Directive (RED) III transposed into Irish Law by the European Union (Planning and Development) (Renewable Energy) Regulations 2025 (S.I. No. 274 of 2025) subsequent amendments (S.I. No. 426/2025 and S.I. No. 435 of 2025).

The proposed project will have an estimated installed capacity of 322 MW and therefore the planning application meets the threshold for wind energy set out in the Seventh Schedule of the Planning and Development Act 2000 as amended, on foot of a notice issued by ACP on 12th October 2026 and is therefore being submitted directly to ACP as a Strategic Infrastructure Development (SID) in accordance with Section 37E of the Planning and Development Act 2000, as amended.

This EIAR accompanies the planning application for the proposed project submitted to ACP. The planning application is also accompanied by a Natura Impact Statement ('NIS').

Full details of the pre-application consultation undertaken with regard to the planning application can be found in Section 2.9 in Chapter 2 of this EIAR.

1.1.1 References to Proposed Project

The proposed project will be known as the Ballydermot Wind Farm and for the purposes of the EIAR:

- Where the 'Proposed Project' is referred to, this encompasses the entirety of the project ('Proposed Wind Farm' and 'Proposed Grid Connection' as described below) for the purposes of this Environmental Impact Assessment (EIA) in accordance with the EIA Directive. The Proposed Project is described in detail in Chapter 4 of this EIAR.
  - The 'Proposed Enhancement Areas' refers to the areas of the Project Site containing the proposed biodiversity and ornithology management areas for offsetting and enhancement as detailed in Appendix 6-5 (Biodiversity Management Plan (BMP)) and in Section 4.4.3 of Chapter 4.
  - The 'Proposed Construction Haul Routes' refers to the construction material haul routes proposed to facilitate the construction of the Proposed Project as detailed in Section 4.5.2 in Chapter 4 and further detailed in Section 15.1 of Chapter 15.

- The 'Proposed Turbine Delivery Route' refers to the turbine delivery route and associated accommodation works areas as detailed in Section 4.5.2 in Chapter 4 and further detailed in Section 15.1 of Chapter 15

- Where the 'Project Site' is referred to, this relates to the Planning Application Boundary, as delineated in red, which identifies the area in which the Applicant is applying for planning permission, as shown on Figure 1-1 and Figure 1-2 of the EIAR and encompasses an area of approximately 5,157 hectares.
- Where the 'Proposed Wind Farm' is referred to, this refers to the 46 no. turbines and associated foundations and hardstanding areas, including access roads, underground internal cabling, permanent meteorological masts, temporary construction compounds, peat and spoil areas, relay mast, tree felling, site drainage, operational stage signage, and all ancillary works and apparatus.
  - The 'Proposed Turbines' refers to the 46 no. turbines associated with the Proposed Wind Farm as outlined above.
- Where the 'Proposed Grid Connection' is referred to, this refers to the Proposed Onsite Substation (described below), the Proposed Offsite Substation (described below), the 13.1km 220kV underground cabling connection from the Proposed Onsite Substation to the Proposed Offsite Substation, and overhead line (OHL) connecting to the existing Maynooth-Dunstown 220kV OHL, and all ancillary works and apparatus. The Proposed Grid Connection is described in detail in Chapter 4 of this EIAR.
  - The 'Proposed Onsite Substation' refers to the new proposed onsite electricity infrastructure proposed within Lodge Bog, Co. Kildare comprising one 220kV Gas-Insulated Substation (GIS) building, and one 110kV GIS building, one control building, a 36m telecommunications tower, and the electrical components necessary to consolidate the electrical energy generated by each wind turbine and export that electricity from the wind farm to the national grid.
  - The 'Proposed Offsite Substation' refers to new proposed offsite electric infrastructure proposed within Killybegs, Co. Kildare comprising one 220kV GIS building, one 36m telecommunications tower, 2 no. steel masts, 2 no. new gantry structures and the associated outdoor electrical equipment necessary to consolidate the grid connection.

This EIAR, along with the NIS, will accompany the planning application for the Proposed Project which will be made to ACP. Both the EIAR and NIS contain the information necessary for ACP to complete the Appropriate Assessment and Environmental Impact Assessment as required for this planning application.

Both the EIAR and NIS take into account the combined impacts of the individual elements 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 Planning Application Boundary identifies the Project Site. Each individual topic, i.e., chapter, determines its own study area for assessment purposes relevant to that topic and provide this detail and justification in the relevant chapters.

The Proposed Project is described in detail in Chapter 4 of this EIAR.

1.1.2 Site Location

The Proposed Wind Farm is located approximately 2.2km south-southeast of Edenderry Co. Offaly, 3.3km west of Allenwood Co. Kildare, 2km north of Rathangan Co. Kildare and 1.7km east of Clonbullogue Village Co. Offaly. The Proposed Wind Farm will be located on part the Allen Bog

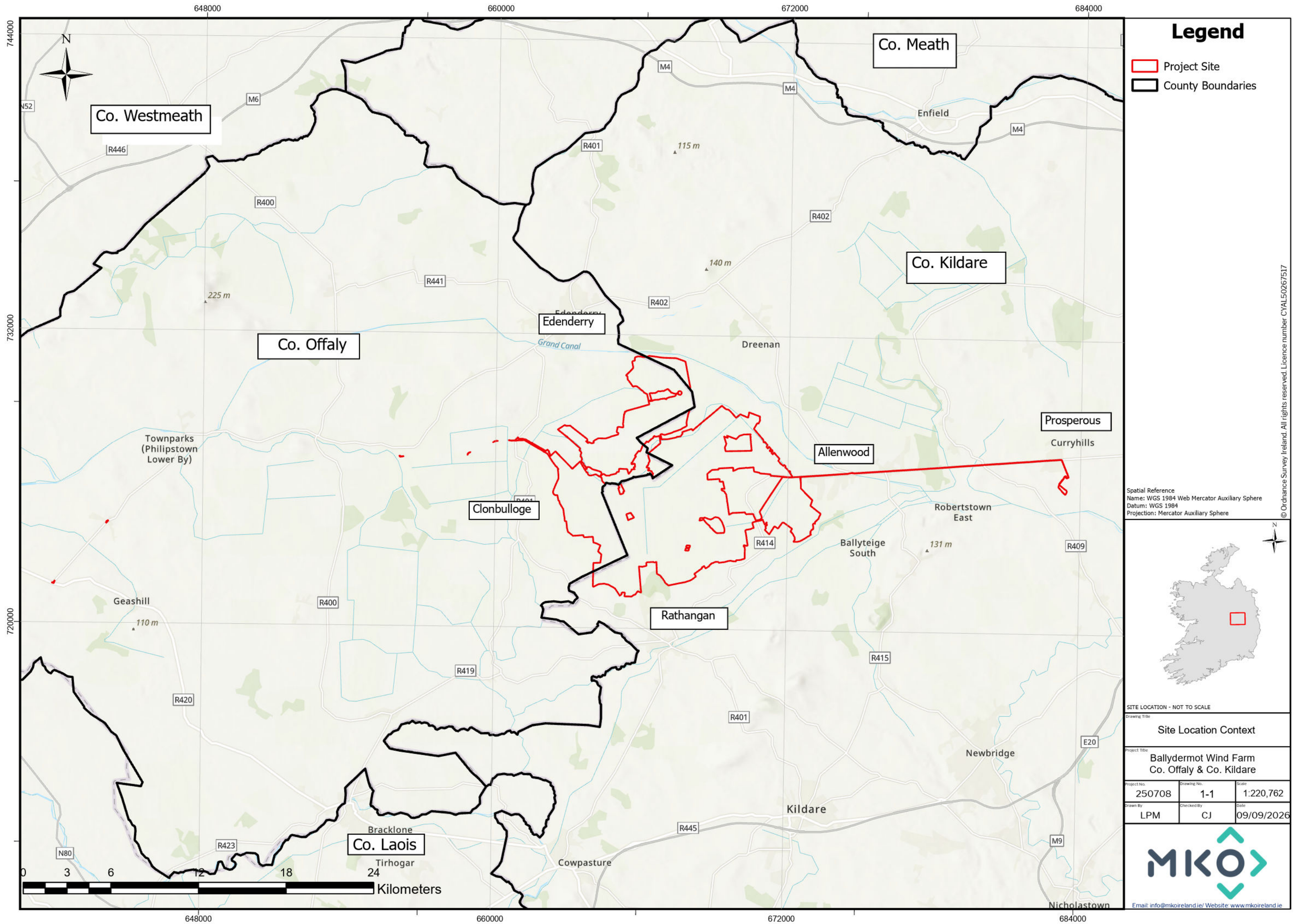
Group which comprises 14 no. bogs covering an area of approximately 5,139 ha. and is located on the border of County Offaly and County Kildare. The bogs include: Ticknevin, Glashabaun North, Glashabaun South, Codd 1, Codd 2, Ballydermot North, Ballydermot South, Blackriver, Lullymore, Lullybeg, Barnaran, Killina, Derrybrennan and Lodge. The Proposed Grid Connection will traverse through Allenwood, Co. Kildare and Prosperous, Co. Kildare, with infrastructure proposed in the townland of Lullymore and Killybegs, Co Kildare and adjacent townlands.

The approximate centre of the Project Site is X666946, Y 725714 in Irish Transverse Mercator (ITM) coordinates. It is proposed to access the Project Site via 10 no. associated site entrances during the construction and operation phases of the proposed project; please see Section 4.5.1 of Chapter 4 Description of the Proposed Project for further information on Site access. A site location context map is shown in Figure 1-1 below. The Project Site is further identified in Figure 1-2 below.

The Proposed Grid Connection will facilitate the connection of the Proposed Turbines to the national electricity grid. Underground electrical cables will transmit the power from each wind turbine to the Proposed Onsite Substation. The Proposed Onsite Substation will connect to the Proposed Offsite Substation via 13.1km of underground electrical 220kV cabling which will be primarily located in the public road network, with two subsections (0.5km and 1km) located in private land. The Proposed Offsite Substation will connect into the national grid via the existing Maynooth-Dunstown 220kV Overhead Line (OHL) in the townland of Killybegs, Co. Kildare, measuring approximately 0.12km in total length (comprising 0.06km of OHL loop-in from the Proposed Offsite Substation to the existing OHL). It is proposed to access the Proposed Onsite Substation via internal access roads during the construction and operation phases. The Proposed Offsite Substation and associated OHL cabling infrastructure will be accessed via a proposed new entrance off the L6002 near Prosperous Co. Kildare. Please see Section 4.5 of Chapter 4 Description of the Proposed Project for further information on Site access.

Current land use within the Proposed Wind Farm comprises natural revegetation of cutaway and degraded bog and public road corridor. Current land use on and along the Proposed Grid Connection comprises majority of public road corridor, degraded raised bog and land principally used for agriculture. Land-use in the wider landscape of the Project Site comprises of BnM landholdings, forestry, agricultural land, cutover and cutaway peatland, one-off rural housing, small village settlements, and existing energy infrastructure, including power plants, solar farms, and wind energy developments.

The Project Site is located within an area designated as ‘Open for Consideration’ for wind energy in the Kildare County Development Plan 2023-2029 and ‘Areas Open for Consideration for wind energy development’ in the Offaly County Development Plan 2021-2027; All the proposed turbine locations are within the ‘Open for Consideration’ wind energy designation for both Offaly and Kildare. Please see Section 2.6.4 of Chapter 2 for further information on both the Offaly County Development Plan and Kildare County Development Plan wind energy designations.



Legend

- Project Site
- County Boundaries

Spatial Reference
Name: WGS 1984 Web Mercator Auxiliary Sphere
Datum: WGS 1984
Projection: Mercator Auxiliary Sphere

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SITE LOCATION - NOT TO SCALE

Drawing Title
Site Location Context

Project Title
Ballydermot Wind Farm
Co. Offaly & Co. Kildare

Project No.	Drawing No.	Scale
250708	1-1	1:220,762
Drawn By	Checked By	Date
LPM	CJ	09/09/2026

MKO
Email: info@mkoireland.ie/ Website: www.mkoireland.ie

640000
660000
680000
740000
720000
N
Ballinagar
Kilbeggan
Tullamore
Geashill
Edenderry
Enfield
Summerhill
Clane
Naas
Kildare
Newbridge
Kildare
Clonaslee
0 4.25 8.5 17 25.5 34
Kilometers
Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
640000
660000
680000

Legend

Project Site

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Spatial Reference
Name: WGS 1984 Web Mercator Auxiliary Sphere
Datum: WGS 1984
Projection: Mercator Auxiliary Sphere

SITE LOCATION - NOT TO SCALE

Drawing Title
Project Site

Project Title
Ballydermot Wind Farm
Co. Offaly & Co. Kildare

Project No.	Drawing No.	Scale
250708	1-2	1:300,000
Drawn By	Checked By	Date
TI	CJ	01/10/2026

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The townlands within which the Proposed Project is located are listed in Table 1-1. All townlands are located in Co. Offaly and Co. Kildare.

Table 1-1 Townlands within which the Proposed Project is located.

Development Works	Townlands in Co. Offaly	Townlands in Co. Kildare
Proposed Wind Farm		
Wind turbines and associated foundations and hard-standing areas, meteorological masts, internal site roads, amenity access track, amenity car parks, temporary construction compounds, underground cabling, peat and spoil areas, site drainage, tree felling, and all ancillary works and apparatus	Ballykilleen, Kilcumber, Cloncant, Ballydermot, Clonmel, Clonbrown, Clonroosk Little, Clonroosk Big, Coolygagan, Cushaling, Shean, Codd, Derries, Cloncanon	Ballysooghan North, Rathangan, Killinthomas, Killyguire, Cappanargid, Cushaling, Lullybeg, Lullymore East, Lullymore West, Drumsru, Allenwood South, Derrybrennan, Tickvein, Kilpatrick, Clonkeen, Barnaran, Allenwood South, Killinagh Upper, Killinagh Lower, Ballybrack
Proposed Grid Connection		
Onsite 220kV substation and control building, underground electrical cabling, offsite 220kV substation, associated temporary construction compound, 2 no. gantry structures, crane pad, tower pad, 2 no. steel masts, OHL connecting to the existing Maynooth-Dunstown 220kV OHL, and all ancillary works and apparatus	Not proposed in Co. Offaly	Killybegs, Curryhills, Downings North, Coolree, Graigues, Blackwood, Brockagh, Derrymullen, Allenwood Middle, Allenwood South
Proposed Enhancement Areas		
Ecological and Ornithological Enhancement and Mitigation	Cloncant, Ballydermot, Clonmel, Clonbrown, Cushaling, Codd, Derries, Cloncanon, Shean	Clonkeen, Ballysooghan North, Rathangan, Killinthomas, Killyguire, Cappanargid, Cushaling, Lullybeg, Lullymore East, Lullymore West, Derrybrennan, Tickvein
Proposed Turbine Delivery Route		
Accommodation works to facilitate the delivery of large turbine components and other abnormally sized loads	Ballina, Ballinagar, Esker More, Ballinrath, Ballynakill, Ballykilleen	Not proposed in Co. Kildare

1.2 Legislative Context

On the 5th May 2021, the Applicant sought a determination, from ACP, in relation to the SID status or otherwise, of a proposed wind farm development at Ballydermot, Co. Offaly and adjacent townlands and Lullybeg Co. Kildare and adjacent townlands. This request was made in accordance with the Seventh Schedule of the Planning and Development Act 2000, as amended and is subject to the requirements of the Renewable Energy Directive (RED) III transposed into Irish Law by the European Union (Planning and Development) (Renewable Energy) Regulations 2025 (S.I. No. 274 of 2025)(Pl Ref: PC19.310143). The Planning and Development Act 2024 was signed into law by the President on the 17th of October 2024, however at the time of writing the relevant provisions have not yet commenced. For further information on the Planning and Development Act 2024 please see Section 2.6.2 of Chapter 2.

In November 2023, a revision of the Renewable Energy Directive[1] (RED III), came into force. On 26th August 2025, the Department of Housing, Local Government and Heritage published a circular which notifies planning authorities, ACP and other key stakeholders of the transposition of certain articles of RED III into law. The provisions of RED III are broad ranging and include provisions that aim to speed up the permit granting process for renewable energy projects by providing mandatory permit granting timelines for various types of renewable energy projects, as well as provisions concerned with environmental protection Directives and how they are applied to certain renewable energy projects.

The European Union (Planning and Development) (Renewable Energy) Regulations 2025 (S.I. 274 of 2025) have given effect to articles 15e(5), 16, 16b, 16c(2), 16c(3), 16d, 16e and 16f of REDIII, by making amendments to the Planning and Development Act 2000 and the Planning and Development Regulations 2001 to 2025.[2] Please see Section 2.3.1 of Chapter 2 for further details on the REDIII.

A pre-application consultation meeting between the ACP (then An Bord Pleanála) and representatives of BnM and MKO, in relation to the Proposed Project took place on the 26th July 2021. Further pre-application consultation with ACP, which was supplemented by further consultation with the National Parks and Wildlife Service, Department of Defence (DoD), EirGrid, and Inland Fisheries Ireland (IFI) was held throughout 2026. Detailed consultation was also held with Offaly County Council (OCC) and Kildare County Council (KCC) throughout the pre-application process, in relation to planning with dedicated meetings being held in relation to traffic and transport with the roads department of each council. Please see Section 2.9 of Chapter 2 for further detail on all consultation held on the Proposed Project.

After the final pre-application consultation meeting on 27th August 2026, a formal closure request was issued on 9th September 2026 to ACP. On 12th October 2026 ACP issued a notice to BnM indicating its determination that the Proposed Project is SID and, accordingly, an application for permission should be made directly to ACP in accordance with Section 37E of the Planning and Development Act 2000 (Act), as amended. Please see Section 2.8 of Chapter 2 for further detail on all consultation and scoping associated with the Proposed Project.

1.2.1 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

[1] *Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast)*
[2] *Department of Housing, Local Government and Heritage (2025) European Union (Planning and Development) (Renewable Energy) Regulations 2025 CEPP 1/2025* <https://www.gov.ie/en/department-of-housing-local-government-and-heritage/circulars/european-union-planning-and-development-renewable-energy-regulations-2025/>

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 as amended by Directive 2014/52/EU, the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations (as amended).

The EIA of the Project will be undertaken by ACP, as the competent authority.

Article 5 of the EIA Directive provides that where an EIA is required, the developer shall prepare and submit an 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 environmental and planning 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 classes/scales of development that normally require EIA are set out in Schedule 5 of the Planning and Development Regulations 2001 to 2019. 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*", per Item 3(i) of the Schedule. The proposed development exceeds 5 turbines and 5 megawatts in scale and therefore is subject to EIA.

The EIAR describes the receiving environment, assesses the likely significant effects of the Proposed Project on the receiving environment and proposes mitigation measures to avoid or reduce these effects as well as appropriate monitoring to ensure the efficacy of such mitigation measures. 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 have been assessed as part of this EIAR.

1.2.1.1 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).

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 to the extent these guidelines are relevant having regard to the enactment of the revised EIA Directive.

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 the 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'* (Department of the Environment, Heritage and Local Government (DoEHLG), 2006) have been taken into account during the preparation of this EIAR.

The '*Wind Energy Development Guidelines for Planning Authorities'* (DoEHLG, 2006) (hereafter referred to as the 'WEDG 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 WEDG 2019'). A consultation process in relation to the Draft WEDG 2019 closed on 19th February 2020. The proposed changes presented in the Draft WEDG 2019 give certain focus on the recommended setback distance from residential properties (4 times the proposed tip height (i.e., 200m and 220m)), along with shadow flicker and noise requirements relative to sensitive receptors.

At time of writing, the Draft WEDG 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 those issued in 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) to develop revised wind energy development guidelines for onshore wind in Q1 2025[3], it is possible that the Draft WEDG 2019 are adopted during the consideration period for the current planning application. Should the Draft WEDG 2019 be adopted in advance of a planning decision being made on this application, the Proposed Project 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 controllable and are discussed further in Chapter 12 and Chapter 5, respectively. The Proposed Project 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 WEDG 2019.

1.3 The Applicant

The applicant for the Proposed Project is Bord na Móna Powergen Ltd. a subsidiary of Bord na Móna plc trading as BnM.

[3] *Department of the Environment, Climate and Communications (April 2025) Climate Action Plan 2025 Annex of Actions (EL/24/5)*

BnM is an Irish, semi-state climate solutions company helping lead Ireland towards a climate neutral future. Bord na Móna was founded in 1934 and was known as The Turf Development Board, with a remit to enhance national energy security through peat harvesting and to develop and manage some of Ireland's extensive peat resources on an industrial scale, in accordance with government policy at the time. The Turf Development Board became Bord na Móna in 1946..

In January 2021, the company announced its decision to permanently end all peat extraction in line with its change from a traditional peat business into a climate solutions company fully focused on renewable energy generation, peatlands restoration and the development of new low carbon enterprises. Ireland has committed to ambitious climate goals and BnM's climate solutions are helping to achieve them. BnM's vision is to help Ireland reach net zero greenhouse gas emissions by 2050.

Today, BnM's lands extend to approximately 80,000 hectares in total and are located mainly in the Irish midlands. BnM currently manages and operates a portfolio of thermal and renewable assets, namely Edenderry Power Plant, Cushaling peaking plant, the Drehid landfill gas facility, Oweninny Wind Farm Phase 1 and Phase 2 in County Mayo, Sliabh Bawn Wind Farm in County Roscommon, and Bruckana Wind Farm situated on the borders of counties Tipperary, Kilkenny and Laois, Derrinlough, Mountlucas and Cloncreen Wind Farms in County Offaly and Timahoe North Solar Farm in County Kildare.

To power a net zero future, BnM are expanding its renewable energy infrastructure. Although they have been constructing and maintaining large-scale infrastructure for decades, the company is now using that experience to build renewable energy developments across the country. BnMs ambition is to build a 5GW renewable energy pipeline, including wind, solar, biomass and biogas projects, safeguarding renewable energy supply, enabling industrial growth and contributing to a sustainable future. These developments are transforming the way the nation generates and consumes energy. Ireland has committed to generating 80% of electricity from renewable sources by 2030 and BnM is working across wind, solar, biomass and biogas to help achieve this target and to provide energy security for future generations.

1.4 BnM Onsite Activities

BnM was granted an Integrated Pollution Control Licence (IPC) Licence (Ref. P0503-01) for industrial peat extraction activities from the EPA for the Allen Bog Group, in May 1999, within which the Proposed Wind Farm and Proposed Onsite Substation are located. The EPA issues licences that contain conditions on how an activity must operate so as to protect the environment from pollution that might otherwise arise. The EPA Act, 1992 specifically prohibits the EPA from granting a licence if emissions from an activity would cause pollution[4].

The EPA has undertaken Technical Amendments of the licence on 27th of September 2012 for the purpose of aligning the operational conditions of the licence to the objectives of National and European environmental protection legislation enacted over the lifetime of the licence.

The current IPC Licence is subject to 14. No. conditions pertaining to the ongoing monitoring and maintenance to ensure any emissions from site activities comply with and not contravene, any of the requirements of Section 83(3) of the Environmental Protection Agency Act, 1992. Conditions 1-4 of the licence outlined the Scope, Management, Interpretation and Notification procedures required by the BnM, respectively. Conditions 5 to 10 pertain to environmental monitoring and management. Conditions 11 to 14 detail the Monitoring (equipment use), Recording and Reporting, Emergency Response and Financial Provisions duties of BnM. The IPC Licence is managed by the BnM's with a Compliance Officer managing the day-to-day compliance requirements.

[4] *Integrated Pollution Control License PO-503-01 issued by the EPA for the Allen Bog Group. Available at: https://epawebapp.epa.ie/terminalfour/ippc/ippc-view.jsp?regno=P0503-01*

In January 2021, BnM formally announced that peat extraction across all bogs within its landholding had ceased, although peat extraction was permanently ceased by BnM in the Allen Bog Group[5] in June 2020. BnM's statutory duties to discharge the conditions of its IPC Licence remains on-going. These ongoing duties -environmental monitoring, decommissioning works and site management - do not facilitate the continuation of peat extraction but instead ensure compliance with BnM's IPC Licence. . Further information on the EPA licenced is presented in Section 4.6.7 of Chapter 4.

The Peatland Climate Action Scheme (PCAS)[6] is a programme of enhanced peatland rehabilitation measures with the primary aim of optimising climate action benefits of rewetting former industrial peat extraction areas by creating soggy peatland conditions that will allow compatible peatland habitats to redevelop. These measures are separate to those defined by the IPC Licence. Within the Project Site, PCAS has been completed on Lodge Bog, with a total of 365.7 ha being rehabilitated. The works completed for PCAS at Lodge bog include hydrological management, extensive re-wetting and drain blocking, modifying outfalls, creation of berms etc. Further information on the PCAS is presented in Section 4.6.8 of Chapter 4.

1.5 Brief Description of the Proposed Project

The Proposed Project will comprise 46 no. wind turbines, 19 no. turbines will have a blade tip height of 200 metres (m) above the top of the foundation and 27 no. turbines will have a blade tip height of 220 metres (m) above the top of the foundation, the Proposed Onsite Substation, and Proposed Offsite Substation, and associated works, including a total of 13.1km of underground 220kV electrical cabling and 0.12km of OHL (comprising 0.06km of loop-in OHL from the Proposed Offsite Substation to the existing Maynooth-Dunstown 220kV OHL) to connect to the national grid. The full description of the Proposed Project is detailed in Chapter 4 of this EIAR.

The development description for the current planning application as it appears in the public notices is as follows:

(i) 46 no. wind turbines and 2 no. meteorological masts with a height of 40m, and subsequent decommissioning of the wind turbines and meteorological masts, following a thirty five-year operational life from the date of full commissioning of the wind turbines. The 46 no. wind turbines (18 no. located in Co. Offaly, 28 no. located in Co. Kildare) comprise:
   a. 19 no. wind turbines with turbine tip height of 200m, hub height of 115m, and blade rotor diameter of 170m; and
   b. 27 no. wind turbines with turbine tip height of 220m, hub height of 135m, and blade rotor diameter of 170m.

(ii) Turbine and meteorological mast foundations, hard-standing and assembly areas;

(iii) Underground electrical and communications cabling connecting the proposed turbines and meteorological mast to the proposed 220kV onsite electrical substation;

(iv) An onsite electrical substation compound (c. 25,615m^2) in the townland of Lullymore East, Co. Kildare, consisting of 1 no. 220kV Gas-Insulated Substation (GIS) building (75m x 22m, with a height of 24m), 1 no. 110kV GIS building (51m x 15.88m, with a height of 16.5m), 1 no. Independent Power Producer (IPP) control building (44.4m x 12.8m, with a height of 7.1m), all associated electrical and communications plant and equipment, access roads, security fencing and gates, lightning masts, signage, landscaping, drainage infrastructure and all other ancillary works;

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[5] The Proposed Wind Farm site is within part of the Allen Bog Group and comprises of the following 14no. bog units Ticknevin, Glashabaun North, Glashabaun South, Codd 1, Codd 2, Ballydermot North, Ballydermot South, Blackriver, Lullymore, Lullybeg, Barnaran, Killina, Derrybrennan and Lodge Bogs, located in Counties Kildare and Offaly which is a total of 5,139 ha. The Allen Bog Unit comprises a total of 30no. bog units in total with a total area of 18,235 ha.

[6] The Peatlands Climate Action Scheme (PCAS) is also referred to as the Enhanced Decommissioning, Rehabilitation and Restoration Scheme (EDRRS). https://www.bnmpcas.ie/

(v) An offsite electrical substation compound (c. 9,307m^2) in the townland of Killybegs, Co. Kildare consisting of 1 no. 220kV GIS building (75m x 22m, with a height of 24m), 2 no. new gantry structures and ancillary apparatus, access roads, security fencing and gates, lightning masts, signage, landscaping, drainage infrastructure and all other ancillary works;

(vi) All works associated with the connection of the wind farm to the national electricity grid, including uunderground electrical (220kV) grid connection cabling, c. 18 no. joint bays, communication chambers and earth sheath links extending for c. 13.1 km primarily located in the public road corridor connecting the proposed onsite substation to the proposed offsite substation, and all associated site development and reinstatement works;

(vii) A 220kV loop-in grid connection at the offsite substation consisting of c. 120m of new overhead line (OHL) and the decommissioning / removal of 65m of existing OHL, 2 no. new steel masts, temporary tower build areas and crane pads, and associated hard-standing areas to facilitate the connection into the existing 220kV Maynooth–Dunstown 220kV OHL in the townland of Killybegs, Co. Kildare;

(viii) 2 no. telecommunications towers with a height of 36m and 1 no. relay telecommunication mast with a height of 60m and associated foundation and hard-standing areas;

(ix) The upgrade of c.2.8km of existing internal site roads/tracks and the provision of c.60 km of new internal site access roads, passing bays, layby areas and set down areas;

(x) The provision of c.14.4km of new tracks and c. 844m of boardwalk for the purposes of amenity, seating areas, and amenity signage;

(xi) Upgrade to 4 no. existing site entrances (1 no. site entrance on R401 regional road, 1 no. site entrance on L3001 local road, 2 no. site entrances on R414 regional road)

(xii) 8 no. new site entrances (3 no. site entrances on L3001 local road, 3 no. site entrances on L1001 local road, 1 no. site entrance on R414 regional road, 1 no. site entrance on L6002 local road);

(xiii) Widening and upgrade of wind farm access roads within the existing Cloncreen Wind Farm to facilitate the delivery of turbine components and other abnormal loads;

(xiv) Temporary works between the R420 regional road to R402 regional road at Ballina Co. Offaly and along the R402 at Ballingar, Co. Offaly to facilitate the delivery of turbine components and other abnormal loads;

(xv) 10 no. temporary construction compounds with temporary offices, containers and staff facilities;

(xvi) 4 no. permanent amenity car parks comprising 132 no. spaces for private vehicles, 12 no. spaces for accessible parking, parking for buses and bicycle rack facilities;

(xvii) 10 no. temporary Security Cabins;

(xviii) Watercourse crossings;

(xix) Peat and Spoil Areas;

(xx) Site Drainage;

(xxi) Tree felling and vegetation removal;

(xxii) Biodiversity mitigation and enhancement measures;

(xxiii) Operational stage site signage; and

(xxiv) All ancillary apparatus and site development works above and below ground, including hard and soft landscaping and drainage infrastructure.

The applicant is seeking a 10-year planning permission for the development and 35-year operational life from the date of commissioning of the renewable energy development.

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 onshore wind turbine generators currently have a typical generating capacity in the 6 to 7.2 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 an output of approximately 7 MW Therefore, on this basis, the proposed 46 no. wind turbines would have an estimated installed capacity

of approximately 322 MW. The actual turbine procured as part of a competitive tender process may have a power output that is marginally lower or greater than the 7 MW 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 3.2.5.3.1 of Chapter 3: Site Selection and Reasonable Alternatives, the layout of the Proposed Project has been led by consideration of constraints and facilitators, thereby avoiding the environmentally sensitive parts of the Site. In addition, there are no inhabitable dwellings located closer than 4 times tip height (i.e. 880 metres) of any Proposed Turbine location. There are 33 inhabitable dwellings located within 1 kilometre of proposed turbine locations, with the closest inhabitable dwelling located 894m from the nearest proposed turbine (T16). The constraints mapping process is outlined in Chapter 3 of this EIAR.

The Proposed Project will require approximately 62.8km of internal site access road roads (comprising upgrades to internal existing tracks and proposed new internal site roads) The Proposed Project includes 55.2 km of amenity track. This includes approximately 13.44km of new dedicated internal amenity access track proposed, as well as 0.84km of boardwalk, an 8.5km circular trail for equestrian access only and 40.8km of proposed internal access road, that will have a dual function of providing amenity access throughout the Proposed Wind Farm and providing access for service and maintenance vehicles during wind farm operation. A total of 4 no. public car parks will be provided during the operational phase of the Proposed Project for amenity purposes. Please see Section 4.4.1.9 of Chapter 4 and Appendix 4-2 Ballydermot Wind Farm Amenity Plan for further details on amenity proposals at the Proposed Wind Farm.

It is proposed to construct the Proposed Onsite Substation within the Project Site; the Proposed Onsite Substation is located in the eastern portion of the Site, in the northeast of Lodge Bog, in the townland of Lullymore East, Co. Kildare. The underground electrical cabling from the Proposed Onsite Substation will measure approximately 13.1km via the public road network to the Proposed Offsite Substation. The Proposed Offsite Substation is located in Killybegs, Co. Kildare within proximity to the existing Maynooth-Dunstown 220kV OHL. During the operational phase EirGrid and ESB Networks will access the Proposed Onsite Substation via the R414, the Proposed Offsite Substation via the L6002.

1.6 Need for the Proposed Project

1.6.1 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 2024[7] 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 2026 the EPA published '*Ireland's Provisional Greenhouse Gas Emissions 1990-2025*'[8] which stated a provisional total of national greenhouse gas emissions (excluding Land Use, Land Use Change and Forestry (LULUCF)) for 2025 to be 52.65 million tonnes carbon dioxide equivalent ($MtCO_2eq$) which is 2.3% lower than emissions in 2024 (53.75 $MtCO_2eq$). Ireland's 2025 emissions were below the 1990 baseline for the third consecutive year.

[7] *Department of Environment, Climate and Communications (2023) Climate Action Plan 2024*
[8] *Ireland's Provisional Greenhouse Gas Emissions (1990-2025)* <https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/EPA-Provisional-GHG-Emissions-1990-2025-web.pdf>

In 2025, the energy industries, transport and agriculture sectors accounted for 73.2% of total greenhouse gas emissions. Agriculture is the single largest contributor to the overall emissions, at 38.7%. Transport, energy industries and the residential sector are the next largest contributors, at 22%, 12.5% and 9.9%, respectively. The report further states that renewables provided 5.8% more electricity in 2025, with an increase in the renewable share in electricity generation from 39.8% in 2024 to 40.6% in 2025, with wind accounting for 31.7% of electricity supply (down from 31.8%). Natural gas accounted for 40.2% of electricity generated in 2025, with coal and oil together accounting for 1.9% of electricity generated. Solar now accounts for 4.4% of electricity generated in Ireland, increasing by 49.7% in 2025. The report highlights that whilst emissions are beginning to reduce, transformative measures will be needed to meet national climate ambitions.

Despite the progress in 2025 noted above, Ireland continues to face highly complex climate challenges, as detailed in a more recent EPA publication from July 2024 titled '*Ireland's State of the Environment Report 2024'*[9]. 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 CAP25, 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[10] 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 CAP 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 the European Commission in February 2024[11] 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. The third Renewable Energy Directive (RED III)[12] 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 1.6.2.2. 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 ([2025] IEHC 1) which emphasises the importance of national climate and renewable energy policy when assessing renewable energy projects. RED III was transposed into Irish Law in August 2025.

[9] https://www.epa.ie/publications/monitoring–assessment/assessment/state-of-the-environment/EPA-SOE-Report-2024-BOOK-LOWRES-FINALfor-WEB.pdf
[10] https://www.seai.ie/sites/default/files/publications/National-Energy-Projections-Report-2024.pdf
[11] https://commission.europa.eu/publications/commission-recommendation-assessment-swd-and-factsheet-draft-updated-national-energy-and-climate-20_en
[12] *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.*

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 2024 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 2.9 and Section 2.10 in Chapter 2 of this EIAR on Background to the Proposed Project, presents a full description of the international and national renewable energy policy context for the project. Section 2.11 addresses climate change, including Ireland's current status with regard to meeting greenhouse gas emission reduction targets.

In March 2026, the World Meteorological Organisation (WMO) published the State of the Global Climate 2025 Report[13]. The report provides a summary on the state of the climate indicators in 2024 with sections on key climate indicators, extreme events and impacts. The key messages in the report include:

- In 2024, the atmospheric concentration of carbon dioxide reached its highest level in the last 2 million years. Levels of methane and nitrous oxide reached their highest levels in the last 800 000 years.
- The increase in the annual carbon dioxide concentration in 2024 was the largest annual increase since modern measurements began in 1957.
- The annually averaged global mean near-surface temperature in 2025 was 1.43 °C ± 0.13 °C above the 1850–1900 average used to represent pre-industrial conditions
- The year 2025 was the second or third warmest year in the 176-year observational record, depending on which of nine datasets is used. The year 2024 remains the warmest year in all the datasets, at 1.55 °C ± 0.13 °C above the 1850–1900 average.
    - For global mean temperature, the past eleven years, 2015–2025, were the eleven warmest years on record.
- In 2025, ocean heat content reached the highest level in the 66-year observational record, exceeding the previous record high set in 2024.
    - Over the past nine years, each year has set a new record for ocean heat content.
- In 2025, global mean sea level was comparable to the record-high levels observed in 2024 in the satellite altimetry record.
    - The year-to-year increase from 2024 to 2025 was smaller than 2023 to 2024, consistent with short-term variability associated with La Niña conditions.

[13] *World Meteorological Organisation (2026) State of the Global Climate 2025* <https://wmo.int/publication-series/state-of-global-climate/state-of-global-climate-2025>

- In the 2024/2025 hydrological year (September 2024–August 2025), glacier mass loss from a set of reference glaciers was among the five most negative glacier mass balances on record. Eight of the ten most negative annual glacier mass balances since 1950 have occurred since 2016.
- Since 1960, the Earth's energy imbalance[14] has been increasing, particularly in the past 20 years compared to the previous 66 years.

There has been a substantial worldwide energy transition, with renewable power capacity projected to increase almost 4,600 GW between 2025 and 2030 – double the deployment of the previous five years (2019-2024); however this increase will not be sufficient to meet the goal agreed at the United Nations Framework Convention on Climate Change (UNFCCC) 28th Conference of the Parties (COP28) meeting in 2023, and reiterated at the 30th Conference of the Parties (COP30) in Belém in 2025, to triple renewable energy capacity globally to 11,000 GW by 2030.[15] Electricity generation from renewables is expected to increase 60% – from 9,900 TWh in 2024 to 16,200 TWh in 2030 with renewables expected to surpass coal by mid-2026 at the latest to become the largest source of electricity generation globally. Solar PV and wind together account for 96% 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[16] underscores the inherent links 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.

1.6.1.1 Climate Change and Greenhouse Gas Emissions

Climate Change and Peatlands

Aligned with CAP25, the Applicant's vision is for a climate-neutral Ireland by 2050. To help achieve this vision, the Applicant is undertaking a number of highly significant actions in such as renewable energy developments and peatland rehabilitation as discussed above. These actions involve a radical transformation and decarbonisation of the Applicant's business activities. In addition, the Applicant's pipeline of renewable energy projects, inclusive of the Proposed Project, aligns with Government climate and energy policies in relation to climate mitigation and adaption and will complement and co-exist on some sites with enhanced peatland rehabilitation. For the avoidance of doubt, no area developed for renewable energy projects (i.e., the specific renewable energy infrastructure footprint) will be subject to support from the scheme albeit they may lie on adjoining areas or within the same site.

Rewetting of drained peatlands can lead to restoration of functional peatland aspects, such as the return of typical peatland species, which in turn may lead to the restoration of peat formation and the carbon sink function. The carbon emission mitigation benefits associated with renewable energy coexisting alongside rehabilitated peatland will make a significant contribution to achieving the State's carbon emission reduction target. A BnM bog in Co. Galway is now a net carbon sink in rewetted areas 8 years after rehabilitation was carried out. Further research (Wilson et al. 2022)[17] at the bog concluded that rapid rewetting of drained peatland sites is important to (a) achieve strong carbon emissions reductions,

[14] *The Earth's energy imbalance is a key climate indicator that measures how fast the heat trapped by anthropogenic emissions of greenhouse gases is accumulating in the climate system. The heat warms the ocean, continents and atmosphere, and melts ice.*
[15] *IEA (2025) Renewables 2025* <https://www.iea.org/reports/renewables-2025>
[16] *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>
[17] *Wilson et al 2022 Carbon and climate implications of rewetting a raised bog in Ireland Global Change Biology Volume 28, Issue 21.*

(b) establish optimal conditions for carbon sequestration and (c) set the site on a climate-cooling trajectory.

The development of the Proposed Project on peatlands will underpin Ireland's energy independence by developing green, sustainable energy sources to assist with Ireland's commitment to reach a 51% reduction in national greenhouse gas emissions relative to 2018 baseline by 2030. The permanent infrastructural footprint of the Proposed Project is very small relative to the overall size of the Project Site (i.e., less than 3% of the total Project Site). Once constructed, it is intended to rehabilitate the 14 no. bogs in and around the Proposed Project infrastructure which form part of the Allen Bog Group (as per the rehabilitation plans outlined in Appendix 2-4 of this EIAR): as an example, the rehabilitation plan for Cloncreen Bog has largely been completed, it began while turbine erection was being carried out in 2022 and continued monitoring of the Site is ongoing.

Climate Change and Greenhouse Gas Emissions in Ireland

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 2023 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 (COP30) held in Belém, Brazil in November 2025 adopted a comprehensive 'Belém Package', comprising 29 decisions by consensus, which underscored an emphasis on implementation and equity. The conference advanced land-use and mitigation governance through a proposed Forest and Climate Roadmap and operationalisation of the Tropical Forests Forever Facility, reflecting the essential role of deforestation reduction in maintaining a viable 1.5 °C pathway. On adaptation, Parties adopted 59 indicators for the Global Goal on Adaptation and agreed to triple adaptation finance by 2035, establishing the first internationally standardised framework for assessing resilience progress. At COP30, 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. During the conference, a coalition of more than 80 willing countries, including the EU and its Member States, launched a partnership to transition away from fossil fuels under Brazil's leadership

In March 2021 the Irish Government approved the Climate Action and Low Carbon Development (Amendment) Bill which provides plans to facilitate the '*transition to a climate resilient and climate neutral economy by the end of year 2050*'[18] 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, entitled 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 (the Act) also outlines the obligations of ACP and/or local authority in assisting the country reach these targets. Section 15 of the Act states as follows:

[18] *Rialtas na Éireann 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 obligations set out by the Climate Action and Low Carbon Development (Amendment) Act 2021 were upheld in the *Coolglass Wind Farm Limited v. An Bord Pleanála* judgement delivered on 10th January 2025 and reaffirmed in the Supreme Court judgement on 4th February 2026 (*Coolglass Wind Farm Limited v An Coimisiún Pleanála [2026] IESC 5*). This judgement provides clarity on the obligations imposed on public bodies under Section 15 of the Climate Action and Low Carbon Development (Amendment) Act 2021 in relation to renewable energy developments, i.e., that ACP was obliged to depart from the terms of the County Development Plan in order to favour development which is more likely to enable Ireland to meet its climate objectives, unless it was impractical to do so.

In the judgement, Mr Justice Humphreys undertook a detailed consideration of the interpretation of section 15 of the Climate Act and concluded that:

> *"...all vectors of interpretation point strongly in the same direction – the need for an imperative reading of s. 15(1) in line with what it says, namely that the board and any other relevant body is required to act in conformity with the climate plans and objectives set out in the subsection unless it is impracticable to do so....*
>
> *That does not mean allowing an application which is prohibited by law. That wouldn't be practicable apart from anything else. But it does mean exercising discretionary and evaluative powers in whatever way is most likely to be consistent with the relevant plans and objectives.'*

As part of Mr Justice Humphreys' consideration of the interpretation of section 15 of the Climate Act, he states in his judgement that "*an immediate end to business as usual is a precondition for planetary survival*". In summary, Section 15 of the Climate Action and Low Carbon Development (Amendment) Act 2021 requires the relevant authority to engage in its own independent consideration of the impact of a proposed development on the State achieving its climate targets and to exercise its discretion in a manner which supports the achievement of those targets.[19]

The High Court judgment was appealed, and the Supreme Court gave judgement on the 4th of February 2026. While the Supreme Court upheld the High Court's decision to quash the refusal of permission, it did so on narrower grounds than those on which the High Court based its conclusions. The Supreme Court analysed the meaning of the wording of Section 15, focusing on the implications of the words 'functions', 'consistent with' and 'in so far as practicable'. It held that Section 15 does not create new functions for relevant bodies. It is the existing function, in this case the decision-making function of the Commission, which must be carried out in a manner consistent with section 15(1). The obligations under 'Consistent with' were interpreted by the Supreme Court as opposed to the High Court's interpretation as a strict 'comply with' obligation. The Supreme Court also noted that the obligation to perform a function "consistent with" the climate objectives is itself qualified by the phrase "in so far as practicable". Please see Section 2.2.2 of Chapter 2 for further information.

[19] *Beauchamps [2025]* https://beauchamps.ie/publications/1327

The Intergovernmental Panel on Climate Change (IPCC) put forward a clear assessment in its Fifth Assessment Report[20], 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 COP21 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 CO_2 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 Working Group-III contribution to the IPCC's Fifth Assessment Report (AR5), the Working Group-I and Working Group-II contributions to Sixth Assessment Report (AR6) and the three Special Reports[21] 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*'[22], and is the final product of the AR6 of the IPCC. It summarises 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 with the implementation of Nationally Determined Contributions (NDCs) announced prior to COP26. Parties to the Paris Agreement have two years to submit updated NDCs for the period up to 2035, and ambitions will need to be ratchetted up in order to limit warming to 1.5°C.

In May 2026, the EPA[23] reported, that currently implemented policies and measures (WEM: with existing measures) will result in Ireland achieving a total greenhouse gas reduction of 13% 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 9.5% reduction

[20] *IPCC Fifth Assessment Synthesis Report, Intergovernmental Panel on Climate Change AR5 Report*
[21] *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)*
[22] *IPCC Sixth Assessment Synthesis Report, Intergovernmental Panel on Climate Change AR6 Report: Climate Change 2023*
[23] *Ireland's Greenhouse Gas Emission Projections 2025-2030 <https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/irelands-greenhouse-gas-emissions-projections-2025-2030.php>*

projected in the 2025 report.[24] If policies and measures in the higher ambition (WAM: with additional measures) scenario are implemented, EPA projections show that Ireland can achieve a reduction of 25% by 2030, still short of the 42% reduction target but higher than the 21.7% reduction projected in last year's estimates. Under the WEM scenario, emissions from the Electricity sector are projected to decrease by 54.5% from 10.2 to 4.7 Mt CO2eq over the period 2018 to 2030. The main drivers of this decrease are the continued rollout of renewable energy and increase in imports. However, delayed delivery in renewable energy results in higher projected emissions than last year caused by dependence on fossil fuels to meet the growing energy demands. By 2030, the sector is projected to contribute 8.3% of Ireland's total emissions (including LULUCF) in the WEM scenario. Under the WAM scenario, emissions from the Electricity sector are projected to decrease by 61.1% from 10.2 to 4.0 Mt CO2eq over the period 2018 to 2030. The extra emissions reductions achieved under WAM are mainly driven by greater renewable energy generation from solar PV, onshore and offshore wind with additional energy storage capacity. However, as with the WEM scenario, delayed delivery in renewable energy results in higher projected emissions than reported last year. By 2030, the sector is projected to contribute 8.3% of Ireland's total emissions (including LULUCF) in this scenario. The contribution of 8.3% under WAM is of lower overall total emissions, therefore differing from the contribution under WEM. The EPA projections show that agriculture and transport emissions form the majority of ESR emissions, representing approximately 74% and 72% of projected 2030 ESR emissions in the WEM and WAM scenarios, respectively. 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 '*National Energy Projections 2025*'[25], published annually by the Sustainable Energy Authority of Ireland (SEAI), state that in the 'With Existing Measures' (WEM) and 'With Additional Measures' (WAM) scenarios, greenhouse gas emissions from the combined energy use and process emissions sectors are projected to exceed the first carbon budget ceiling by approximately 4% by 2025. This overshoot means that 7% of the second carbon budget will be consumed before the period begins. The second sectoral ceiling is then projected to be exceeded in 2029, by 14% to 17% in the WAM and WEM scenarios, respectively.

By 2028 it is expected that the largest input to electricity will be by renewable energy, i.e., onshore wind, offshore wind and solar. 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 to achieve national and international greenhouse gas emission targets. The SEAI National Energy Projections state that the projected exceedance in the first carbon budget period for energy sectors and industrial processes has decreased from the 2024 projections, while the projected exceedance in the second carbon budget has increased. By the end of the second budget period, the total exceedance in the electricity sector is projected to be 2MtCO_2eq and 4MtCO_2eq in the WAM and WEM scenarios, respectively. The main driver of this change from last year is the electricity sector, which has experienced higher levels of imports through interconnection in recent years. This net import behaviour is projected to continue in the near term, but the electricity sector is also subject to projected delays in the installation of renewable capacity by 2030.

CAP25[26] was published in April 2025 by the Department of Climate, Energy and the Environment. 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

[24] *Ireland's Greenhouse Gas Emission Projections 2024-2055 (May 2025)* <https://www.epa.ie/publications/monitoring--assessment/climate-change/air-emissions/07875-EPA-GHG-Projections-Report-FINAL.pdf>
[25] *SEAI National Energy Projections 2025 Report.* <https://www.seai.ie/sites/default/files/publications/National-Energy-Projections-Report-2025.pdf>
[26] *Government of Ireland (2025)* https://assets.gov.ie/static/documents/Climate_Action_Plan_2025_updated_cover.pdf

which climate may have on Irelands environment, society, economic and natural resources. CAP25 clearly recognises that Ireland must significantly step up its commitments to tackle climate disruption. The CAP25 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 9GW 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 April 2025, there was 6.3GW of wind energy capacity installed on the island of Ireland; of this, 4.9GW was installed in the Republic of Ireland.[27]

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: 9GW
  - Offshore Wind Capacity: 5GW (minimum)
  - Solar PV Capacity: 8GW
- At least 2GW via new flexible gas plant;
- Ensure that 20-30% of system demand is flexible by 2030;
- 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 a potential installed capacity of 322 MW, will result in the net displacement of approximately 198,833 tonnes of Carbon Dioxide (CO_2) per annum; the offsetting potential of carbon dioxide from the Proposed Project over the operational lifetime, i.e., 6,959,155 tCO_2eq, is capable of offsetting all emissions associated with County Offaly and County Kildare when compared against each counties Baseline Emissions Inventory (year 2018). Detailed information on the carbon offsets resulting from the Proposed Project are provided in Section 11.4.3.2 of Chapter 11 of this EIAR: Climate.

1.6.2 Energy Security

At a national level, Ireland currently has one of the highest external dependencies on imported sources. In July 2026 the SEAI published '*First Look: Irelands Energy Supply and Security of Supply in 2025* [28], which identifies that in 2025, Ireland's national primary energy requirement was 163.1 TWh. Over three-quarters of this value came from the sum of oil (47.3%) and natural gas (29.9%) energy requirements. Renewables accounted for 15.9% of Ireland's energy requirement in 2025, up from 14.6% in 2024. Overall, Ireland's total primary energy requirement in 2025 was 2.2% lower than in 2024. However, in 2025, Ireland's renewable energy requirement was 26 TWh, up 6.8% from 24.3 TWh in 2024 with wind accounting for just under half (46.3%) of Ireland's renewable energy.

The Department of the Environment, Climate and Communications (DECC) report '*Energy Security in Ireland to 2030*'[29] states that '*Irelands 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 Irelands energy security. Ireland is currently

[27] *EirGrid, https://www.eirgrid.ie/grid/system-and-renewable-data-reports*
[28] *SEAI (July 2026) First Look: Irelands Energy Supply and Security of Supply in 2025 <https://www.seai.ie/sites/default/files/2026-07/First_Look_Energy_Supply_and_Security_of_Supply_2025.pdf>*
[29] *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>*

one of the most energy import dependent countries in the EU, having imported 78.5% of its energy supply in 2023.[30]

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, Irelands 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 its '*Energy in Ireland 2025 Report*'[31], stating that 57.5% of greenhouse gas emissions in Ireland were energy related in 2024 with 81.3% of Irelands energy being sourced from fossil fuels. Energy related emissions in 2024 were at their lowest level in over 30 years: energy-related emissions in 2024 were 30.9MtCO_2eq, down 1.5% on 2023 levels. In 2024, electricity accounted for approximately 22.5% of energy-related emissions, with transport accounting for a further 37.7%. Heat emissions accounted for the remaining 39.8%. Overall, energy-related emissions in 2024 were down by 8.3% on the previous year and 16% from 2018 levels (the carbon budget baseline). This net reduction came from an overall decrease in indigenous generation of electricity in Ireland, a decrease in indigenous generation of electricity from fossil fuels, and an increased use of net-imported electricity across international interconnectors with Northern Ireland and Great Britain (the emissions from which are not countable towards Ireland's national emissions).

In 2024, Ireland generated 24.5 TWh of renewable energy, up 5.6% from the previous year. The largest source of renewable energy supply for electricity generation was wind generation. In 2024, Ireland had 4.94 GW of installed wind capacity, up 4.3% on the previous year. SEAI's provisional estimate for installed wind capacity in 2025 is 5.4 GW, based on the WAM scenario. When all data from 2025 is recorded an updated carbon intensity factor for the Irish national grid will be published. Currently, the SEAI website has a published value of 204.3gCO2/kWh for electricity generation and 226.3gCO2/kWh for electricity consumption.[32] These are the lowest carbon intensity values ever reached in Ireland.

On 19th May 2026 the SEAI published the Interim Energy Balance for 2025.[33] The interim figures identify that Irelands Energy us in 2025 was 2.2% lower than in 2024. In Ireland, fossil fuels accounted for 79.2% of Ireland's total energy use in 2025 – below 80% for the first time since 1990. Additionally, energy-related emissions in 2025 were 19% below 2018 levels, the baseline year for the 2030 target of a 51% reduction in total greenhouse gas emissions. Ireland's renewable energy supply in 2025 was 6.8% higher than in 2024, with 46.3% coming from wind.

Electricity demand in Ireland rose by 1.24 TWh in 2023. This net increase was strongly led by a 1.15 TWh increase in demand from the commercial services sector, which includes data centres. The Energy in Ireland 2024 Report states: '*Ireland must rapidly transform its economy and society to one based on sustainable energy technologies, like wind and solar farms, bioenergy, district heating schemes, electric vehicles, and heat-pumps. We must also reduce energy demand by making our technologies and practices more energy efficient, and by making behavioural changes that reduce our day-to-day energy demand across heat, electricity, and transport.*'

[30] *SEAI (July 2024) Irelands Energy Supply and Security of Supply in 2023* <https://www.seai.ie/data-and-insights/seai-statistics/key-publications/energy-supply-security>
[31] *Sustainable Energy Authority Ireland (2025) Energy in Ireland – 2025 Report* <https://www.seai.ie/sites/default/files/publications/Energy-in-Ireland-2025.pdf>
[32] https://www.seai.ie/data-and-insights/seai-statistics/conversion-factors/
[33] https://www.seai.ie/data-and-insights/seai-statistics/key-publications/national-energy-balance

Ireland continues to be hugely dependent on energy imports, leaving it exposed to large energy price fluctuations as a minimum 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"*[34].

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 5% of Ireland's electricity, while gas generates 51%. Climate Action Plan 2024 calls for a reduction of 75% in electricity-related emissions to not exceed the carbon budget allocations. At a time when the energy system is under severe pressure to ensure security of supply, amid 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[35] ('the White Paper') notes "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".*

1.6.2.1 REPowerEU

In a Communication from the European Parliament on Joint European Action for more affordable, secure and sustainable energy[36], the European Commission proposed an outline of a plan to make Europe independent from Russian fossil fuels well before 2030 in response to 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[37] in response to Russia's February 2022 invasion of Ukraine. 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 its 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.

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[34] *Dr Eimear Cotter, Head of Low Carbon Technologies, SEAI - "Energy Security in Ireland 2015"*
[35] *Ireland's Transition to a Low Carbon Energy Future 2015-2030 (Department of Communications, Energy & Natural Resources, 2015)*
[36] *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
[37] https://ec.europa.eu/commission/presscorner/detail/en/IP_22_3131

1.6.2.2 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 had 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 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 2.10.1 in Chapter 2 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.

1.6.3 Competitiveness of Wind Energy

While Ireland has a range of renewable resources, as the Energy White Paper states that "[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.

1.6.4 European Renewable Energy Policy and Targets

1.6.4.1 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)[38] 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 second Renewable Energy Directive (RED II),[39] 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%. RED II 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[40].

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 RED II, 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 National 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.

In November 2023, a revision of the Renewable Energy Directive (RED III), came into force. RED III increases the EU wide renewable energy target from 32% set under the previous revision of the directive to at least 42.5%, with an ambition to reach 45% by 2030[41]. 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 European Union'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 greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels and to achieve climate neutrality in the European Union by 2050.

1.6.5 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.

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[38] *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*

[39] *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*

[40] *Department of the Environment, Climate and Communications 2024, < https://www.gov.ie/en/department-of-the-environment-climate-and-communications/publications/national-energy-and-climate-plan-necp-2021-2030/ >*

[41] *European Commission 2023 Renewable Energy Directive < https://energy.ec.europa.eu/topics/renewable-energy/renewable-energy-directive-targets-and-rules/renewable-energy-directive_en >*

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 greenhouse gas 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 Irish Government published 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 and at least 5GW of offshore wind. The SEAI provides a provisional estimate of installed wind energy capacity in 2023 based on EirGrid data to the end of August and ESBN data to the end of September. Ireland's installed capacity for wind generation in January 2025 was 4.9GW.[42] 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 noted in Chapter 2 Section 2.10.1.

1.6.6 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[43] 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 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 the current installed energised capacity.[44]

In its '*All Island Generation Capacity Statement 2022 - 2031'* (October 2022), EirGrid estimates 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 its report '*Future Expenditure Risks associated with Climate Change/Climate Finance*' concluded that *'potential costs of purchasing non-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, it could significantly reduce these costs.

In April 2016[45] the SEAI estimated the historic build rate for wind energy deployment as 180 MW per year since 2005. If this average build rate over the remaining period between 2018 and 2020 is

[42] *EirGrid, https://www.eirgrid.ie/grid/system-and-renewable-data-reports*
[43] *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/>*
[44] *Ibid.*
[45] *https://www.seai.ie/sites/default/files/publications/Ireland___s-Energy-Targets-Progress-Ambition-and-Impacts.pdf*

assumed, then approximately 3.85 GW of wind would be built up to 2020. The SEAI has provided a provisional estimate of wind capacity in Ireland in 2025 to be 5.4GW.[46]

The key driver for electricity demand in Ireland for the next number of years is the connection of large new 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*'. Analysis by EirGrid 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 GW of electricity demand could materialise between 2015 and 2020 due to growth in data centres. More recently, data available from Bitpower[47] at the end of 2021 noted a 25% increase in completed data centre capacity over the past 12 months with a total of 70 operational data centres with a combined total of 900 MW of connected power capacity. Ten new data centres came online between the period of November 2020 and November 2021. 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. DECC has set a target for Ireland of 80% of total electricity consumption to come from renewable resources by 2030; this target 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 its 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. The SEAI estimates that the shortfall could be in the region of 1% to 5% of the 12% RES-H target[48]. 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, with one report recently published by the Irish Fiscal Advisory Council and the Climate Change Advisory Council stating that '*[Ireland] may have to pay out €8 to €26 billion to its EU Partners if it does not step up on climate action it has agreed to.*'[49] 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. An electricity system powered primarily by renewable sources is the foundation of such a transformation.

The Energy 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'*.

[46] *Sustainable Energy Authority of Ireland (2025) Energy in Ireland – 2025 Report*
[47] https://bitpower.ie/images/Reports/2021_H1_Report.pdf
[48] https://www.seai.ie/sites/default/files/publications/Achieving-Ireland-s-2020-Renewable-Heat-Target.pdf
[49] *IFAC / CCAC (2025) A Colossal Missed Opportunity* <https://www.fiscalcouncil.ie/a-colossal-missed-opportunity/>

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. 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 has 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 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 is provided in Chapter 2, Section 2.10.2.

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[50] 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

[50] http://www.seai.ie/News_Events/Press_Releases/2014/Biomass-is-a-big-part-of-the-solution-but-not-the-whole-solution.html

biomass is transported, the greater the greenhouse gas emissions[51]. 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 20th of June 2025 [52] 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 any time they need extra generation capacity 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 BnM and ESB stations by 2030. In April 2025, the DECC published CAP25 which is the fourth annual update to Irelands Climate Action Plan 2019 and the third to be prepared under the Climate Action and Low Carbon Development (Amendment) Act 2021. CAP25 notes the need for renewable alternatives to coal and peat. Further information on the CAP25 can be seen in Chapter 2, Section 2.9.2.

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 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 areas with a larger population density.

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

[51] *Sustainability Criteria Options and Impacts for Irish Bioenergy Resources (SEAI 2019)*
[52] https://www.rte.ie/news/2025/0620/1519429-moneypoint-power-station/

detailed in Section 1.6.2.2 above, EU Regulation 2022/2577 as amended by Regulation 2024/223[53] 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 European 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.

1.6.7 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 Energy 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 Turbines will displace approximately 198,833 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. The offsetting potential of carbon dioxide from the Proposed Project over the operational lifetime, i.e., 6,959,155 tCO_2eq, is capable of offsetting all emissions associated with County Offaly and County Kildare when comparing against each counties Baseline Emissions Inventory (year 2018).

The World Health Organisation (WHO) in 2019 estimated that ambient (outdoor) air pollution caused 4.2 million deaths worldwide in 2019.[54] The Environmental Protection Agency (EPA) report '*Air Quality in Ireland 2024*[55] noted that in Ireland, the premature deaths attributable to poor air quality are estimated at 1,700 people per annum. The European Environmental Agency (EEA) Report, '*Air Quality in Europe – 2022 Report*'[56] 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_2 and O_3 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 $PM_{2.5}$, 50 Irish deaths attributed to nitrogen oxides (NO_2) and 70 Irish deaths attributed to Ozone (O_3). These emissions, along with others, including sulphur oxides (SO_x), 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 EEA published a briefing on Europe's Air Quality Status[57] in April 2026 and presents an analysis of the latest official 2024 and 2025 reported concentrations in Europe against current and future (2030) EU limit values and against the stricter World Health Organization guideline levels. The analysis shows

[53] *European Union 2024 Council Regulation (EU) 2024/223 of 22 December 2023 amending Regulation (EU) 2022/2577 laying down a framework to accelerate the deployment of renewable energy*<https://eur-lex.europa.eu/eli/reg/2024/223/oj/eng >
[54] https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health
[55] *Air Quality in Ireland Report 2024* <https://www.epa.ie/publications/monitoring--assessment/air/air-quality-in-ireland-2024.php>
[56] *Air Quality in Europe 2022* <https://www.eea.europa.eu/publications/air-quality-in-europe-2022>
[57] *EEA (2025) Air Quality Status Report 2026* <https://www.eea.europa.eu/en/analysis/publications/air-quality-status-report-2026>

that, despite constant improvements, exceedances of air quality standards are common across the EU, with concentrations well above the latest WHO recommendations.

The EPA 2020 report '*Ireland's Environment – An Assessment*'[58] states that the pollutants of most concern are NOx, (the collective term for the gases nitric oxide and nitrogen dioxide), PM (particulate matter) and O_3 (ozone). The EPA 2020 report goes on to state that:

> *"Ireland has excellent indigenous renewable energy resources, and renewable energy is playing an increasing role in the domestic energy supply. Ireland has more onshore (land-based) and offshore energy potential than most other European countries.*
>
> *Energy from non-combustion sources, such as hydropower, wind or solar energy, and use of hydrogen, do not give rise to combustion-related impacts."*

The Proposed Project therefore represents an opportunity to further harness Ireland's significant renewable energy resources, with valuable benefits to air quality and climate 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_2), oxides of nitrogen (NOx), and sulphur dioxide SO_2, thereby resulting in cleaner air and associated positive health effects.

1.6.8 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.[59] As detailed in the SEAI Report '*Energy in Ireland 2025*, Ireland has a high import dependence on oil and gas and is essentially a price-taker on these commodities. Ireland's import dependency increased slightly 78% in 2023 to 79.5% in 2024 due to increased primary energy requirement and decreased in primary energy production.[60] From October 2024 to September 2025, Ireland imported 79.5% of its gas supply and supplied 20.5% of its gas supply from indigenous sources.

The '*Energy in Ireland 2025 Report*'[61] stated that Ireland's national energy-related emissions in 2024 were at their lowest level in over 30 years with 14.6% of Ireland primary energy being sourced from renewables, the highest value to date. The SEAI estimates electricity emissions to be 6.9MtCO_2e in 2024, down 8.3% from 2023.

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 and it is expected to rise to €550 million by the end of the decade. If Ireland is to achieve the 8,200 MW target set in the Climate Action Plan 2021, 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.

In February 2025 Wind Energy Ireland identified that spending on gas for electricity in Ireland was cut by almost €1 billion as wind supplied approx. 32% of Ireland's electricity. Irish wind farms saved €748 million euro on gas, which would have been predominantly imported, and a further €268 million in

[58] *Ireland's Environment – An Assessment (2020)* < https://www.epa.ie/publications/monitoring-assessment/assessment/state-of-the-environment/EPA_Irelands_Environment_2020.pdf >
[59] *SEAI (2025) Energy in Ireland – 2025* <https://www.seai.ie/data-and-insights/seai-statistics/key-publications/energy-in-ireland?gad_campaignid=9583667516&gad_source=1&gbraid=0AAAAACeKKRTH1A7nfT5aa6jPrWbJCiB-3>
[60] *Ibid.*
[61] *Ibid.*

carbon credits in Ireland. An additional €213 million euro was saved on gas and carbon credits in Northern Ireland, bringing total all-island savings to more than €1.2 billion.[62]

As stated above, for the purposes of this EIAR, a rated output of 7MW has been chosen to calculate the power output of the proposed 46-turbine renewable energy development, which would result in an estimated installed capacity of 322 MW. Therefore, the Proposed Project will be capable of providing power to approximately 257,390 Irish households per year, based on the average Irish household using 3.2 MWh of electricity[63] (this latest figure is available from the Central Statistics Office Metered Electricity Consumption 2025/2024), as presented in the calculations in Section 4.4.1.1.8 of this EIAR. The 2022 Census of Ireland Summary Results recorded a total of 28,923 occupied households in Co. Offaly and 82,793 occupied households in Co. Kildare. Per annum, based on a capacity factor of 29.2%[64], the Proposed Project would therefore produce sufficient electricity for the equivalent of over 100% of all households in Co. Offaly and Co. Kildare.

The Proposed Project will help to supply the rising demand for electricity, resulting from renewed economic growth. The EirGrid report '*Ten-Year Generation Capacity Statement 2023 – 2032'* (January 2024) 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 additional income to local landowners, job creation, work opportunities for local businesses and service providers, local authority commercial rate payments and a Community Benefit Fund; please see Section 1.6.8.2 below for further detail on employment potential resulting from the Proposed Project.

Additional commercial rate payments from the Proposed Project will be provided to Offaly County Council and Kildare County Council each year, which will be redirected to the provision of public services within each County. 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.

1.6.8.1 Community Gain and Near-Neighbour Scheme

BnM currently manages seven Community Benefit Funds associated with its renewable energy assets at Mountlucas, Cloncreen, Sliabh Bawn, Oweninny Phase 2, Bruckana, Derrinlough Wind Farms and Timahoe North Solar Farm. The first of these Funds, Mountlucas and Bruckana were established in 2014 with the support and cooperation of the surrounding communities.

The Mountlucas, Bruckana and Sliabh Bawn Community Funds provide a fixed annual allocation, based on the installed capacity of each wind farm, to support community-led projects in the local area. In 2017 and 2018, near-neighbour schemes were also established for residents living close to these wind farms. These near-neighbour schemes provide eligible electricity bill payers within a prescribed distance of a turbine with an annual contribution towards electricity costs.

The Cloncreen, Oweninny Wind Farm Phase 2, Derrinlough and Timahoe North Community Funds are calculated in accordance with Renewable Energy Support Scheme (RESS) requirements and are linked to the annual generation of the relevant asset. These funds also include an Education Scholarship Fund to support local students accessing further education. The Education Scholarship provides a monetary grant to successful applicants for each year of study, up to a maximum of four years, and may be used towards course fees, accommodation, tools, transport and related costs.

[62] *WEI (2025)* https://windenergyireland.com/latest-news/7836-wind-energy-saved-ireland-over-1-2-billion-on-gas-in-2024
[63] *Central Statistics Office (2026) Metered Electricity Consumption 2025/2024* https://www.cso.ie/en/releasesandpublications/ep/p-mec/meteredelectricityconsumption2025/
[64] *SEAI (2025) Energy In Ireland 2025 (*https://www.seai.ie/sites/default/files/publications/Energy-in-Ireland-2025.pdf*)*

BnM proposes to apply its established Community Benefit Fund model to the Proposed Project, in line with industry best practice. The Community Benefit Fund will support local communities, near neighbours and local students.

A detailed description of the Community Benefit Fund proposal is set out below and in the Ballydermot Wind Farm Community Engagement Report, presented in Appendix 2-2.

Community Benefit Fund

In addition to construction and operational employment and annual commercial rates payable to the local authority, the Proposed Project will provide wider local benefits through a Community Benefit Fund. The value of the Fund will be linked to the electricity generated by the Proposed Development. Based on an estimated annual generation of 823,650 MWh, the Community Benefit Fund is estimated to be in the region of €24 million over the first 15 years of operation.

In 2021, the Department of the Environment, Climate and Communications published the Renewable Energy Support Scheme Good Practice Principles Handbook[65], which sets out how community funds should be managed, operated and distributed for wind and solar projects successful in RESS auctions. The guidance was subsequently updated through the Community Benefit Fund Rulebook[66] published in May 2025, which may be subject to further amendment at the Department's discretion.

A key requirement of the 2025 Community Benefit Fund Rulebook is that funded projects and initiatives benefit communities surrounding the Proposed Development. A Community Benefit Fund Committee will be established, comprising volunteer community representatives, the Project Developer and, where applicable, the Fund Administrator. The Community Benefit Fund Committee should seek to represent the broadest possible cross-section of the local community.

Under the 2025 Rulebook, Community Benefit Funds must be distributed as follows:

Near-Neighbour payments

An annual fixed payment of €1,000 must be made to each household located within 1 km of a turbine.

Households located more than 1 km and up to 2 km from a wind energy project shall receive an annual payment of an amount lower than €1,000 but more than €500. The payment shall be calculated using the formula: Amount in Euro = 1,500 - (0.5 x distance in metres), rounded to the nearest euro.

Total direct payments to households are be limited to 50% of the total annual contributions from the Community Benefit Fund.

Administration

Up to 10% of the Community Benefit Fund value over the relevant period may be used to cover administration costs, increasing to 20% in Year 1.

Community Projects

A minimum of 40% of the Community Benefit Fund must support initiatives whose primary focus is the delivery of the United Nations Sustainable Development Goals (SDGs). Eligible initiatives may be proposed through an open application process by enterprises, clubs, societies and similar not-for-profit

[65] https://futurenergyireland.ie/wp-content/uploads/2022/11/RESS-Good-Practice-Principles-Handbook-for-Community-Benefit-Funds.pdf
[66] https://assets.gov.ie/static/documents/Rulebook_for_CBFs_under_RESS_branded.pdf

community organisations, including scholarship-related initiatives. Organisations within 10 km of a wind energy project will be considered first and given priority - subject to the project meeting the overall terms and conditions of the Fund.

Particular emphasis is placed on SDGs 4 (Quality Education, including scholarships), 7 (Affordable and Clean Energy), 11 (Sustainable Cities and Communities), and 13 (Climate Action). Projects may be eligible for funding where they promote at least one United Nations SDG.

Further details of the Community Benefit Fund proposal are provided in the Ballydermot Wind Farm Community Engagement Report, provided as Appendix 2-2.

1.6.8.1.1 *Recreational Benefits*

In addition to the economic and environmental benefits of the Proposed Project, there will be potential social and recreational benefits associated with the proposed amenity tracks.

The Proposed Wind Farm creates a unique opportunity to develop an amenity area for use by members of the local and wider community alike, as well as tourists. The peatland habitat within the bogs is attractive to both locals and visitors to the area because of its history and variety of vegetation.

The Proposed Project includes 55.2 km of amenity track. This includes 13.44km of a new dedicated internal amenity access track, 42km of proposed internal access road (Section 4.4.1.2.1 in Chapter 4), 844m (0.8km) of amenity board walk and 8.5km of dedicated circular trail for equestrian users only. These amenity tracks will provide amenity access opportunities, facilitate a variety of walking loops, enhance connectivity with local roads and existing off-site amenities, and provide local access to the Proposed Wind Farm. The amenity track proposed will enable the Proposed Wind Farm to provide connectivity to the surrounding settlements and sites / areas of interest. These include the towns / villages of Edenderry, Allenwood, Lullymore, Rathangan and Clonbullogue. Please see Section 4.4.1.9 in Chapter 4 for further details on amenity.

This proposal will provide a safe site and openly available recreational area for walkers, trail runners, and other recreational users, as outlined in Appendix 4-2, Ballydermot Wind Farm Amenity Plan, of this EIAR. The Proposed Project will also facilitate linkages to the wider area and to both existing and proposed amenity walkways, as well as to the Killinthomas Wood (to the south), Grand Canal (surrounding the Project Site) and the existing Cloncreen Wind Farm (to the west) (please see Section 4.4.1.9 of Chapter 4 for further details) and provide detailed signage (i.e., archaeological board) about the history and cultural heritage of the Proposed Site.

This will provide a long-term benefit to both the local community and visitors to the area.

1.6.8.2 Employment potential

The 2014 report '*The Value of Wind Energy to Ireland*', published by Pöyry, 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 energy projects, then by 2030 the country will be reliant on natural gas for most of its electricity generation, at a cost of €671 million per annum in fuel import costs.

A 2021 MaREI report[67] 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

[67] *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

zero carbon targets as pledged in the Climate Action and Low Carbon Development Act 2021 discussed in Section 1.6.1 above.

The Proposed Project will provide local job creation / work opportunities for local businesses and service providers. It is estimated that the Proposed Project has the potential to create 200-250 jobs during the construction phase and 6 - 8 jobs during operational and maintenance phases. During construction, additional indirect employment will be created in the region through the supply of services and materials. 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 Chapter 5 of this EIAR: Population & Human Health.

1.7 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 served to highlight any areas where mitigation measures may be necessary in order to protect the surrounding environment from the possibility of any negative impacts arising from the Proposed Project.

It is important to distinguish the EIA to be carried out by ACP, from this EIAR, which accompanies the planning application. This EIAR will inform the EIA to be carried out by ACP. The EIA is the assessment carried out by the competent authority, which includes an examination 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 EIA Directive, the direct and indirect significant effects of the 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) *The interaction between the factors referred to in points (a) to (d)*

This 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 in Article 5 and Annex IV of the revised EIA Directive and Article 94 and Schedule 6 of the Planning and Development Regulations 2001 (as amended) described in Section 1.2 above.

1.8 Structure and Content of the EIAR

1.8.1 Overview of EIAR

The minimum information that must be contained in an EIAR is specified in Part X of the Planning and Development Act, 2000 and Schedule 6 of the Planning and Development Regulations, 2001 (as amended by S.I. No. 296 of 2018). The structure and content of this EIAR fully complies with the legislative requirements as set out in "*Part X of the Planning and Development Act, 2000*", "*Part 10 of the Planning and Development Regulations, 2001*" (as amended by S.I. 296 of 2018) and the environmental guidelines detailed in Section 1.2 above.

The EIAR contains information on the scale and nature of the proposed development, a description of the existing environment, assessment of effects, mitigation measures to reduce or negate potential effects on the receiving environment, monitoring and residual effects (if relevant).

The overall EIAR is arranged in three volumes, as follows:

- Volume I: Non-Technical Summary (NTS) and EIAR

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, impacts and mitigation measures presented in the grouped format. The structure of the EIAR is detailed in Section 1.8.2 below.

- Volume II: Photomontages;

Photomontages will be provided in Volume II of the EIAR to provide detailed visuals of the Proposed Project in the context of the surrounding landscape. Details on the photomontages and associated assessment are provided in Chapter 14 Landscape and Visual and associated appendices.

- Volume III: EIAR Appendices.

Volume III of the EIAR contains the various appendices that are referred to in the individual chapters of the main EIAR Report. These include graphics, tabular data and supporting documents.

Where appendices are used, they are cross-references within the EIAR to advise the reader of relevant appendices and of specific relevant material within them.

1.8.2 General Structure

This EIAR uses the grouped structure method to describe the existing environment, the potential impacts 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 impacts 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, together with the interaction of the foregoing, schedule of mitigation and monitoring, and risk of major accidents and vulnerability to disasters:

1. *Introduction*
2. *Background to the Proposed Project*
3. *Site Selection and Reasonable Alternatives*
4. *Description of the Proposed Project*
5. *Population and Human Health*
6. *Biodiversity*
7. *Ornithology*
8. *Land, Soils and Geology*
9. *Water*
10. *Air Quality*
11. *Climate*
12. *Noise and Vibration*
13. *Landscape and Visual*
14. *Cultural Heritage*
15. *Material Assets (including Traffic and Transport & Telecommunications)*
16. *Aviation*
17. *Major Accidents and Natural Disasters*
18. *Interactions of the Foregoing*
19. *Schedule of Mitigation and Monitoring Measures*
20. *Summary of Significance of Effects*

1.8.3 Description of Likely Significant Effects and Impacts

As stated in the *'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports'* (EPA, May 2022), an assessment of the likely 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 potential significant 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 impacts in this EIAR follows the definitions provided in the Glossary of Impacts contained in the EPA 2022 Guidelines document.

The European Commission 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*', which have also been consulted.

Table 1-2 presents the glossary of impacts as published in the EPA guidance documents. 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)

Impact Characteristic	Term	Description
Quality	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.
Significance	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.

Impact Characteristic	Term	Description
	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.
Extent and Context	Extent	Describe the size of the area, number of sites and the 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	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	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).
Type	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.

Impact Characteristic	Term	Description
	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 impact is described in terms of its quality, significance, extent & context, probability, duration & frequency, and type, where possible. A 'Do-Nothing' impact is also predicted in respect of each environmental theme in the EIAR. Residual impacts are also presented following any impact for which mitigation measures are prescribed. The remaining impact 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 Chapter 18: Interaction of the Foregoing.

1.8.4 Likely Future Receiving Environment

The existing receiving environment has been established throughout this EIAR informed by the relevant desk studies, field surveys and monitoring undertaken for each environmental factor.

The Project Site is located predominantly on former industrial peat extraction lands within the Allen Bog Group. Industrial peat extraction ceased in June 2020. Since then, environmental conditions across these lands have continued to develop through natural revegetation, alongside ongoing site management, decommissioning works and environmental monitoring undertaken in accordance with IPC Licence P0503-01.

As stated in the EPA 2022 Guidelines:

> *'The environment will change over time, even without the introduction of the proposed project. Therefore the EIAR must include a description of the likely evolution of the environmental factor in the absence of the project. This predicted changing baseline may be referred to as the likely future receiving environment.'*

Given the ongoing natural revegetation of lands previously subject to industrial peat extraction, the likely evolution of relevant environmental factors at the Project Site requires consideration in this EIAR. Accordingly, for each environmental factor, a Likely Future Receiving Environment at commencement of the Proposed Project construction phase has been established having regard to:

- the established baseline conditions and observed environmental change during site specific surveys from 2020 to 2026, including natural vegetation;
- ongoing IPC licence management and monitoring;
- Available BnM site records and environmental data, including management and monitoring undertaken under IPC Licence Reg. No. P0503-01 included within the Annual Environment Reports (AERS) for the Allen Bog Group;
- relevant scientific literature and guidance, where applicable; and
- competent expert judgement.

The established existing receiving environment provides the evidential basis for predicting the Likely Future Receiving Environment. Where more than one future condition is reasonably foreseeable, the relevant technical assessment adopts an appropriately precautionary scenario for the purposes of assessing likely significant effects.

The general assessment sequence applied within the relevant technical chapters are therefore:

> *Established existing receiving environment → evidence-based prediction of Likely Future Receiving Environment at commencement of construction phase → impact assessment against the Likely Future Receiving Environment.*

BnM has prepared draft Cutaway Bog Decommissioning and Rehabilitation Plans (hereafter the Draft Rehabilitation Plans), for the bogs within the Proposed Wind Farm site (further information on the Draft Rehabilitation Plans in Section 4.6.7 in Chapter 4) . The targeted rehabilitation measures set out in the Draft Rehabilitation Plans will be implemented following completion of the construction phase in a phased manner under the IPC Licence, subject to agreement and approval by the EPA. Where the Proposed Project proceeds, implementation of the Draft Rehabilitation Plans will follow the Proposed Project construction phase and occur during the operational phase.

The EIAR therefore distinguishes between:

- the **Likely Future Receiving Environment** at commencement of the construction phase, which reflects natural revegetation and ongoing IPC licence management and monitoring; and
- the **Future Environmental Trends**, which reflects continued natural revegetation and the implementation of the Draft Rehabilitation Plans

The Draft Rehabilitation Plans are considered within the relevant technical chapters in the context of future environmental trends and are also considered within the Do-Nothing Scenario and cumulative impact assessment.

The Likely Future Receiving Environment and future environmental trends have been considered in greater detail in those EIAR chapters where the evolving condition of the receiving environment has the potential to influence the assessment of likely significant effects. The relevant chapters and assessment sections are identified in Table 1-3 below.

Table 1-3: Likely future receiving environment and future environmental trends chapters and sections within the EIAR

EIAR Chapter	Likely Future Receiving Environment	EIAR Sections	Future environment trends	EIAR Sections
Chapter 5: Population & Human Health	The likely future receiving environment at commencement of the construction phase will remain materially comparable to the existing baseline environment with respect to population and human health.	Section 5.3.12 and Section 5.4.6	Notwithstanding the continued natural revegetation, and implementation of the Draft Rehabilitation Plans, the future environmental trends of the receiving environment for population and human health are not anticipated to introduce new sources of human health risk. While the individual environmental determinants of health may evolve over time, on balance, these changes are not expected to materially alter the overall human health baseline within the Population Study Area.	Section 5.3.12.1 and Section 5.4.6.1
Chapter 6: Biodiversity	The likely future receiving environment is anticipated to reflect an increase in the extent of birch and willow scrub and pioneer habitats which will reduce the overall extent of exposed bare peat across the Proposed Wind Farm site by the commencement of the construction phase of the Proposed Project. In addition to augmenting the biodiversity value of these habitats, this will result in the creation of additional suitable habitat for a range of rare and protected flora and faunal species including badger, Irish hare, marsh fritillary, amphibians, reptiles and rare plant species such as round-leaved wintergreen It is not anticipated that natural revegetation will have taken place to a degree that would materially alter the existing ecological baseline, therefore, the existing ecological baseline conditions remains representative of the likely future receiving environment for this Biodiversity Chapter against which the Proposed Project is assessed.	Section 6.3.4	Future environmental trends associated with natural revegetation and the implementation of the Draft Rehabilitation Plans are anticipated to increase natural habitat development on shallower peat, including poor fen, wetlands with reedbeds and birch woodland. The development of a range of habitats at the Proposed Wind Farm site as a result of the implementation of the Draft Rehabilitation Plans will support biodiversity including plants, insects, birds and mammals. In relation to species such as marsh fritillary and round-leaved wintergreen which show a preference for open habitats, it is likely that the areas of suitable habitat for these species will be dynamic in nature. Accordingly, the future environmental trends of the receiving environment for ecology, ornithology and hydrology is anticipated to materially alter the baseline the established ecological baseline and is reflected in the ecological impact assessment.	Section 6.3.4.1

	However, it is acknowledged that there is potential for mammal species, such as badger, otter, pine marten, Irish stoat and red squirrel to establish new breeding and resting sites within existing areas of suitable habitat within the Project Site.			
Chapter 7: Ornithology	The likely future receiving environment is anticipated to reflect a reduction in open habitat that would increase habitat suitability for KORs with a preference towards scrub and woodland (e.g. woodcock and sparrowhawk) and reduce habitat suitability for KORs with a preference towards open habitats (e.g. golden plover and lapwing). Due to the project temporal interval between the existing baseline survey data and the commencement of the construction phase, the underlying vegetation structure and thus the avian community of the Proposed Wind Farm site is anticipated to be materially comparable to the existing baseline against which the Proposed Project is assessed.	Section 7.3.8	Future environmental trends associated with natural revegetation and the implementation of the Draft Rehabilitation Plans are anticipated to alter the ecological baseline through reduced open habitat and increased closed habitat present on site. An increase in closed habitat will increase habitat suitability for scrub and woodland preferring KORs and reduce habitat suitability for KORs that prefer open habitats. As the Proposed Wind Farm site trends towards increasingly closed habitats, collision risk may increase for woodland preferring KORs and reduce for KORs that prefer open habitats, however ongoing monitoring will detect these changes during the lifetime of the Proposed Wind Farm. While the distribution and abundance of KORs may evolve over time, on balance, these changes are not expected to materially alter the overall ornithological baseline for the majority of KOR species within the Core Ornithology Study Area.	Section 7.3.8.1
Chapter 8: Land, Soils & Geology	The likely future receiving environment at commencement of the construction phase will remain materially comparable to the existing baseline environment with respect to land soils and geology.	Section 8.3.12	Notwithstanding the continued natural revegetation, and implementation of the Draft Rehabilitation Plans, the future environmental trends of the receiving environment for land soils and geology will remain materially comparable to the land soils and geology conditions as described and do not require separate consideration elsewhere in the land soils and geology impact assessment.	Section 8.3.12.1

Chapter 9: Water	The likely future receiving environment at commencement of the construction phase will remain materially comparable to the existing baseline environment with respect to hydrology and hydrogeology.	Section 9.3.18	Future environmental trends associated with natural revegetation and the implementation of the Draft Rehabilitation Plans are not anticipated to result in the complete replacement of the existing hydrological and hydrogeological regime across the Proposed Wind Farm site. Rather, the receiving environment is expected to transition progressively from the existing managed, drained former industrial peatland towards a more naturally functioning and attenuated peatland system, with the greatest changes occurring within areas directly subject to rehabilitation. The extent and rate of change will be spatially variable and will depend on the implementation and effectiveness of the rehabilitation measures, local hydrological conditions and subsequent vegetation establishment. The hydrogeological environment is not anticipated to be materially altered; however, localised changes in groundwater–surface water interaction may occur within areas subject to rehabilitation.	Section 9.3.18.1
Chapter 10: Air Quality	The likely future receiving environment at commencement of the construction phase will remain materially comparable to the existing baseline environment with respect to air quality.	Section 10.2.5	Implementation of the Draft Rehabilitation Plans will progressively improve air quality during the operational phase and is reflected in the air quality assessment.	Section 10.2.5.1
Chapter 11: Climate	The likely future receiving environmental of the Proposed Wind Farm site is anticipated to reflect a net greenhouse-gas source at commencement of construction and will remain materially comparable to the existing climate baseline against which the Proposed Project is assessed.	Section 11.3.3	Implementation of the Draft Rehabilitation Plans will progressively improve carbon storage and sequestration during the operational phase and is reflected in the climate assessment.	Section 11.3.3.1.1
Chapter 12: Noise & Vibration	The likely future receiving environment at commencement of the construction phase will remain materially comparable to	Section 12.5.2	Notwithstanding the continued natural revegetation, and implementation of the Draft Rehabilitation Plans, the future environmental trends of the receiving environment for noise	Section 12.5.2.1

	the existing baseline environment with respect to noise and vibration.		and vibration will remain materially comparable to the noise and vibration conditions as described and do not require separate consideration elsewhere in the noise and vibration impact assessment.	
Chapter 13: Landscape & Visual	The likely future receiving environment at commencement of the construction phase will remain materially comparable to the existing baseline environment with respect to landscape and visual.	Section 13.6	The anticipated changes associated with natural revegetation and targeted rehabilitation measures implementation of the Draft Rehabilitation Plans are predominantly ground-level changes in landcover. Having regard to the flat nature of the receiving landscape and the existing boundary vegetation surrounding the Proposed Wind Farm site, these changes are not anticipated to materially alter the visual baseline experienced by receptors in the surrounding landscape, beyond the Project Site as experienced by ground-based visual receptors	Section 13.6.1
Chapter 14: Cultural Heritage	The likely future receiving environment at commencement of the construction phase will remain materially comparable to the existing baseline environment with respect to cultural heritage.	Section 14.3.3	Notwithstanding the continued natural revegetation, and implementation of the Draft Rehabilitation Plans, the future environmental trends of the receiving environment for cultural heritage will remain materially comparable to the cultural heritage conditions as described and do not require separate consideration elsewhere in the cultural heritage impact assessment.	Section 14.3.3.1
Chapter 15: Material Assets	The likely future receiving environment at commencement of the construction phase will remain materially comparable to the existing baseline environment with respect to material assets.	Section 15.1.8 Section 15.2.6 Section 15.3.4	Notwithstanding the continued natural revegetation, and implementation of the Draft Rehabilitation Plans, the future environmental trends of the receiving environment for material assets will remain materially comparable to the material asset (i.e., traffic, telecoms, and built services) conditions as described and do not require separate consideration elsewhere in the material asset impact assessment.	Section 15.1.8.1 Section 15.2.6.1 Section 15.3.4.1

Chapter 16 Aviation	The likely future receiving environment at commencement of the construction phase will remain materially comparable to the existing baseline environment with respect to aviation.	Section 16.8	Notwithstanding the continued natural revegetation, and implementation of the Draft Rehabilitation Plans, the future environmental trends of the receiving environment for aviation will remain materially comparable to the aviation conditions as described and do not require separate consideration elsewhere in the aviation impact assessment.	Section 16.8.1
Chapter 17 Major Accidents and Natural Disasters	The likely future receiving environment at commencement of the construction phase will remain materially comparable to the existing baseline environment with respect to major accidents and natural disasters.	Section 17.3.5	Notwithstanding the continued natural revegetation, and implementation of the Draft Rehabilitation Plans, the future environmental trends of the receiving environment for major accidents and natural disasters will remain materially comparable to the major accidents and natural disasters conditions as described and do not require separate consideration elsewhere in the major accidents and natural disasters impact assessment.	Section 17.3.5.1

1.9 Project Team

1.9.1 Project Team Responsibilities

The companies and staff listed in Table 1-4 EIAR Project Teamwere responsible for completion of this EIAR. 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 1.9.2 below. Each chapter of this EIAR has been prepared by a competent expert in their subject matter. Further details on project team expertise are provided in the Statement of Authority at the beginning of each impact assessment chapter.

Table 1-4 EIAR Project Team

Consultants	Principal Staff Involved in Project	EIAR Input*
MKO Tuam Road, Co. Galway.	Brian Keville Michael Watson Sean Creedon Ellen Costello Colm Ryan Dervla O'Dowd John Hynes Catherine Johnson Ciarán Fitzgerald Lakshmi Priya Mohan Edel Mulholland Joye Atkinson Ronan Dunne Mike Ameil Mekell Shikha Gajula Pat Roberts Sarah Mullen Kate O'Donnell Katy Beckett Amy McDermott Bea Jackson Chandra Walters Jack Workman Dija Mazonaite Grace Levins Brian O'Carroll Pietro Salvagno Killian Devereux Gabriela Oliveria Joseph O'Brien Aoife Joyce Molly O'Hare Padraig Cregg Patrick Manley Kathryn Sheridan	Project Managers, Scoping and Consultation, Preparation of Natura Impact Statement and the following Chapters: › 1. Introduction › 2. Background to the Proposed Project › 3. Site Selection and Reasonable Alternatives › 4. Description of the Proposed Project › 5. Population and Human Health › 6. Biodiversity › 7. Ornithology › 10. Air Quality › 11. Climate › 13. Landscape and Visual › 15. Material Assets (non-Traffic) › 17. Major Accidents and Natural Disasters › 18. Interaction of the Foregoing › 19. Schedule of Mitigation Measures › 20. Summary of Significance of Effects

Consultants	Principal Staff Involved in Project	EIAR Input*
Hydro Environmental Services 22 Lower Main Street, Dungarvan, Co. Waterford.	Michael Gill Adam Keegan Conor McGettigan Nitesh Dalal	Flood Risk Assessment, Drainage Design and Preparation of the following Chapters: › 8. Land, Soils and Geology › 9. Water
Fehily Timoney & Company The Grainstore, Singletons Lane, Bagenalstown, Co. Carlow.	Tom Clayton Ian Higgins Aaron Clarke Emily Archer Alan Whelan Gary Lawlor Beren de Hora	Preparation of Peat Stability Assessment and Peat and Spoil Management Plan
AWN Consulting The Tecpro Building, Clonsgaugh Business & Technology Park Dublin 17.	Dermot Blunnie Alaistair Maclaurin Miguel Cartuyvels	Baseline Noise Survey and Preparation of Chapter 12: Noise and Vibration
Tobar Archaeological Services Saleen, Midleton Co. Cork.	Miriam Carroll	Preparation of Chapter 14: Cultural Heritage
Alan Lipscombe Traffic and Transport Consultants Claran, Headford, Co. Galway	Alan Lipscombe	Preparation of Chapter 15: Material Assets - Traffic and Transport
Cyrrus Cyrrus House, Concept Business Court, Allendale Road, Thirsk, North Yorkshire, Y07 3NY, United Kingdom	Peter Foulsham	Provision of › Physical Safeguarding Report › Flight Safety Review › Airspace Analysis › Preparation of Chapter 16 Aviation

Consultants	Principal Staff Involved in Project	EIAR Input*
Ai Bridges Quin Road Business Park, Ennis, Co. Clare	Kevin Hayes	Preparation of Radar Impact Assessments, Telecommunication Impact Assessment and provision of Telecoms Scoping in 2021 and 2025
IDL Old Galway Rd, Cuscarrick, Loughrea, Co. Galway	Declan Joyce Ronan Killeen	Provision of site investigative works on the Project Site
Sagentia Bristol and Bath Science Park, Emerson Green, Bristol, BS16 7FR United Kingdom	Liam Clarke Sam Shuttlewood	Provision of the Instrument Flight's Procedure Assessment
Tom Gittings Ecological Consultant 3 Coastguards Cottages, Roches Point, Whitegate, Co. Cork P25 HN60	Tom Gittings	Review of preliminary Collision Risk Model
Triturus Environmental Ltd 42 Nordwood Court, Rochestown, Cork T12 ECF3	Ross Macklin Bill Brazier	Preparation of Aquatic Survey Report of the Proposed Project

**A Statement of Authority is included in each chapter of this EIAR 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.*

1.9.2 Project Team Members

1.9.2.1 MKO

Brian Keville BSc

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 honour's 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 Environmental Director at MKO, overseeing a team which comprises over 50 highly skilled environmental professionals. 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 renewables, 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. 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 environment 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).

Sean Creedon BSc, MSc

Sean Creedon is an Associate Director in the Environment Team at MKO. He leads a team of highly skilled environmental professionals working on EIAR for large-and medium scale Renewable Energy infrastructure. Sean has directed and overseen multiple renewable energy projects across wind, solar, battery and hydrogen as well as a range of thermal and other energy related developments. He has worked on the planning and environmental impact elements within all stages of wind farm project delivery. Sean's professional experience includes the development and management of a portfolio of wind farm developments to the consenting decision. He is a member of the MKO senior management team. Sean has over 23 years' experience in program and project development, holds an MSc from NUI Galway and a Diploma in Project Management from Institute of Project Management Ireland.

Ellen Costello M.Sc., B.Sc., PISEP

Ellen Costello is a Senior Environmental Scientist with MKO with over 6 years' experience in private consultancy. Ellen holds a BSc (Hons) in Earth Science, and a MSc (Hons) in Climate Change: Integrated Environmental and Social Science Aspects where she focused her studies on renewable energy development in Europe and its implications on environment and society. Ellen's key strengths and expertise are Environmental Protection and Management, Environmental Impact Statements, Project Management, and GIS Mapping and Modelling. Since joining MKO, Ellen has been involved in a range of renewable energy infrastructure projects. In her role as a senior project manager, Ellen 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. Ellen is a Practitioner Member of the Institute of Sustainability and Environmental Professionals (ISEP).

Colm Ryan BA

Colm Ryan is the Planning Project Director with MKO with over 16 years of experience in both private practice and local authorities. Colm holds BA (Hons) in Geography & Irish and Masters in Civic Design Town & Regional Planning. Prior to taking up his position with McCarthy Keville O'Sullivan 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.

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

Dervla O'Dowd is Associate Director with responsibility for MKO's dedicated Ornithology Team with twenty 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 the 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 co-ordinator 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.

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.

Catherine Johnson B.Sc., LLM

Catherine is a Climate Practitioner and Project Environmental Scientist with MKO with over four years of private consultancy experience and expertise in climate and sustainability matters. Catherine has expertise in of consultancy experience in climate, renewable energy, and sustainability. Catherine possesses skills in mapping and design, which complement her experience in preparing comprehensive reports for EIAs. Catherine holds a BSc in Earth and Ocean Science and a LLM in Global Environment and Climate Change Law. Prior to joining MKO in 2022, Catherine worked as an Environmental Social Governance (ESG) analyst for Acasta in Edinburgh. Catherine has been involved in a myriad of environmental service offerings at MKO including EIA Screenings and Reports, climate and sustainability related work and renewable energy infrastructure projects, including both onshore and offshore wind energy developments.

Ciarán Fitzgerald BSc, PG

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).

Lakshmi Priya Mohan

Lakshmi is an Environmental Scientist at MKO with over two years of consultancy experience. Lakshmi holds a Master's degree in Environmental Science, a Master's degree in Zoology and a Bachelor's degree in Zoology. Prior to taking up her position with MKO in March 2026, Lakshmi worked as an Environmental Consultant in DNV, Ireland. Lakshmi has excellent report writing and research skills. Lakshmi has experience in the preparation of Environmental Impact Assessment Reports (EIARs), Construction and Environmental Management Plans (CEMPs), EIA Screening Reports and Strategic Environmental Assessment (SEA) Screening Reports. She has also produced GIS mapping outputs for a range of large-scale infrastructure developments and land infill projects in Ireland.

Edel Mulholland BA

Edel Mulholland is an Environmental Scientist with MKO with over 1 year of experience in both private practice and local authorities. Edel holds BA (Hons) in Environmental Science from the University of Galway. Prior to taking up her position with MKO in September 2024, Edel worked as an Environmental Chemistry Analyst with CLS, Co. Galway, where she assisted with water quality analysis. Edel's key strengths and areas of expertise are in environmental policy, drafting EIAR chapters and QGIS mapping.

Joye Atkinson

Joye Atkinson is a Environmental Scientist with MKO with over 1 year of experience in both private practice and local authorities. Joye holds a BSc in Geography and Sociology from UCD. Joye has

knowledge of planning systems having completed a one year internship with RMLA Planning. Her key strengths and areas of expertise are in report writing, QGIS and ArcGIS pro and mapping.

Ronan Dunne BSc, MSc

Ronan Dunne is a Project Planner with MKO with over 3 years' experience. Ronan holds a BSc (Hons) in City Planning and Environmental Policy, and a MSc (Hons) in Urban and Regional Planning from University College Dublin where he focused his studies on wind energy development.

Since joining MKO, Ronan has been involved in a range of infrastructure projects, including onshore and offshore wind, solar, battery storage and grid infrastructure developments. In his role as a Project Planner, Ronan works with multidisciplinary teams including members from MKO's Environmental, Ecological and Ornithological departments as well as sub-contractors from various fields in the develop/deliver reports to facilitate the planning process. Through his professional and academic experience, Ronan has gained skills in renewable energy planning, Environmental Impact Assessment, strategic and spatial planning, development management, planning appeals, condition compliance, and project management.

Pat Roberts

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. Pats 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) Pat sits on the Irish Policy Group of the CIEEM and reviews and comments on Irish and European Policy and legislation in this capacity. He is also an assessor for CIEEM membership applications.

Sarah Mullen

Sarah is a Project Director (Ecology) with MKO with over 10 years' post graduate experience in ecology. Sarah holds a B.Sc. (Hons) in Botany, an M.Sc. in Biodiversity and Conservation and a Ph.D. in Botany. Since joining MKO Sarah has been responsible for the management, co-ordination and undertaking of flora, fauna and habitat surveys for a range of projects including large-scale energy infrastructure projects, residential and commercial developments, tourism projects and biodiversity monitoring and restoration projects. She has overseen the preparation of ecological reports to accompany planning applications including Ecological Impact Assessments, Stage 1 and Stage 2 Appropriate Assessment reports, Invasive Species Management Plans and Biodiversity/Habitat Management Plans. She currently oversees the general Ecology team at MKO. Sarah's key strengths and areas of expertise are in terrestrial flora and fauna ecology, including vegetation surveys, habitat mapping, invasive species surveys, mammal surveys, Appropriate Assessment and Ecological Impact Assessment. She holds membership with the Chartered Institute of Ecology and Environmental Management.

Kate O'Donnell

Kate is a Project Ecologist with MKO with over 6 years of experience in ecological consultancy. Kate holds a BSc (Hons) in Ecology and Environmental Biology. Kate has also completed a Level 8 Special Purpose Award in Digital Mapping and GIS. Kate's key strengths and areas of expertise are in terrestrial ecology, including vegetation surveys, habitat identification, invasive species surveys, mammal surveys, Appropriate Assessment and Ecological Impact Assessment. Kate is also skilled in GIS. Prior to taking up her position with MKO in February 2022, Kate worked as an Ecologist with RPS where she gained experience in Ecological Impact Assessment, Appropriate Assessment and multidisciplinary ecological surveys for a range of projects including IDA developments, flood relief schemes, road network improvements and greenway developments. Since joining MKO Kate has been responsible for organising and undertaking flora, fauna and habitat surveys in accordance with NRA Guidelines for projects including wind farm developments and housing developments and for the preparation of Ecological Impact Assessments and Stage 1 and Stage 2 Appropriate Assessment reports. Kate is trained in carrying out bat surveys, non-volant mammal surveys, freshwater pearl mussel surveys, and in taking vegetation relevés of vascular plants and has extensive experience in habitat identification and habitat mapping. She is an Associate member of the Chartered Institute of Ecology and Environmental Management.

Katy Beckett

Katy is a Project Ecologist with MKO with over three years' experience in ecological consultancy. Katy holds a B.A. (Hons) in Environmental Science and an M.Sc. in Biodiversity and Conservation from Trinity College Dublin. During these academic studies she focused on conservation, gaining field and desk skills, and completing a thesis on the impact of wind farms on Irish pollinators with the Nature+ energy research group. Katy's main focus and expertise are in terrestrial ecology and conservation, largely focusing on renewable energy projects since joining MKO. Field skills are a key strength, from high-level constraints mapping to completing detailed multidisciplinary ecological walkover surveys, habitat mapping, mammal surveys and vegetation analyses, as well as specialist surveys for rare and threatened plant species, Annex I habitat condition assessments, marsh fritillary larval web and habitat condition assessments, Odonata surveys and both wintering and breeding bird surveys. Katy is also skilled in QGIS mapping, data analysis and scientific communication, preparing detailed Appropriate Assessment Screening Reports, Natura Impact Statements, Ecological Impact Assessments, EIAR Biodiversity and Ornithology Chapters, Biodiversity Management and Enhancement Plans and other site-specific ecological reporting. She is a member of the Chartered Institute of Ecology and Environmental Management and continues to upskill through internal training as well as external courses through the Botanical Society of Britain and Ireland, National Biodiversity Data Centre, Birdwatch Ireland and the British Trust for Ornithology.

Amy McDermott

Amy is a Graduate Ecologist at MKO with over one year of professional experience and holds a B.Sc. (Hons) in Environmental Science from the University of Galway. During her academic studies, Amy demonstrated a strong commitment to ecological research and conservation. In May 2024, Amy was awarded the Karzan d'Ahmed Research Bursary through the University of Galway and The Corncrake LIFE project, where she developed valuable skills in scientific research, ecological surveying techniques and technical report writing. Since joining MKO, Amy has contributed to a wide range of projects including large scale wind farms. She has experience in a wide range of surveys including habitat and vegetation surveys, mammal surveys, bird surveys and marsh fritillary surveys. She has gained experience in technical report writing, including Appropriate Assessment Screening Reports, Natura Impact Statements, Ecological Impact Assessments and EIAR Biodiversity Chapters during her time at MKO. Amy is a Qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM). In addition to her consultancy work, Amy participates in the annual voluntary Irish Wetland Bird Surveys (I-WeBS) to help grow her knowledge in ornithology and contribute to the monitoring and conservation of Ireland's wetland bird population.

Bea Jackson

Bea is an Ecologist Practitioner with MKO and has over two years' experience in ecological consultancy. Bea holds a B.A. (Hons) in Botany from Trinity College Dublin and a Master's degree in Botany from the same university. Bea has experience conducting a wide range of ecological surveys, including bat emergence and re-entry, newt surveys, terrestrial mammal surveys, breeding and wintering bird surveys, as well as habitat and botanical surveys. Bea has prepared Appropriate Assessment Screening Reports, Ecological Impact Assessments, Natura Impact Statements, Biodiversity Management Plans and contributed to other site-specific ecological reporting on a range of project types including renewable energy infrastructure projects, road developments and residential developments. Bea holds a Qualifying Membership with the Chartered Institute of Ecology and Environmental Management.

Chandra Walters

Chandra is an Ecologist with MKO with over five year's consultancy experience. She is skilled in botanical and habitat surveys as well as specialised faunal surveys such as mammal, marsh fritillary and pollinator surveys. Chandra has authored numerous reports to inform Appropriate Assessment (Stage 1 and Stage 2), as well as Environmental Impact Assessments (EcIAs) for a variety of projects including renewable energy developments.

Jack Workman BSc, MSc

Jack Workman MSc., TMLI. is the Landscape & Visual Project Director at MKO and is chartered as a Technician Member of the British Landscape Institute. Jack is an environmental scientist and an LVIA specialist with an academic background in the field of Environmental Science and Geography. Jack's primary role at MKO is scoping and writing LVIA for EIARs with over 6 years' experience directing and managing all aspects of LVIA for a broad range of large commercial infrastructure developments. Jack holds a BSc. in Psychology, and an MSc. in Coastal and Marine Environments (Physical Processes, Policy & Practice), and a University Certificate of Study (NFQ Level 9 Minor Award) in Landscape and Visual Impact Assessment (LVIA) from the University of Limerick, a specialist postgraduate qualification developed specifically for professionals undertaking LVIA of wind energy developments. Jack is an active participant in the National Landscape Forum, presenting in 2023, 2024 and 2025 on the topic of LVIA, he also regularly delivers guest lectures for students on the topic of LVIA at top third level institutions in Ireland including University of Galway, Trinity College Dublin, University College Dublin and University College Cork. 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 BSc

Dija Mazonaite is a Project Environmental Scientist - LVIA Specialist at MKO. Dija holds a BSc (Hons) in Geography & Geosystems from University of Galway, a Postgraduate Certificate in Marine Spatial Planning from Atlantic Technological University, and a University Certificate of Study (NFQ Level 9 Minor Award) in Landscape and Visual Impact Assessment (LVIA) from the University of Limerick, a specialist postgraduate qualification developed specifically for professionals undertaking LVIA. She was also and was recognised as a University Scholar at the University of Galway. Dija's primary role at MKO is producing and reviewing the LVIA chapter of EIA reports for large-scale 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 an active participant of the Irish National Landscape Forum. Dija also regularly delivers guest lectures for students on the topic of LVIA at top third level institutions in Ireland.

Grace Levins

Grace Levins is a Graduate Environmental Scientist - LVIA Specialist at MKO. She holds a M.Sc. (Hons) in Coastal and Marine Environments from the University of Galway and a B.Sc. (Hons) in Geosciences from Union College (New York). Grace's primary roles at MKO include organising fieldwork campaigns and producing technical outputs for LVIA chapters of EIA reports. Grace is proficient in QGIS, ArcGIS Pro, and R Studio, conducting LVIA surveys (i.e., capture of photomontage imagery and route screening analyses), and operating UAVs. Since joining MKO, Grace has worked on projects covering a range of developments including wind and solar energy projects, grid infrastructure, and Strategic Housing Developments.

Brian O'Carroll

Brian is a Senior Graphics Technician at MKO with over 20 years' experience in graphic design, visual communications, and more recently environmental consultancy support. He specialises in the production of Type 4 verified photomontages and the delivery of high-quality visualisations, mapping, and graphic outputs for planning and environmental projects. Brian holds a Second Class Honours Degree (Level 8) in Design – Visual Communications and has extensive experience in website design and management, print design, and the production of technical documentation for environmental and planning applications. His expertise includes WindPro, QGIS, SketchUp integration, Adobe Creative Suite (Photoshop, Illustrator, and InDesign), design for print, packaging, and print finishing. Brian plays a key role in supporting renewable energy and infrastructure developments through the preparation of accurate visual assessments and planning graphics, while also leading the Graphics and 3D Services Team. His strong problem-solving abilities, communication skills, and creative approach, combined with previous experience as a Design and Pre-Press Manager, enable him to successfully manage complex projects and deliver high-quality visual communication solutions for clients across the environmental and planning sectors.

Pietro Salvagno

Pietro Salvagno is Project Environmental Scientist in MKO with a broad multidisciplinary formation in environmental sciences and a particular expertise in photogrammetry and remote sensing. Pietro holds both Bachelor's and Master's degrees in Environmental Engineering. Prior to taking up his position with MKO in June 2023, Pietro worked as junior researcher during a 6-months-long internship at Institute National de la Recherche Agronomique (INRA) in France, Avignon, where he consolidated his software skills and improved his understanding of natural processes. Then, Pietro worked with Wesii S.r.l. an Italian company operating drone-based multispectral services for a wide range of different applications. Across 3 years, Pietro improved his expertise in environmental monitoring, renewable energies and infrastructure inspections, remote sensing. He eventually became Technical and Product Lead thanks to his key competences and skills in project management. Since joining MKO, Pietro has worked in building a new drone service within the Landscape team. That included defining new workflows and software apparatus, training internal remote pilots, consolidating procedures and registering MKO as Drone Company Operator on the Irish Aviation Authority. In the past three years of activity as Operational and Accountable Manager for the company, Pietro completed and delivered countless projects ranging from topographic surveys to wind and solar farm inspections, from habitat mapping to building inspections, from bird surveys to invasive species mapping. Pietro is now holding a STS01/PDRA-S01 certificate for drone operations and can rely on several qualified remote pilots holding A1, A2 and A3 certificates, providing drone services for MKO across Ireland.

Killian Devereux BSc

Killian is currently the Project CAD Technician at MKO he has over 8 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 Oliveria B.Arch

Gabriela Oliveira is a CAD Technician with MKO with over 7 years of experience specializing in the design of residential and commercial spaces, as well as expertise in sustainable and energy-efficient drafting. Gabriela holds a Bachelor of Architecture (B.Arch. Hons) degree in Architecture and Urbanism. Before joining McCarthy Keville O'Sullivan in July 2023, Gabriela held significant roles in the industry, including Architect and CAD Technician positions. She contributed her skills and knowledge at Fergal Bradley & Co. Building Surveyors in Ireland for 4 years and at DAMOUS Ltd. Consulting Engineers in Brazil for 3 years. Gabriela possesses specialized proficiency in architectural design, technical drafting utilizing software such as AutoCAD, SketchUp, and Revit, as well as expertise in measurement surveys and the preparation of Planning Application drawings and documents. Gabriela excels in various areas, with a particular focus on design, drafting, and leading measurement surveys for planning application packages. Since joining MKO, Gabriela has been actively involved in producing drawings for planning applications across a diverse range of projects, including Wind Farms, Solar Farms, residential developments, and commercial buildings.

Within MKO, Gabriela plays a role in the CAD team, dedicated to delivering high-quality technical drawings tailored for planning applications.

Joseph O'Brien, BA

Joseph O'Brien is a CAD Technician with MKO with over 8 years of experience. Joseph holds a BA Honours Level 8 Modelmaking, Design and Digital Effect, Institute of Art Design and Technology (IADT), Dun Laoghaire & City & Guilds Level 3 2D &3D AutoCAD certificates. Prior to taking up his position with MKO in June 2016, Joseph worked as worked as a free-lance Modelmaker and CAD Technician. His previous experience included designing various models and props through CAD and then making them for various conventions such as Dublin Comic Con and Arcade Con. Joseph's key strengths and areas of expertise are skills such as mapping, aerial registration and detailed design drawings for projects. Since joining MKO Joseph has been role of producing planning application drawings through CAD for various projects such as renewable energy such as wind and solar.

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

Aoife Joyce is a Project Director (Ecology) with 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.

Molly O'Hare

Molly O'Hare is a Project Bat Ecologist with MKO with over 3 years of experience in ecological consultancy. Molly holds a BSc in Ecology and Environmental Biology and an MSc in Marine Biology from University College Cork. Prior to taking up her position with MKO in February 2025, Molly worked as Lead Bat Ecologist for Inis Environmental Consultants Ltd and held a previous post as Research Assistant with African Bat Conservation in Malawi. Molly has specialist experience in bat field survey techniques including mist netting, harp trapping, hand netting, radio tagging and tracking, exclusion works, transect surveys, emergence surveys, re-entry surveys and roost assessments. Molly also has experience carrying out multidisciplinary field surveys such as habitat assessments, general mammal surveys, bird surveys and acting as an ecological clerk of works. Molly's key strengths and areas of expertise are in bat ecology, field survey techniques, project management and survey scope design, bioacoustics analysis and training and education. Since joining MKO Molly has been an integral part of the bat division of the ecology team. Within MKO she works as part of a multidisciplinary team, Molly is a qualifying member of CIEEM.

Padraig Cregg

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.

Patrick Manley

Patrick Manley is a Senior Ornithologist with MKO with over 10 years' of experience in environmental consultancy. Patrick holds B.Sc. (Hons) in Geology from University College Dublin. Since joining MKO, Patrick has worked on wind farm projects, solar farm projects, residential developments, data centres, county council projects and National Parks and Wildlife Service projects. He specialises in ornithological consulting, including Environmental Impact Assessments and has specialist knowledge in designing, executing and project managing ornithological assessments, primarily in the renewable energy industry. Prior to joining MKO in August 2016, Patrick gained experience through his involvement in several bird conservation projects, including protected curlew, seabirds and waders. Within MKO, Patrick 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 EIAR chapters.

Kathryn Sheridan

Kathryn Sheridan is a Project Ornithologist with MKO with over six years of experience in ornithological field surveys. Kathryn holds a B.A. (Hons) Zoology, and a M.Sc. (Hons) in Wildlife Conservation and Management where she focused her studies on breeding hen harrier. Prior to joining MKO in November 2020, Kathryn has worked as a research assistant with UCD, in private consultancy as a sub-consultant with Scott Cawley, and has also worked with BirdWatch Ireland and the National Parks and Wildlife Service (NPWS) Curlew Conservation Programme. Kathryn's key strengths and expertise are bird identification, GIS, data collation and report writing. In her role as a project ornithologist, Kathryn has worked on wind farm projects, residential developments, county council projects and conservation projects including the preparation of EIAR chapters and seasonal reports

1.9.2.2 Hydro Environmental Services

Michael Gill

Michael Gill (BA, BAI, Dip Geol., MSc, MIEI) is an Environmental Engineer and Hydrogeologist with over 22 years' environmental consultancy experience in Ireland. Michael has completed numerous hydrological and hydrogeological impact assessments of wind farms and renewable projects in Ireland. In addition, he has substantial experience in geological characterisation, peatland morphology, and surface water drainage design and SUDs design and surface water/groundwater interactions. Michael has worked on the EIS/EIAR for Oweninny WF, Cloncreen WF, Croagh WF and over 100 other wind farm related projects across the country.

Adam Keegan

Adam Keegan PGeo (B.Sc., M.Sc.) is a hydrogeologist with 7 years environmental consultancy experience in Ireland. Adam has been involved in Environmental Impact Assessment Reports (EIARs) for numerous projects including wind farms, grid connections, quarries and small housing developments. Adam holds an MSc in Hydrogeology and Water Resource Management. Adam has worked on several wind farm EIAR projects, including Croagh WF, Lyrenacarriga WF (SID), Cleanrath WF, Carrownagowan WF (SID), and Fossy Wind Farm.

Conor McGettigan

Conor McGettigan (BSc, MSc) is an Environmental Scientist with over 6 years' experience in the environmental sector in Ireland. Conor holds an M.Sc. in Applied Environmental Science (2020) and a B.Sc. in Geology (2016) from University College Dublin. Conor routinely prepares the land, soils and geology chapters of environmental impact assessment reports for wind farm development. Conor has worked on the EIAR for Ballivor WF, Lemanaghan WF, Littleton WF, Briskalagh WF, Knockshanvo WF, Seskin WF and over 20 other wind farm related projects across the country.

Nitesh Dalal

Nitesh Dalal (B.Tech, PG Dip., MSc) is an Environmental Scientist with over 7 years' experience in environmental consultancy and environmental management in India and over 1 year environmental consultancy experience in Ireland. Nitesh holds a M.Sc. in Environmental Science from University College Dublin (2024), a PG Diploma in Health, Safety and Environment from Annamalai University, India (2021) and B.Tech. in Environmental Engineering (2016) from Guru Gobind Singh Indraprastha University, India (2016).

1.9.2.3 Fehily Timoney & Company

Fehily Timoney and Company (FT) is an Irish engineering, environmental science and planning consultancy with offices in Cork, Dublin and Carlow. The practice was established in 1990 and currently has c.100 members of staff, including engineers, scientists, planners and technical support staff. We deliver projects in Ireland and internationally in our core competency areas of Waste Management, Environment and Energy, Civils Infrastructure, Planning and GIS and Data Management. They provide 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.

Tom Clayton

Tom is a Chartered Engineer with a total of 18 years of experience within the geotechnical sector having developed excellent skills in analytical design (including finite element analysis), project and team management. Tom has significant and broad experience in the geotechnical sector, having developed key expertise in transport geotechnics (for road, rail, underground rail schemes, active travel and greenway schemes), deep excavations and shafts (primarily in the Middle East and London) and Energy Geotechnics (both for solar and wind farms).

Ian Higgins

Ian is a geotechnical engineer with over 25 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 holds a BSc (Hons) Engineering Geology from University of Sunderland, and a MSc in Geotechnical Engineering from the Heriot-Watt University. 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.

Aaron Clarke

Aaron Clarke: Aaron is a Chartered Principal Engineering Geologist with Fehily Timoney's Infrastructure Team, providing specialist geotechnical and geological advice for multi-disciplinary projects across Ireland and the UK. He has over 20 years' experience working as a geologist; of which, 11 years' have been spent within ground engineering.

Emily Archer

Emily Archer (BSc Geology, MSc Applied Environmental Geology) is a Geotechnical Engineer with 6 years' experience and has been involved in the preparation of several peat stability reports and Land, Soils & Geology Chapters for EIAR's for wind farm developments.

Alan Whelan

Alan Whelan is a Fehily Timoney Senior Project Engineer. He holds a Bachelor of Engineering in Civil Engineering and is a active member of Engineers Ireland (MIEI). Alan has over 6 years' experience in geotechnical engineering.

Gary Lawlor

Gary is a Senior project Engineer with FT and has 6 years' experience. He has been responsible for the data collation, validation and analysis for a multitude of projects, including desk studies and walkover surveys

Beren de Hora

Beren De Hora is the Director of Sustainable Infrastructure in FT. Beren has over 29 years of civil engineering experience and has led small and medium size projects up to multi-billion-euro new build projects in locations including Ireland, UAE, Oman, Qatar, Saudi Arabia, The United States of America and The United Kingdom. His expertise includes business management and operations, programme management, planning and strategy, change management, risk assessment, business development, sales and marketing, and the leadership and development of management, technical and administration staff.

1.9.2.4 AWN Consulting Ltd.

Dermot Blunnie

Dermot Blunnie (Associate Director) 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.

Alistair Maclaurin

Alistair Maclaurin (Senior Acoustic Consultant) holds a BSc in Creative Music and Sound Technology and a Diploma in Acoustics and Noise Control. He is a member of the Institute of Acoustics. Alistair has worked in the field of acoustics since 2012 (14+ years' experience). He has been the lead noise consultant across various sites on major infrastructure projects such as Crossrail and Thames Tideway Tunnel, specialising in construction noise assessment and control. Additionally, he has undertaken environmental noise assessments for various wind farm developments throughout Ireland.

Miguel Catuyvels

Miguel Cartuyvels (Acoustic Consultant) holds a BEng (Hons) in Industrial Engineering and is a member (AMIOA) 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

1.9.2.5 Tobar Archaeological Services

Tobar Archaeological Services is a Cork-based company entering its ninth year in business. They offer professional nationwide services ranging from pre-planning assessments to archaeological excavation, and cater for clients in state agencies, private and public sectors.

Tobar's Director, Miriam Carroll, is licensed by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs to carry out excavations in Ireland and have carried out work directly for the National Monuments Services of the Department of the Environment, Heritage and Local Government. Tobar Archaeological Services has a proven track record and extensive experience in the wind farm industry from EIAR stage through to construction stage when archaeological monitoring is frequently required.

Miriam Carroll

Miriam Carroll is a partner of Tobar Archaeological Services which was established in 2003. Prior to that Miriam worked in the field of commercial archaeology for five years in University College Cork where she completed her primary and Masters degrees. Miriam has over 24 years of experience in the field of archaeology, with 19 of those as partner of Tobar Archaeological Services. She is a full member of the Institute of Archaeologists of Ireland (IAI) and is licensed by the National Monuments Service to carry out excavations in Ireland. Miriam undertook her primary degree in Archaeology (major) and English (minor) between 1993 and 1996. Her Masters degree was also undertaken in University College Cork. This was a 2 year course in Irish Archaeology. The subject of Miriam's thesis focused on 'Ballyalton Bowls' (prehistoric pottery) in the context of the Irish Neolithic. This Masters degree was undertaken between 1996 and 1998. Miriam then went on to work in commercial archaeology in the Archaeological Services Unit of University College Cork for 5 years after which both Annette Quinn and Miriam set up the business Tobar Archaeological Services in 2003. She is a full member of the Institute of Archaeologists of Ireland (IAI) and is licensed by the National Monuments Service to carry out excavations in Ireland. Miriam has overseen numerous commercial projects in Ireland including wind, solar and overhead line projects. Miriam was the project archaeologist for the Bandon Sewerage Scheme which lasted a number of years. This required a high-level of experience and organization as well as the resolution of parts of the 17th century town wall and other additional significant finds in a timely and efficient manner. Miriam also successfully managed a major excavation in Buttevant, Co. Cork for the Cork Education and Training board as well as being the project archaeologist for Fota Wildlife park extension from 2014. This involved project management of a large team of archaeologists on a medieval settlement site. Miriam has also undertaken numerous EIARs and has presented evidence at numerous Oral Hearings for bodies such as Eirgrid.

1.9.2.6 Alan Lipscombe Traffic and Transport Consultants

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.

1.9.2.7 Cyrrus

Peter Foulsham

Peter has worked in the aviation industry for nearly four decades. He has been both a military and civilian Air Traffic Controller, been seconded to a National regulator as an Air Traffic Control inspector and has held both Tower and Approach Control licence ratings. He has also spent the past 23 years as a Pilot flying for the Airlines, as well as flying corporate aircraft for multi-national companies. He holds both UK CAA and United States FAA Airline Transport Pilots Licences. Peter has also served on an Air Accidents Review Board for a National regulator.

1.9.2.8 Ai Bridges

Kevin Hayes

Kevin Hayes is a senior radio planner / engineer with Ai Bridges and holds a B.Eng, M.Eng. in Communications & Electronic Engineering with over 30 years of experience in telecommunications network design, software modelling services and project implementation and roll-out of turnkey solutions for clients. Kevin Hayes takes overall responsibility for the approval of all Telecommunications, Aviation and Television Impact Statements provided by Ai Bridges

1.9.2.9 IDL

Declan Joyce

Declan is a Chartered Geotechnical Engineer for 35 years with Irish Drilling Ltd and also with over three years of private consultancy experience in geotechnical engineering in Ireland and the UK. Declan has expertise in geotechnical investigations and geotechnical design. Declan holds a BE (Hons.) in Civil Engineering and a M.Eng.Sc. in Geotechnical Engineering. Declan has been involved in reporting for many site investigations for windfarms in difficult bogland and mountainous terrain throughout Ireland.

Ronan Killeen

Ronan is an Engineer for over 30 years with Irish Drilling Ltd and also with previous private consultancy experience in Ireland. Ronan has expertise in managing large site investigation projects for most of the large clients in Ireland and in difficult bogland and mountainous terrain, in Ireland and the UK. Ronan holds a BE (Hons.) in Civil Engineering has been involved in reporting for many site investigations for windfarms in Ireland and Scotland.

1.9.2.10 Sagentia

Osprey Consulting Services Ltd (t/a Sagentia Aviation) is an Approved Procedure Design Organisation (APDO) consisting of 5 qualified Instrument Flight Procedure (IFP) Designers operating in both the Civil and Military domain.

Liam Clarke

Liam Clarke is Head of IFP Design at Osprey Consulting Services Ltd (t/a Sagentia Aviation) with over 10 years of experience in the design, review and safeguarding of published IFPs worldwide

Sam Shuttlewood

Sam Shuttlewood is an IFP Designer with over 10 years of experience in the design, review and safeguarding of published IFPs worldwide.

1.9.2.11 Tom Gittings

Tom has a BSc in Ecology, a PhD in Zoology and is a member of the Chartered Institute of Ecology and Environmental Management. He has 30 years' experience in professional ecological consultancy work and research. He has specific expertise in ornithological assessments for wind energy projects and has been involved in numerous wind energy projects. His input to these projects has variously included

field surveys, collision risk modelling, writing the ornithological sections of EIS/EIAR and NIS reports, expert witness services at oral hearings, and provision of scoping advice and peer review services.

1.9.2.12 Triturus

Ross Macklin

Ross Macklin (B.Sc. (Hons) Applied Ecology, HDip GIS, Dip IPM, MCIEEM, IFM) is a principal ecologist and Director at Triturus Environmental Ltd., specialising in freshwater and fisheries ecology. He studied a bachelor's degree in applied Ecology at UCC and later completed a higher diploma in Geographical Information Systems at UCC and a diploma in Integrated Pest Management at UCD. He is currently completing his PhD at UCC in fisheries ecology. Ross has an in-depth knowledge of all freshwater ecosystems and riparian corridors. He has undertaken river habitat, lake habitat, canal habitat and fisheries assessments in professional work for 20 years. His specialist freshwater experience lies in biological and physicochemical water quality analysis, fisheries ecology, riparian habitat assessments, habitat mapping, protected species, mammal surveys, geographical information systems, ecological design and invasive species. Ross has expert experience in identifying and assessing macrophyte plant, aquatic bryophytes, fish and macroinvertebrates from a variety of aquatic habitats. He routinely undertakes fisheries assessments, protected species surveys, invasive species surveys, river hydromorphology surveys, surface water management plans, CEMP, EcIA , EIAR and NIS reporting. He holds full national licences for freshwater pearl mussel (Margaritifera margaritifera), white-clawed crayfish (Austropotamobius pallipes) and amphibians inclusive of an open photography licence for numerous protected species. He has held over 300 section 14 licences for fisheries surveys spanning the breadth of Ireland

Bill Brazier

Bill Brazier (B.Sc. (Hons) Applied Freshwater & Marine Biology, MIFM) is an aquatic, fisheries and mammalian ecologist with over 14 year's professional experience in Ireland. He is a senior ecologist and Associate Director at Triturus Environmental Ltd. and is completing a PhD in fish genetics at UCC. He has extensive experience in a wide range of ecological and environmental projects including EIAR, EcIA and AA/NIS reporting, as well as the areas of renewable energy developments, flood relief schemes, road schemes, invasive species management blueways/greenways, biodiversity projects and non-volant mammal monitoring. Highly competent in GIS, he specialises in aquatic ecology and freshwater fish, inclusive of fisheries assessments, macrophytes, water quality, hydromorphology, riparian habitats, otter, freshwater pearl mussel, white-clawed crayfish and amphibians, holding full national licences for all of these species. Bill is one of Ireland's most experienced fisheries scientists having held over 250 section 14 authorisation licences for fisheries related work in freshwater and transitional habitats.

1.10 Difficulties Encountered

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

1.11 Viewing and Purchasing the EIAR

Copies of this EIAR will be available online, including the Non-Technical Summary (NTS), on the website of ACP, under the relevant Planning Reference Number (to be assigned on lodgement of the application).

- ACP: http://www.pleanala.ie/

This EIAR and all associated documentation will also be available for viewing at the offices of ACP and Offaly 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

- Offaly County Council,
  Áras an Chontae
  Charleville Road
  Tullamore
  Co. Offaly

- Kildare County Council
  Head Office Áras Chill Dara
  Devoy Park, Naas
  Co Kildare W91 X77F

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)

The EIAR will also be available to view online on the Ballydermot Wind Farm dedicated SID website: www.ballydermotwindfarmplanning.ie