

1. INTRODUCTION

1.1 Introduction

This Remedial Environmental Impact Assessment Report (rEIAR) has been prepared by MKO on behalf of Planree Ltd (the Applicant) as part of an application for substitute consent to An Coimisiún Pleanála ('the Commission') under Section 177E of the Planning and Development Act 2000 (as amended) ('the Act').

This substitute consent application arises from a High Court decision on 10th April 2024 (upheld by the Court of Appeal on December 18th 2024) which determined that, due to certain material deviations from the plans approved under the original permission the partially constructed Wind Farm constituted unauthorised development. Substitute consent is now sought to retain all works undertaken to date for the Meenbog Wind Farm.

The Subject Development comprises two elements the Existing Development and the Prospective Development and shall be known as Meenbog Wind Farm. The wind farm was originally permitted by the Commission under ABP 300460-17, as subsequently amended by ABP-303729-19.

This substitute consent application is accompanied by this rEIAR and a Remedial Natura Impact Statement (rNIS) in relation to the Existing Development, and an Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) in relation to the Prospective Development.

1.1.1 Development Referencing

The list below provides terminology used in this rEIAR.

- › The **'Site'** refers to the application site boundary for the Subject Development as illustrated in red on Figure 1-1 of this rEIAR. It comprises the Wind Farm Site, Grid Connection Site, and BMEP Site combined.
 - The **'Wind Farm Site'** refers to the area surrounding the wind turbines and associated infrastructure (including the onsite 110kV substation), from the Wind Farm Site entrance off the N15 National Road.
 - The **'Grid Connection Site'** refers to the area of the Site surrounding the Grid Connection from the Wind Farm Site entrance off the N15 National Road to the Clogher 110kV substation.
 - The **'BMEP Site'** refers to the areas of the Site to be managed for hen harrier habitat and peatland habitat enhancement.
- › The **'Grid Connection'** refers to the 110kV underground cabling route, joint bays, and ancillary infrastructure connecting the existing onsite 110kV substation (within the Wind Farm Site) to the Clogher 110kV substation.
- › The **'Permitted Development'** refers to the 19-turbine wind farm and ancillary infrastructure originally granted permission under ABP-300460-17 (and subsequent amendments) and included the Grid Connection under planning condition no. 1.
- › The **'Existing Development'** refers to all works carried out to date for the Meenbog Wind Farm.
- › The **'Prospective Development'** refers to all works necessary to complete construction, operate, and ultimately decommission the Meenbog Wind Farm.
- › The **'Subject Development'** comprises both the Existing Development and the Prospective Development and shall be known as the Meenbog Wind Farm.
- › The **'2017 EIAR'** refers to the original EIAR for the Permitted Development granted permission under ABP-300460-17

- › The '**November 2020 Peat Slide**' means the peat slide or peat movement that occurred on 12th November 2020, at the Wind Farm Site.
- › '**proposed turbines**' refers to the 19 no. proposed turbines associated with the Prospective Development
- › '**proposed turbine locations**' refers to the 19 turbine locations associated with the Subject Development

The location of the Site is shown outlined in Figure 1-1. Please note that no works associated with the Existing Development occurred on the BMEP Site. Biodiversity enhancement measures form part of the Prospective Development and therefore the baseline environment of the BMEP Site, as well as potential impacts and effects associated with that are discussed exclusively in the EIAR for the Prospective Development. The BMEP Site does not form part of the primary rEIAR study area for the purposes of this rEIAR. The primary rEIAR study area is shown in red in Figure 1-2.

This rEIAR provides a description of:

- 1) The baseline environment as of November 2019; and
- 2) All works carried out from November 2019 to date.

This rEIAR, along with the EIAR, rNIS and NIS, accompanies the planning application for the Subject Development which will be made to the Commission. The rEIAR/EIAR and rNIS/NIS contain the information necessary for the Commission to complete the Environmental Impact Assessment (EIA) and Appropriate Assessment (AA) as required for this planning application.

For clarity in this rEIAR, all elements of the Subject Development will be assessed cumulatively and in combination with other projects to aid the Commission in carrying out an EIA

The primary rEIAR Study Area is shown in green in Figure 1-2, however, each individual topic, i.e. chapter, has its own study area for assessment purposes relevant to that topic which will be clearly identified in the relevant chapters. The rEIAR study area encompasses an area of approximately 901 hectares (ha). The as-built infrastructure footprint of the Existing Development measures approximately 32.6 ha (including the onsite 110kV substation which is located within the Wind Farm Site), which represents approximately 3.7 % of the Wind Farm Site (892 ha). A full and detailed description of the Existing Development is contained in Chapter 4: Description of the Existing Development of this rEIAR.

1.1.2 Site Location

The Wind Farm Site and the Grid Connection Site together measure approximately 901 hectares and are located within a rural, agricultural setting in County Donegal. The Wind Farm Site is located within a rural, agricultural setting in County Donegal approximately 8 km southwest of the twin towns of Ballybofey and Stranorlar and approximately 12 km northeast of Donegal Town at its nearest point. The Grid Connection Site extends southwest from the Wind Farm Site for approximately 6 km along the N15 National Road towards Donegal Town before exiting the N15 to the southeast and following Local Roads, adjacent agricultural land and private access track to the Clogher 110kV substation.

Table 1-1 below shows the townlands within which the Existing Development is located, distinguishing between the Wind Farm Site and the Grid Connection Site. The Wind Farm Site borders County Tyrone in Northern Ireland.

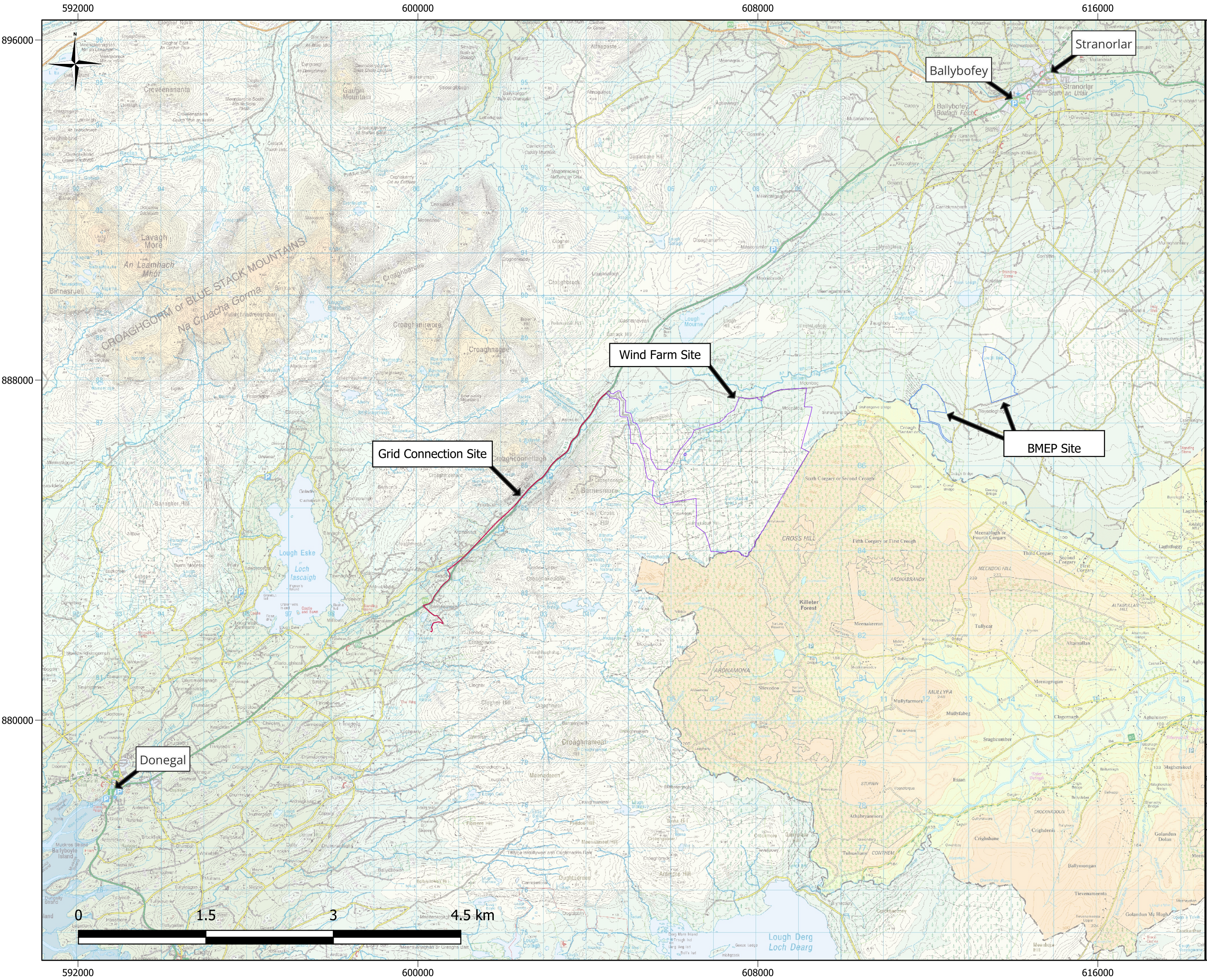
Current land-use at the Wind Farm Site is comprised of the partially constructed Meenbog Wind Farm and areas of commercial forestry and blanket bog. The surrounding land-use predominantly comprises peat bogs, commercial forestry and other seminatural areas with limited residential use along local roads. There is an existing quarry located adjacent to the Wind Farm Site in the townland of

Croaghonagh. Existing access to the Wind Farm Site is from the N15 National Road in the northwest of the Wind Farm Site and the local road north of the Wind Farm Site. The N15 National Road runs south-west to north-east, with the Wind Farm Site lying to the south-east of the road. The Grid Connection Site extends along the N15 National Road to the L-2595 Local Road, then proceeds to the L-1985 Local Road where it travels east along the road and through agricultural lands parallel to the local road before continuing along the L-19852 Local Tertiary Road and finally following a private road to reach the Clogher 110kV substation. The Clogher substation is situated approximately 6.5 km southwest of the on-site 110kV substation within the Wind Farm Site. The grid reference co-ordinates for the approximate centre of the Wind Farm Site are X 607126.00 Y 885870.00 (ITM).

The townlands within which the Wind Farm Site and Grid Connection Site are located are listed in Table 1-1. All townlands are located in Co. Donegal.

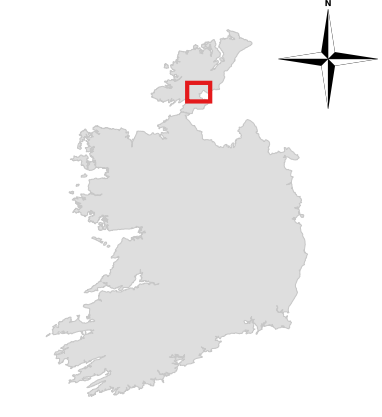
Table 1-1 Townlands involved in the Existing Development

Wind Farm Site	Grid Connection Site
Meenbog	Ardinawark
Croaghonagh	Keadew Upper
	Keadew Lower
	Cullionboy
	Cashelnavean
	Tawnawully Mountains
	Friarsbush



- Map Legend
- Wind Farm Site Boundary
 - Grid Connection Site Boundary
 - BMEP Site Boundary

Spatial Reference
Name: IRENET95 Irish Transverse Mercator
Datum: IRENET95
Projection: Transverse Mercator

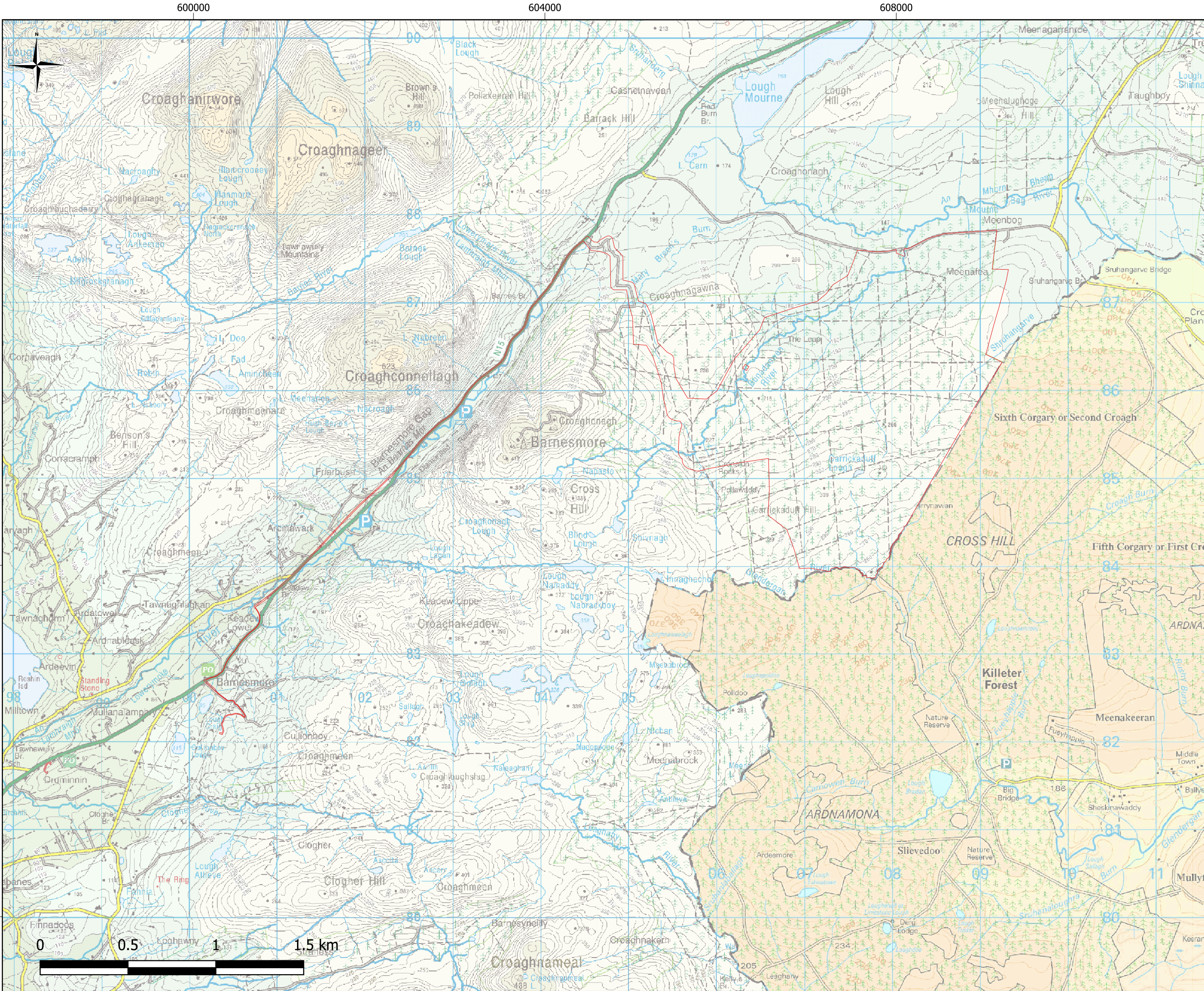


SITE LOCATION - NOT TO SCALE

Site Location Context		
Project Title		
Meenbog Wind Farm, Co Donegal		
Project No.	Drawing No.	Scale
240505	Figure 1-1	1:80,000
Drawn by	Checked by	Date
EON	TB	24/06/2026



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



Map Legend

rEIAR Site Boundary

Spatial Reference
Name: IRENET95 Irish Transverse Mercator
Datum: IRENET95
Projection: Transverse Mercator

SITE LOCATION - NOT TO SCALE

rEIAR Site Boundary

Meenbog Wind Farm, Co. Donegal

Project No.	Drawing No.	Scale
240505	Figure 1-2	1:40,000
Drawn by	Checked by	Date
EON	TB	25/06/2026

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

1.1.3 Brief Project History

Planning permission for the Permitted Development was originally granted under the Strategic Infrastructure Development (SID) process by the Commission (ABP Ref: PA05E.300460) on 25th June 2018, for a 19 no. turbine wind farm development in Meenbog (and surrounding townlands), Co. Donegal, subject to 20 no. conditions. It included permission for a 110kV underground cabling grid connection to the Clogher Substation in the townland of Cullionboy under condition no. 1 of the permission. This planning permission was altered on 7th June 2019, in accordance with section 146B(3)(a) of the Act where it was confirmed that the use of a larger turbine rotor diameter was considered non-material (ABP-303729-19).

Construction work commenced at the Wind Farm Site in November 2019. Approximately 90% of the civil engineering works, including wind farm access roads, turbine hardstands, turbine foundations, borrow pits and peat cells, were completed over the following 12-month period up to November 2020. Works on the electricity substation and associated underground cabling connection to the grid continued until completion in the second quarter of 2021.

On 12th November 2020, during the construction of a permitted access road to turbine T7, a peat slide or peat failure occurred within the Wind Farm Site (November 2020 Peat Slide). The works that were underway at the time adjacent to where the peat slide occurred, were fully permitted and were being undertaken in line with the project design that had been subject to both EIA and AA. Following the November 2020 Peat Slide, a multi-agency investigation of the incident was led by the Environmental Protection Agency (EPA). During this investigation the EPA engaged the services of ARUP Consulting Engineers, to advise and represent the EPA on the geotechnical and peat stability aspects of the investigations.

After the investigation of the November 2020 Peat Slide, a number of deviations from the permitted plans for the Meenbog Wind Farm were identified by Donegal County Council (DCC). For the avoidance of doubt, following investigations by DCC (and SLR on their behalf), EPA (and ARUP on their behalf), and Planree (and FTC and Ionic on their behalf), nothing has emerged to indicate that any deviation from the original permitted development was in any way responsible for the November 2020 Peat Slide.

A programme of remedial works to address the effects of the November 2020 Peat Slide were undertaken as part of a direction issued by Donegal County Council (DCC) under Section 12 of the Local Government (Water Pollution) Act, 1977 and therefore fall within the scope of Schedule 2, Class 41 of the Planning and Development Regulations 2001 (as amended) as Exempted Development. For this reason, these remedial works are not considered part of the Existing Development.

Following extensive additional site investigation work, geotechnical analysis, site meetings and reporting undertaken by both Fehily Timoney and Company and Ionic Consulting Ltd. (now AFRY Ireland Ltd) on behalf of Planree, and review by ARUP on behalf of the EPA, the EPA, by notice dated 28th September 2021, concluded that *“The issues identified in correspondence from the EPA on the 29th July 2021 have been satisfactorily addressed. Compliance with the EPA Direction from 1st April is now confirmed. It is important that the mitigation measures proposed are implemented for the remaining works to be completed at the site. The detailed design for civil works should be informed by this updated assessment”*.

On 7 July 2022, the DCC Environment Section issued a letter confirming their satisfaction with the peat slide remediation works and closing the Section 12 notices issued. Following the closure of the Section 12 notices, works recommenced at the Wind Farm Site for a period from July to December 2022. During this period additional works were carried out on site roads, internal site ducting, hardstanding areas, borrow pits, and peat cells. This works ceased following a direction to cease works from DCC.

On 3rd April 2023 the DCC Planning Section commenced Section 160 proceedings against Planree Ltd to stop works on-site on the basis that the unauthorised development had taken place. A High Court judgement delivered on 10th of April 2024 found that as a result of the deviations from the consented plans, the entire development, as constructed to date, was considered unauthorised development. This decision was upheld by the Court of Appeal in a ruling issued on 18th of December 2024. This has led Planree limited to seek substitute consent to retain the Existing Development, and complete the works required to finish the Windfarm ie the Prospective Development.

The applicant is therefore applying under Section 177E of the Act for permission for the Subject Development. A detailed planning history of the Site and the Meenbog Wind Farm is provided in Chapter 2 (Background) of the rEIAR. Work on the construction of the wind farm has been halted pending the outcome of this application.

1.2 Legislative Context

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 as amended by the EIA Directive 2014/52/EU (the 'EIA Directive'), has been transposed into Irish planning legislation primarily by the Act and the Planning and Development Regulations 2001 as amended.

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

The remedial Environmental Impact Assessment (rEIA) will be undertaken by the Commission, as the competent authority.

Article 5 of the EIA Directive 2011/92/EU as amended by Directive 2014/52/EU provides where an EIA is required, the developer shall prepare and submit an environmental impact assessment report (EIAR). The information to be provided by the developer shall include at least:

1. a description of the project comprising information on the site, design, size and other relevant features of the project;
2. a description of the likely significant effects of the project on the environment;
3. 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;
4. 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;
5. a non-technical summary of the information referred to in points (a) to (d); and
6. 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 Act with which this rEIAR complies.

MKO was appointed as lead planning and environmental consultant on the Subject Development and commissioned to prepare this rEIAR in accordance with the requirements of the EIA Directive.

Part 2 of Schedule 5 of the Act, identifies classes and scales of development that require Environmental Impact Assessment (EIA). The relevant class of development in this case relates to *"installations for the harnessing of wind power for energy production (wind farms) with more than 5 turbines or having a*

total output greater than 5 megawatts”, as per Item 3(i) of the Schedule. The Subject Development exceeds 5 Megawatts in scale and proposes more than 5 turbines and therefore is subject to EIA.

The rEIAR provides information on the receiving environment and assesses the effects of the Existing Development on it and sets out the mitigation measures that were employed to avoid or reduce these effects. The function of this rEIAR is to provide information to allow the competent authority to conduct the rEIA of the Existing Development.

1.2.2 EIAR Guidance

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

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

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

1.3 The Applicant

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

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

1.4 Brief Description of the Subject Development

As discussed in Section 1.1, the Subject Development is comprised of two elements: the Existing Development and the Prospective Development. The Existing Development, which is the subject of this rEIAR is described in Section 1.4.1. For completeness the Prospective Development, which is the subject of a separate EIAR, which also accompanies this application, is briefly described in Section 1.4.2 below. The Existing Development is described in detail in Chapter 4 (Description of the Existing Development) of this rEIAR.

1.4.1 Existing Development

The Existing Development for which substitute consent is being sought consists of the retention of the following:

- › Upgrading of access junctions, tracks and roads, and construction of new site access roads;

- › 18 no. wind turbine foundations and hardstand areas at various stages of development;
- › A 110kV Electrical substation with 2 no. control buildings (with a combined floor area of 398.1 sqm) with welfare facilities, associated electrical plant and apparatus, security fencing and underground wastewater holding tank;
- › 110kV underground grid connection cabling (including joint bays, communication chambers, earth sheath links, and ancillary works along the underground electrical cabling route) connecting the wind farm 110kV substation to the Clogher Substation in the townland of Cullionboy. This cabling route is primarily located within the public road corridor;
- › Internal wind farm underground cabling at various stages of development;
- › 2no. temporary construction compounds (including 4 no. temporary site offices with a combined floor area of 66 sqm and 1 no. temporary security cabin with a floor area of 30.5 sqm);
- › 3no. borrow pits;
- › Peat and spoil management;
- › Forestry felling;
- › Site drainage and sediment control measures; and
- › All associated site development works.

1.4.2 Prospective Development

The Prospective Development for which permission is being sought will consist of the provision of the following:

- › 19 no. wind turbines, with an overall tip height of 156.5m, rotor diameter of 133m, and wind turbine hub height of 90m, and 1 no. meteorological mast with a height of 80m, and subsequent decommissioning of the wind turbines and meteorological mast, following a twenty five-year operational period from the date of full commissioning of the wind farm;
- › The completion of upgraded access junctions, tracks and roads, and construction of new site access roads;
- › The completion of construction of all 19 no. wind turbine foundations and hardstand areas, and the construction of a meteorological mast foundation;
- › Completion of internal wind farm underground ducting and cabling;
- › Continued use of and upgrade of 2no. temporary construction compounds (including 3 no. temporary site offices with a combined floor area of 121.5 sqm);
- › Continued use and extraction at the 3no. borrow pits;
- › Peat and spoil management, including site landscaping;
- › Forestry felling;
- › Site drainage and sediment control measures;
- › Biodiversity enhancement measures (including peatland habitat restoration and Hen Harrier habitat areas);
- › Recreation and amenity works (including carpark, play, picnic & amenity areas and pedestrian access paths to the wind farm roads);
- › Operational stage site signage; and
- › All associated site development works.

A detailed description of the Prospective Development is provided in the EIAR for the Prospective Development which accompanies this application.

1.5 Need for the Existing Development

The regularisation of the Existing Development together with the Prospective Development are the key components of the Subject Development. The need for the Subject Development, and by extension the need for the Existing Development is discussed below.

1.5.1 Overview

In July 2021, the Climate Action and Low Carbon Development (Amendment) Act 2021 was signed into law, committing Ireland to reach a legally binding target of net-zero emissions no later than 2050, and a cut of 51% by 2030 (compared to 2018 levels). On this pathway to decarbonisation, the Government published the Climate Action Plan 2025¹ reaffirming the renewable electricity target of 80% by 2030, without compromising security of energy supply and with the proposed deployment of a 9GW of onshore wind capacity by 2030. As it is partly constructed, the Meenbog Wind Farm is uniquely positioned to be operational before 2030 and would therefore contribute to this 2030 target.

In July 2025 the EPA published ‘Ireland’s Provisional Greenhouse Gas Emissions 1990-2024’² which stated a provisional total of national greenhouse gas emissions (excluding Land Use, Land Use Change and Forestry (LULUCF)) for 2024 to be 53.75 million tonnes carbon dioxide equivalent (MtCO₂eq) which is 2% lower than emissions in 2023 (55.01 MtCO₂eq). Ireland’s 2024 emissions were below the 1990 baseline for the second consecutive year.

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

Despite the progress in 2024 noted above, Ireland continues to face highly complex climate challenges, as detailed in an EPA publication from July 2024 titled ‘Ireland’s State of the Environment Report 2024’³. This report states that “Ireland has set a national objective to transition by 2050 to a climate-resilient, biodiversity-rich, environmentally sustainable and climate-neutral economy. Achieving this multifaceted objective will be the most complex and interconnected societal challenge for the next 25 years, and each step towards its achievement will present opportunities and challenges. Efficiencies will not get us there. Incrementalism will not get us there. Collectively we must shift our society to a sustainable trajectory.” The report further notes that the overall current assessment for climate in Ireland is ‘poor’ and “largely not on track to meet policy objectives and targets” and urges the full implementation of actions set out in the Climate Action Plan 2025 in addition to various other actions, for Ireland to have any chance of meeting its 2030 and 2050 climate targets. According to a SEAI report⁴ published in November 2024, there are significant projected gaps to all legally binding targets in Ireland, including national carbon budgets and sectoral emissions ceilings, and EU obligations on renewable energy, energy efficiency and greenhouse gas emissions. The report highlights the risks faced over the delayed achievement of the majority of Climate Action Plan targets, including renewable electricity, and that “actions to address these risks are critically important”.

¹ Department of Environment, Climate and Communications (2025) Climate Action Plan 2025

² Ireland’s Provisional Greenhouse Gas Emissions (1990-2024) <<https://www.epa.ie/publications/monitoring-assessment/climate-change/air-emissions/EPA-Provisional-1990-2024-GHG-Report-1716.pdf>>

³ <https://www.epa.ie/publications/monitoring-assessment/assessment/state-of-the-environment/EPA-SOE-Report-2024-BOOK-LOWRES-FINALfor-WEB.pdf>

⁴ <https://www.seai.ie/sites/default/files/publications/National-Energy-Projections-Report-2024.pdf>

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 2024⁵ indicated that Ireland is projected to fall short of the target of 43% of energy coming from renewable sources. While that figure in 2021 was 12.5%, Ireland's target of 31.4% is "*significantly below the share of 43% resulting from the formula in Annex II of Regulation (EU) 2018/1999 on the Governance Regulation of the Energy Union and Climate Action ('Governance Regulation')*".

The critical need for renewable energy is underscored by European legislation. RED III⁶ contains a presumption in favour of renewable projects being in the '*overriding public interest and serving public health and safety*'. This presumption was introduced prior to the enactment of RED III in the Council Regulation (EU) 2022/2577 (laying down a framework to accelerate the deployment of renewable energy) detailed below in Section 1.5.2.2. The prioritisation of renewable energy projects in European law has been acknowledged by the Irish judicial system, most recently in the Carrownagowan Wind Farm judgement ([2024] IEHC 549), the Toole II judgment ([2024] IEHC 610) and in particular the Coolglass Wind Farm judgement, in which the High Court ([2025] IEHC 1) emphasised the importance of national climate and renewable energy policy when assessing renewable energy projects, and the Supreme Court subsequently confirmed that public bodies must have regard to their statutory climate obligations when exercising their planning functions. RED III was transposed into Irish Law in August 2025.

As such, the Subject Development 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 Subject Development is driven by the following factors:

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

Section 2.4 of Chapter 2: Background to the Existing Development, presents a full description of the international and national renewable energy policy context for the Subject Development. Section 2.5 of Chapter 2 addresses climate change, including Ireland's current status with regard to meeting greenhouse gas emission reduction targets.

⁵ https://commission.europa.eu/publications/commission-recommendation-assessment-swd-and-factsheet-draft-updated-national-energy-and-climate-20_en

⁶ 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.

In November 2025, the World Meteorological Organisation (WMO) published the ‘*State of the Climate Update for COP30*’.⁷ The report provides a summary on the state of the climate indicators in 2025, between January and August, with sections on key climate indicators, extreme events and impacts. The key messages in the report include:

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

Following this in March 2026, the WMO published the ‘*State of the Global Climate 2025*’⁸ which contains the following key messages:

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

There has been a substantial worldwide energy transition, with renewable capacity additions increasing by nearly 60% from 2022, totalling 565 gigawatts (GW).⁹ This growth represents the highest rate observed in the past two decades, signalling a significant momentum toward achieving the clean energy goal set at the United Nations Framework Convention on Climate Change (UNFCCC) 28th Conference of the Parties (COP28) meeting in 2023, and reiterated at the 29th Conference of the Parties (COP29) in Azerbaijan in 2024 and at the 30th Conference of the Parties (COP30) in Belem in 2025, to triple renewable energy capacity globally to at least 11,000 GW by 2030. Considering existing policies and market conditions, the International Energy Agency (IEA) predicts that there will be approximately 5,500GW of new renewable capacity becoming operational by 2030. This implies that global renewable capacity additions will continue to increase every year, reaching almost 940GW annually by 2030. Solar PV and wind together account for 95% of all renewable capacity growth through the end of this decade due to their growing economic attractiveness in almost all countries.

⁷ World Meteorological Organisation (2025) *State of the Climate Update for COP30* <<https://wmo.int/publication-series/state-of-climate-update-cop30>>

⁸ World Meteorological Organisation (2026) *State of the Global Climate 2025* <https://library.wmo.int/viewer/69807/download?file=WMO-1391-2025_en.pdf&type=pdf&navigator=1>

⁹ IEA (2024), *Renewables 2023*, IEA, Paris <<https://www.iea.org/reports/renewables-2023>>

The joint publication of WMO and International Renewable Energy Agency on Climate-driven Global Renewable Energy Potential Resources and Energy Demand in 2023¹⁰ 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.

1.5.2 European Renewable Energy Policy and Targets

1.5.2.1 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)¹¹ 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),¹² 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.

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 more recent Climate Action Plan (2024), which will ensure that renewable electricity continues to form the backbone of Irish renewable energy use for the coming decade and beyond.

Given the need to accelerate the EU's clean energy transition, RED was revised in 2023, and the amending Directive EU/2023/2413 (RED III)¹³ entered into force on 20 November 2023 and transposed into Irish law in August 2025. RED III amended the EU-wide overall 2030 RES target from 32% to at

¹⁰ 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>>

¹¹ Directive 2009/28/EC on the promotion of the use of energy from renewable sources. Available from: <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32009L0028>

¹² Directive (EU) 2018/2001 on the promotion of the use of energy from renewable resources (recast). Available from: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32018L2001>

¹³ Directive (EU) 2023/2413 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources and repealing Council Directive (EU) 2015/652. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202302413

least 42.5%, with an ambition to reach 45% by 2030¹⁴. Article 3(4a) of RED III requires Member States to establish a framework to enable the deployment of renewable energy to a level consistent with its national contribution to the EU's target and at a pace that is consistent with the indicative trajectories in Climate Action Regulation 2018/1999.

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

1.5.3 National Renewable Energy Targets

1.5.3.1 Climate Action Plan 2025

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

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

In April 2025, the Government published the most recent Climate Action Plan (CAP25)¹⁵. Following on from Climate Action Plans 2019, 2021, 2023, and 2024, CAP25 sets out the roadmap to deliver on Ireland's climate ambition. It aligns with the legally binding economy-wide carbon budgets and sectoral ceilings that were agreed by Government in July 2022 following the Climate Action and Low Carbon Development (Amendment) Act 2021, which commits Ireland to a legally binding target of net-zero greenhouse gas emissions no later than 2050, and the reduction of 51% by 2030 mentioned above. CAP25 sets out an ambitious course of action over the coming years to address the impacts that climate may have on Ireland's environment, society, economic and natural resources. CAP25 clearly recognises that Ireland must significantly step up its commitments to tackle climate disruption and identifies the need to increase the share of electricity demand generated from renewable sources by up to 80% where achievable and cost effective, without compromising security of electricity supply. The CAP also reaffirms targets for renewable electricity deployment of 9 GW of onshore wind capacity by 2030. As of December 2025, Ireland's installed capacity for wind generation in December 2025 was over 5GW, according to Wind Energy Ireland reporting¹⁶. With a renewable share of electricity generation at 80% in mind and a target of 9GW installed onshore wind by 2030, it is now more critical than ever that we continue to progress renewable energy development in Ireland so that we are successful in meeting our 2030 targets. Further detail on the EU 2030 targets is provided in Section 2.4.1 of Chapter 2: Background to the Existing Development.

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

¹⁴ European Commission 2023 Renewable Energy Directive <https://energy.ec.europa.eu/topics/renewable-energy/renewable-energy-directive-targets-and-rules/renewable-energy-directive_en>

¹⁵ Government of Ireland (2025) Climate Action Plan 2025 <<https://www.gov.ie/en/department-of-the-environment-climate-and-communications/publications/climate-action-plan-2025/>>

¹⁶ Wind Energy Ireland (February 2026) Wind Energy Report Annual & December 2025 <<https://windenergyireland.com/blog/irish-wind-farms-provided-a-third-of-our-power-in-2025/>>

A summary of the targets for electricity generation and transmission set out in CAP25 is outlined below:

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

It is estimated that the Subject Development, with an estimated installed capacity of 91.2MW (based on a 4.8MW turbine model) will result in the net displacement of approximately 53,000 tonnes of carbon dioxide equivalent (CO₂e) per annum.

1.6 Purpose and Scope of the rEIAR

The purpose of this rEIAR is to document the state of the environment prior to the commencement of the development on and in the vicinity of the Wind Farm Site and Grid Connection Site and to quantify the likely significant direct and indirect effects of the Existing Development on the environment. This document also identifies any mitigation measures that were put in place in order to protect the surrounding environment from the possibility of any negative impacts arising from the Existing Development.

It is important to distinguish the Remedial Environmental Impact Assessment (rEIA) is to be carried out by An Coimisiún Pleanála, from the rEIAR accompanying the planning application. The rEIA is the assessment carried out by the competent authority, i.e., An Coimisiún Pleanála, 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*
- a) *biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC*
- b) *land, soil, water, air and climate*
- c) *material assets, cultural heritage and the landscape*
- d) *major accidents and natural disasters*
- e) *the interaction between the factors referred to in points (a) to (e)*

This rEIAR provides the relevant environmental information to enable an rEIA to be carried out by the Commission relative to the Existing Development. The EIAR (for the Prospective Development) provides the relevant environmental information to enable an EIA to be carried out by the Commission. Together, these reports provide the relevant environmental information to allow the competent authority to carry out an Environmental Impact Assessment of the Subject Development. The information to be contained in the EIAR and rEIAR is prescribed in Article 5 of the revised EIA Directive described in Section 1.2 above.

1.7 Structure and Content of the rEIAR

1.7.1 General Structure

This rEIAR uses the grouped structure method to describe the existing environment, the potential impacts of the Existing Development thereon and the mitigation measures. Background information relating to the Existing Development, scoping and consultation undertaken and a description of the Existing Development are presented in separate sections. The grouped format sections describe the impacts of the Existing Development 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, hydrology and hydrogeology, air quality, climate, noise and vibration, landscape and visual, cultural heritage, material assets such as traffic and transportation, and vulnerability to major accidents and natural disasters, together with the interaction of the foregoing and a schedule of mitigation and monitoring measures.

The chapters of the rEIAR are as follows:

- 1) *Introduction*
- 2) *Background and Policy*
- 3) *Consideration of Reasonable Alternatives*
- 4) *Description of the Existing Development*
- 5) *Population and Human Health*
- 6) *Biodiversity (Flora and Fauna)*
- 7) *Ornithology*
- 8) *Land, Soils and Geology*
- 9) *Hydrology and Hydrogeology*
- 10) *Air Quality*
- 11) *Climate*
- 12) *Noise and Vibration*
- 13) *Landscape and Visual*
- 14) *Cultural Heritage*
- 15) *Material Assets (including Traffic and Transport)*
- 16) *Major Accidents and Natural Disasters*
- 17) *Interactions of the Foregoing*
- 18) *Schedule of Mitigation and Monitoring Measures*

This rEIAR also includes a Non-Technical Summary, which is a condensed and easily comprehensible version of this rEIAR document. The non-technical summary is laid out in a similar format to the main rEIAR document and comprises a description of the Existing Development followed by the existing environment, impacts and mitigation measures presented in the grouped format.

1.7.2 Description of Likely Significant Effects and Impacts

As stated in the EPA, 2022, an assessment of the likely significant impacts on the environment of a proposed 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 the rEIAR follows the definitions provided in the Glossary of Impacts contained in the EPA, 2022 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 and followed.

Table 1-2 presents the glossary of impacts as published in EPA, 2022. 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 rEIA employs a systematic approach, which can be replicated across all disciplines covered in the rEIAR. The consistent application of terminology throughout the rEIAR facilitates the assessment of the Existing Development 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
	Very significant	An effect which, by its character, magnitude, duration

Impact Characteristic	Term	Description
		or intensity significantly alters most of a sensitive aspect of the environment
	Profound	An effect which obliterates sensitive characteristics
Extent & 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

Impact Characteristic	Term	Description
	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
	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

Impact Characteristic	Term	Description
	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, duration and type, where possible. A 'Do-Nothing' impact is also predicted in respect of each environmental theme in the rEIAR. 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 rEIAR. Any potential interactions between the various aspects of the environment assessed throughout the rEIAR are presented in Chapter 17: Interactions of the Foregoing.

1.7.3 Structure of Assessment Chapters

Figure 1-3 below outlines the general structure of the assessment chapters (Chapters 5 to 16) that is used in this rEIAR. Where necessary some chapters may vary slightly from this structure and order due to the nature of topic assessed, however in all cases the key headings are addressed.



Figure 1-3

ASSESSMENT CHAPTER STRUCTURE - rEIAR

INTRODUCTION

A description of the project comprising information on the site, design, size and other relevant features.

ASSESSMENT METHODOLOGY

A description of data and methods used, the reasons for their selection, the limitations and difficulties encountered.

RECEIVING ENVIRONMENT

A description of the relevant aspects of the current state of the environment (baseline scenario) involving the collection and analysis of information on the condition, sensitivity and significance of relevant environmental factors which are likely to be significantly affected by the project.

SIGNIFICANT EFFECTS

A description of the likely significant effects of the project on the environment resulting from the construction phase.

TRANSBOUNDARY EFFECTS

Assessment of the potential for transboundary effects as a result of the Subject Development.

CUMULATION EFFECTS SUBJECT DEVELOPMENT

Assessment of cumulative effects of the Subject Development, any other relevant existing, permitted or proposed projects. Assessment of identified environmental effects of Prospective Development when considered cumulatively with other relevant plans, projects and other land uses .

IN-CUMULATION EFFECTS

This section considers the in-cumulation impact of the combination of the Existing Development and Prospective Development (the Subject Development).

CUMULATIVE EFFECTS - EXISTING DEVELOPMENT

Assessment of cumulative effects of the Existing Development, any other relevant existing, permitted or proposed projects. Assessment of identified environmental effects of Prospective Development when considered cumulatively with other relevant plans, projects and other land uses .

1.7.3.1 Cumulative Impact Assessment Methodology

To gather a comprehensive view of cumulative impacts on the above environmental considerations and to inform the rEIAR process being undertaken by the Commission, each relevant chapter within this rEIAR will address the potential for cumulative effects to arise, where appropriate.

In the first instance, an assessment of potential cumulative effects between the Existing Development and other relevant developments will be undertaken. Following this, an assessment of the identified environmental effects of the Existing Development, in cumulation with the anticipated environmental effects of the Prospective Development, will be undertaken in each relevant chapter. This allows for an assessment of the environmental effects of the Subject Development.

Finally, an assessment of potential cumulative effects of the Subject Development with other relevant developments will be carried out for the purpose of identifying what influence the Subject Development could potentially have, on the surrounding environment when considered cumulatively with relevant permitted, proposed and constructed projects and other land uses in the vicinity of the Site. This process flow is shown in Figure 1-3, above. As previously stated, the order of the cumulative assessment may vary but all three assessments are carried out within the relevant chapters.

1.8 Project Team

1.8.1 Project Team Responsibilities

The companies and staff listed in Table 1-3 were responsible for completion of the rEIAR of the Existing Development and the EIAR for the Prospective Development. Further details regarding project team members are provided below.

The rEIAR and 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 the rEIAR and EIAR are summarised in Section 1.8.2 below. Each chapter of the rEIAR and EIAR has been prepared by a competent expert in the subject matter.

Table 1-3 Companies and Staff Responsible for rEIAR and EIAR Completion

Consultants	Principal Staff Involved in Project	rEIAR and EIAR Input
MKO Tuam Road, Galway, H91 VW84.	Brian Keville (BK) Michael Watson (MW) Sean Creedon (SC) Eoin O'Sullivan (EOS) Thomas Blackwell (TB) Robert Kennedy (RK) Karen O'Neill (KON) Keelin Bourke (KB) Emma Prior (EP) Evan Connolly (EC) Colm Ryan (CR) Evelina Sadauskaite (ES) Sean McCarthy (SMC) Katie Fleming (KF) Pat Roberts (PR) John Hynes (JH) Aoife Joyce (AJ) Matthew Kieran (MK) Caiti Farren (CF) Aran von der Geest Moroney (AGM) Dervla O'Dowd (DOD) Pdraig Cregg (PC) Susan Doyle (SD) Katy Beckett (KBT) Jack Workman (JW) Dija Mazonaite (DM) Brian O'Carroll (BOC) Killian Devereux (KD) Gabriela Oliveira (GO)	Project Managers, Scoping and Consultation, Preparation of rNIS and NIS, and the following sections of the rEIAR and EIAR: 1. Introduction 2. Background and Policy 3. Considerations of Reasonable Alternatives 4. Description of the Existing Development / Description of the Prospective Development 5. Population & Human Health 6. Biodiversity (Flora and Fauna) 7. Ornithology 10. Air Quality 11. Climate 13. Landscape & Visual 15. Material Assets (non-Traffic) 16. Major Accidents and Natural Disasters 17. Interactions of the Foregoing 18. Schedule of Mitigation and Monitoring Measures
Hydro Environmental Services 22 Lower Main Street, Dungarvan, Co. Waterford.	Michael Gill (MG) Conor McGettigan (CMG) Nitesh Dalal (ND)	Drainage Design, Preparation of rEIAR and EIAR Sections: 8. Land, Soils & Geology 9. Hydrology and Hydrogeology

Consultants	Principal Staff Involved in Project	rEIAR and EIAR Input
		Flood Risk Assessment Water Framework Directive Assessment
Fehily Timoney & Company The Grainstore, Singletons Lane, Bagnelstown, Co. Carlow.	Ian Higgins (IH) Tom Clayton (TC)	Preparation of Peat and Geotechnical Stability Assessment and Peat and Spoil Management Plan
AWN The Tecpro Building, Clonshaugh Business & Technology Park, Dublin 17.	Dermot Blunnie (DB) Mike Simms (MS) Alistair McLaurin (AML) Miguel Cartuyvels (MC)	Baseline Noise Survey, Preparation of rEIAR and EIAR Chapter 12. Noise and Vibration
Triturus Environmental Ltd. Unit 5, Anchor Business Park, Courtstown, Little Island, Co. Cork, T45 XN59	Ross Macklin (RM) Bill Brazier (BB)	Preparation of Aquatic Ecology Reports
Tobar Archaeological Service Saleen, Midleton, Co Cork.	Miriam Carroll (MC)	Preparation of rEIAR and EIAR Chapter 14. Cultural Heritage
Alan Lipscombe Traffic and Transport Consultants Claran, Headford, Co. Galway.	Alan Lipscombe (AL)	Preparation of rEIAR and EIAR Chapter 15. Material Assets - Traffic and Transport
AGL Consulting Suite 2, The Avenue, Beacon Court, Dublin 18, D18 EOK5.	Conor O'Donnell (COD)	Peer Review of Peat Stability Risk Assessment & Peat and Spoil Management Plan for Existing and Prospective Developments
Tom Gittings 3 Coastguard Cottages, Roches Point, Whitegate Co Cork, P25 HN60	Tom Gittings (TG)	Peer Review of rEIAR and EIAR Chapter 7. Ornithology Chapter

A Statement of Authority is included in each chapter of this rEIAR 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. A list of ornithological surveyors who took part in

ornithological surveys for the Subject Development is provided in Appendix 7-1 to the accompanying EIAR.

1.8.2 Project Team Members

1.8.2.1 MKO

Brian Keville B.Sc. (Env.)

Brian Keville has over 20 years' professional experience as an environmental consultant having graduated from the National University of Ireland, Galway with a first-class honours degree in Environmental Science. Brian was one of the founding directors of environmental consultancy, Keville & O'Sullivan Associates Ltd., prior to the company merging in 2008 to form McCarthy Keville O'Sullivan Ltd. Brian's professional experience has focused on project and environmental management, and environmental impact assessments. Brian has acted as project manager and lead-consultant on numerous environmental impact assessments, across various Irish counties and planning authority areas. These projects have included large infrastructural projects such as roads, ports and municipal services projects, through to commercial, mixed-use, industrial and renewable energy projects. The majority of this work has required liaison and co-ordination with government agencies and bodies, technical project teams, sub-consultants and clients.

Michael Watson BA. MA. CEnv. 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 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 is a member of the MKO senior management team and leads a team of highly skilled environmental professionals working on EIAR for large-and medium scale Renewable Energy infrastructure. Over a 24-year period, Sean has overseen and directed the submission of range of large and medium scale renewable energy planning applications for wind (offshore and onshore), solar, biogas, battery and hydrogen developments, 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. Sean holds an MSc from NUI Galway and a Diploma in Project Management from Institute of Project Management Ireland.

Eoin O'Sullivan M.Sc B.Sc

Eoin O'Sullivan is a Project Director at MKO with over 15 years of experience in the assessment of a wide range of energy and infrastructure related projects and working in the fields of environmental and human health risk assessment, waste management, waste policy and permitting. Eoin has wide experience in the project management of large scale infrastructural projects and brownfield developments which includes all aspects of geo-environmental and geotechnical investigation. Eoin holds a BSc (Hons) in Environmental Science & Technology and a MSc in Environmental Engineering. Prior to taking up his position with MKO in July 2017, Eoin worked as a Chartered Senior Engineer with CGL in Surrey, UK. Prior to this Eoin worked as a Project Engineer with RPS Consulting Engineers in Belfast. Eoin has wide experience in the project management of large scale brownfield developments and has routinely undertaken detailed quantitative risk assessment for the protection of controlled waters and ground gas risk assessments. Eoin has also experience in completing Environmental Impact Assessment Reports for renewable energy projects, quarries and a number of non-hazardous landfill sites and anaerobic digesters for both public and private clients. Eoin's key strengths include project strategy advice for a wide range and scale of projects, project management and liaising with the relevant local authorities, Environmental Protection Agency (EPA) and statutory consultees as well as coordinating the project teams and sub-contractors. Eoin is a Chartered Member of the Chartered Institute of Water and Environmental Management and Chartered Environmentalist with the Society of Environment.

Thomas Blackwell BA. MSc.

Thomas is a Senior Environmental Consultant with over 20 years of progressive experience in environmental consulting. Thomas' professional experience includes managing Environmental Impact Assessments, environmental permitting, environmental due diligence and compliance, and general environmental assessment on behalf of clients in the renewable energy, mining, solid waste management, residential and commercial development, and public sectors. Thomas also has extensive experience in environmental and ecosystem restoration design, project management, and construction oversight. Thomas' multi-sector experience working on projects in multiple jurisdictions has allowed him to develop a wealth of knowledge and understanding of the challenges involved in guiding complex project through the regulatory and planning process.

Robert Kennedy BSc. MSc.

Robert is a Project Environmental Scientist working as part of MKO's Renewables Team. Having joined the company in June 2022, Robert has over 4 years' experience in renewable energy consulting. Robert holds a BSc in Environmental Biology and an MSc in Environmental Policy, both from University College Dublin. Robert's key strengths and areas of expertise are in project management, environmental impact assessment, renewable energy, report writing, and research. Since joining MKO, Robert has worked with and coordinated large multi-disciplinary teams involved in the production of EIA Reports for large-scale renewable energy developments. Robert's experience spans a broad range of wind energy developments, including applications for new onshore and offshore wind farms, lifetime extension and repowering projects, and substitute consent. Robert also played a key role in developing MKO's new service offering around Biodiversity Net Gain and other nature-positive mechanisms. Prior to taking up his position with MKO, Robert worked in various roles in Canada and Ireland, giving him a broad mix of skills and experience to apply to his current role with MKO. Robert also holds a membership with the Institute of Sustainability and Environmental Professionals (ISEP).

Karen O'Neill BA. MSc.

Karen O'Neill is a Project Environmental Scientist with MKO with over 5 years of experience in private consultancy. Karen holds a BA (Joint Hons) in Geography and Archaeology, and a MSc (Hons) in Environmental Science where she focused her studies on environmental and planning policy. Karen's

key strengths and expertise are project management, report writing and review, and preparation of Environmental Impact Assessment Reports. Through previous roles, Karen has been involved as part of the project delivery team for a range of renewable energy infrastructure projects, including onshore and offshore wind energy developments, and multifaceted projects comprising wind energy, solar energy, battery storage and associated electrical infrastructure. Responsibilities for same included feasibility and constraints analysis, project management, draft and review of various EIAR chapters, mapping, and engagement with stakeholders.

Keelin Bourke BSc. MSc.

Keelin is an Environmental Scientist with MKO, with over 2 years' experience in private consultancy, having joined the company in September 2023. Keelin holds a BSc (Hons) in Environmental Science from University College Cork and an MSc (Dist) in Environmental Engineering from Trinity College Dublin. Keelin's current key strengths and areas of expertise are in environmental mapping, environmental surveying, and environmental report writing. Keelin has experience in conducting environmental impact assessments of a broad range of topics, including population and human health assessments, air quality assessments, assessments of built services and infrastructure and major accidents and natural disaster risk assessments for both onshore and offshore wind energy projects. Prior to taking up her position with MKO, Keelin worked as an Environmental Health and Safety Officer in an EPA licensed Waste Transfer Facility in Cork City. Since joining MKO, Keelin has become a member of the MKO Environmental Renewables Team and has been involved in preparing and managing Environmental Impact Assessments and in leading large multi-disciplinary teams in order to produce robust Environmental Impact Assessment Reports for large-scale onshore and offshore wind energy developments.

Emma Prior BA. MSc.

Emma Prior is an Environmental Scientist with MKO, with over a year's experience in private consultancy, having joined the company in September 2024. Emma holds a first-class Honours BA (Hons) in Geography & Human Development from Dublin City University and a Master of Science Degree in Environmental Resource Management from University College Dublin achieving a first-class honours Thesis. Emma's key strengths and areas of expertise are in environmental geography, field research, communication, and teamwork. Emma is skilled in report writing and QGIS mapping, with experience across a diverse range of projects including wind farms, wastewater treatment plants, quarries, and residential developments. Since joining MKO, Emma has experience in the preparation of EIA Scoping Reports, Construction Environmental Management Plans, EIA Screening Determinations, EIA Report Chapters including assessments, and Environmental fieldwork including surface and groundwater monitoring.

Evan Connolly BSc. MSc.

Evan is an Environmental Scientist with MKO within the Renewables team having joined the company in September 2024, with over a year's experience in private consultancy. Evan holds a B.Sc. in Earth and Ocean Science from the University of Galway and an interinstitutional M.Sc. in Sustainable Resource Management: Policy & Practice from University of Galway and University of Limerick. Evan's strengths and areas of expertise are in environmental sustainability, geology, hydrology and oceanography. Since joining MKO Evan has been involved as an Environmental Consultant on a range of wind energy infrastructure projects. Within these projects Evan has been responsible for the drafting and reviewing of EIAR chapters, geological mapping as well as assisting with proposed project fee proposals and scoping on behalf of clients.

Colm Ryan BA. MSc.

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

Evelina Sadauskaite BSc. MSc.

Evelina Sadauskaite has over four years' experience in private consultancy, having joined MKO as a Planner in December 2021. She holds a BSc (Hons) in Planning, Environment and Development and a Master's in City Design and Planning, both from Queen's University Belfast. Evelina has experience in a range of projects across various sectors, with focus on commercial, residential, renewable energy, and industrial projects. Her role involves providing development advice to clients, preparing and submitting planning applications, and contributing to Development Plan and Local Area Plan submissions. Her expertise lies in project and development management as well as collaborative planning. At MKO, she plays a key role in managing applications and coordinating project inputs, collaborating within a multidisciplinary team to deliver comprehensive EIS Reports.

Sean McCarthy BSc. MSc.

Sean McCarthy is a Project Director in the Planning Team at MKO with 15 years of experience in both private practice and local authorities. Sean holds a BSc. (Hons) in Property Studies from ATU and a Masters in Regional & Urban Planning for Heriot Watt University in Edinburgh. Prior to taking up his position with McCarthy Keville O'Sullivan in September 2015, Sean worked as a Planning Officer with the Western Isles Council in Scotland in the UK and prior to that worked as a Graduate Planner with Tipperary County Council. Sean is a chartered member of the Royal Town Planning Institute with extensive experience in residential, commercial, industrial, quarries and healthcare development projects. Sean has been involved in complex and large-scale development projects from inception through to planning permission both as a project manager and working as part of wider design teams. Sean has extensive experience in working on Strategic Housing Development Projects/Large Scale Residential Development Projects and EIAR projects. Within MKO, Sean plays a large role in the management and confidence building of junior members of staff and works as part of a large multi-disciplinary team to produce planning applications.

Katie Flemming BA. MSc.

Katie Fleming is a Planner with MKO with over two years' experience having joined the company in April 2024. Katie holds a BA (Hons) in Geography and a Masters in Planning and Development. Katie's key strengths and areas of expertise are in report writing and research. Since joining MKO Katie has been involved in a range of projects across multiple sectors including solar renewables, healthcare, commercial and residential. Through her career to date, Katie has gained experience in the preparation of planning inputs required for Planning Applications, preparation of briefing notes and preparation of Response to Grounds of Appeal Reports.

Pat Roberts B.Sc. (Env.)

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

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

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

John's key strengths and areas of expertise are in Appropriate Assessment of plans and projects, Ecological Impact Assessment, Flora and Fauna survey methods and design, project management and project strategy. John is experienced as a coordinator of 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.

Aoife Joyce BSc. MSc.

Aoife Joyce is a Project Director (Ecology) with over 5 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.

Matthew Kieran BA

Matthew is an Ecologist with MKO and holds BA in Environmental Science with Ecology from ATU Sligo. Matthew has over two year's experience in private consultancy, having joined in June 2024. Prior to taking up his position with MKO, Matthew worked as a Seasonal Field Surveyor with ACRES Donegal with a good knowledge in habitat mapping, species identification of both fauna and flora, impacts on biodiversity and working in protected sites. Matthew's key strengths and area of expertise are in ecological fieldwork, ArcGIS and ESRI and appropriate assessments. Since joining MKO Matthew has been involved as an ecological consultant, surveying sites across the country for various processes. The majority of the work Matthew has done so far resides in the creation of appropriate assessments and habitat mapping along with the occasional bat surveys.

Caiti Farren BA(Hons)

Caiti is a Practitioner Ecologist with MKO with over three years of ecological experience. Caiti holds BA (Hons) in Biological and Biomedical sciences in TCD, with a specialisation in Botany. Prior to taking up her position with MKO in September 2023, Caiti worked as an Intern with Farm ZeroC in west Cork, a project with the aim of creating a carbon neutral dairy farm. During this time, Caiti helped to design, and then executed independently, plant and pollinator surveys of the farm. These surveys were designed to analyse the effect of improving habitats for nature under the new CAP eco-scheme 2024 on plant and pollinator species richness and abundance. Caiti's current key strengths and areas of expertise are in plant and pollinator identification, experimental design, survey design and writing. Since joining MKO, Caiti has become a member of the MKO Forestry Team which work on producing high quality Appropriate Assessment Screening Reports and Natura Impact Statements for a variety of clients. Caiti has since joined the General Ecology team and carries out fieldwork and produces high quality Natura Impact Statements and Ecological Impact Assessments for the General Ecology team. She also carries out Ecological Clerk of Works site visits. She is also a member of the MKO Ecology Training Committee.

Aran von der Geest Moroney BSc (Hons)

Aran von der Geest Moroney is a Project Ecologist with MKO having joined the company in February 2021 and having over 5 years' experience in professional ecological consultancy. Aran holds a first-class honours BSc (Hons) in Ecology and Environmental Biology from University College Cork. Aran has also completed a Level 8 Special Purpose Award in Digital Mapping and GIS. Aran's key strengths and areas of expertise are wintering bird surveying and identification, freshwater macroinvertebrate identification and sampling, freshwater pearl mussel surveying, white-clawed crayfish surveying, electric fishing, bat surveys, GIS, habitat mapping, preparation of Stage 1 and Stage 2 Appropriate Assessment reports and Ecological Impact Assessment. Since joining MKO, Aran has been involved in a range of mixed use, residential, industrial, nature restoration, public services, wind energy and forestry projects. Aran has carried out a wide range ecological field surveys in accordance with NRA Guidelines, bat surveys, bird surveys, recording vegetation relevés and freshwater quality analysis using bioindicators. Aran has provided supervision as an ecological clerk of works in residential and wastewater infrastructure projects. Aran is trained in carrying out bat surveys, non-volant mammal surveys, bird

surveys, freshwater pearl mussel surveys, white-clawed crayfish surveys, electric fishing surveys, river condition assessment surveys and in taking vegetation relevés of vascular plants and has experience in habitat identification and habitat mapping. Within MKO, Aran is responsible for independently carrying out and planning a range of ecological field surveys in accordance with NRA Guidelines and carrying out Appropriate Assessment screenings, Natura Impact Statements, Ecological Impact Assessments, Biodiversity chapters for EIARs, Invasive Species Management Plans and Aquatic reports as part of the ecology team. Aran is a member of CIEEM, holds a current Bat Roost Disturbance licence and holds an IFM Certificate in Electric Fishing.

Dervla O'Dowd BSc.

Dervla O'Dowd is Associate Director with responsibility for MKO's dedicated Ornithology Team with 19 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.

Padraig Cregg M.Sc., B.Sc.

Padraig Cregg is employed as a Principal Ornithologist for MKO and has over 12 years' experience of working in environmental consultancies. In his role with MKO, he acts as technical advisor for the ornithology team helping to take projects through their full 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 undertakes to keep up-to-date and keep his colleagues updated on all emerging guidance, legislation, policies, initiatives, industry best practice and emerging trends and market opportunities. Padraig joined MKO in 2018.

Susan Doyle BSc. MSc.

Susan Doyle is a senior ornithologist at MKO. She completed her primary degree in Zoology (moderatorship in Natural Science) at Trinity College Dublin in 2013 and her master's degree in Ecological Assessment in University College Cork in 2014. Susan has 7 years' experience in ecological consultancy and has worked on wind farm projects, solar farm projects, residential developments, data centres, county council projects and National Parks and Wildlife Service projects. She specialises in ornithological consulting, including Environmental Impact Assessments and operational monitoring. Prior to joining MKO in October 2020, Susan gained experience through her involvement in several bird conservation projects, including protected curlew, seabirds, waders and waterfowl, as well as research into breeding hen harrier, satellite telemetry in migrant birds and avian diseases in Ireland, providing her with extensive experience in a wide variety of bird survey methods, data management and reporting.

Katy Beckett BA. MSc.

Katy is a Project Ecologist at MKO and holds a BA in Environmental Science and a MSc in Biodiversity and Conservation both from Trinity College Dublin. Katy has over two years' experience in ecological consultancy, undertaking Appropriate Assessment Screening Reports and Natura Impact Statements, Ecological Impact Assessments and EIAR chapters, and Biodiversity Management and Enhancement Plans. She has extensive experience in bird surveying for a range of developments including wind farms, greenways, amenity projects and masterplans, following best-practice guidance methodologies. She has gained further experience in bird surveying through her involvement with the British Trust for Ornithology and BirdWatch Ireland Countryside Bird Survey and Irish Wetland Bird Surveys.

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 5 years' experience managing all aspects of LVIA for a broad range of commercial infrastructure developments. Jack holds a BSc. in Psychology, and an MSc. in Coastal and Marine Environments (Physical Processes, Policy & Practice). 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. PGCert.

Dija Mazonaite is a Project Environmental Scientist - LVIA Specialist at MKO. Dija has over 3 years' experience in private consultancy, having joined in February 2023. Dija has a BSc (Hons) in Geography & Geosystems, PGCert in Marine Spatial Planning, 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.

Brian O'Carroll BDes.

Brian O'Carroll currently holds the position of Graphics Technician within MKO.

Brian has obtained a second-class honours degree (level 8) in Design – Visual communications from the Limerick School of art and Design. Prior to taking up his position with MKO in June 2023, Brian worked for close to 20 years as a graphic designer and Pre Press Manager and former Senior graphic designer within the print industry.

Brian has worked within the design department, as a graduate he joined Cube Printing Ltd, (Limerick) and worked his way from junior designer to senior and then lead designer for Cube. Brian then progressed to the design and Pre Press Manager of the well established Davis printers (Limerick). His key skills are the implementation of the skills acquired over the years in the Adobe Suite, primarily but not limited to Indesign, Photoshop, Lightroom and Illustrator. Communication and planning for print

are amongst Brian's greatest attributes. Brian is now fully versed in WindPro Software and is a key part of the Graphics Pod within MKO, has recently completed training in Pano2VR and Website design.

Killian Devereux BSc.

Killian is currently the Senior CAD Technician at MKO, he has over 10 years of drafting experience in various sectors of the building industry. He holds BSc (Hons) in Architectural Technology from Galway Mayo Institute of Technology. Prior to taking up his position with MKO in October 2022, Killian worked as a Structural CAD/BIM Technician for Tobin Consulting Engineers and as an Architectural Technician for some smaller-scale Engineering Consultants. He was primarily involved in a variety of Commercial / Residential projects where he was responsible for the structural drawing packages but also has experience working in RC concrete Drawings, Architectural and Civil drawings, FSC's /DAC's and one-off housing planning applications. His key strengths and areas of expertise are in Auto CAD, Revit, Cads RC and Google Sketch up. Since joining MKO Killian has been the lead CAD technician on multiple Renewable Energy Planning Applications.

Gabriela Oliveira B.Arch.

Gabriela Oliveira is a CAD Technician with MKO with over 8 years of experience specialising 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.

1.8.2.2 Hydro Environmental Services Ltd

Michael Gill P.Geo (BA, BAI, Dip Geol., MSc, MIEI)

Michael Gill (BA, BAI, Dip Geol., MSc, MIEI) is an Environmental Engineer and Hydrogeologist with over 24 years' environmental consultancy experience in Ireland. Michael has completed numerous geological, 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, Derrinlough WF and over 100 other wind farm related projects across the country.

Conor McGettigan BSc. MSc

Conor McGettigan is an Environmental Scientist with over 5 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 on peatlands.

Nitesh Dalal (B.Tech, PG Dip., MSc)

Nitesh 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).

1.8.2.3 Fehily Timony & Company Ltd

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

Ian Higgins

Ian is a Technical Director with Fehily Timoney and has 25 years' experience in geotechnical engineering and in the design and supervision of construction of bulk earthworks, geotechnical foundation design, geotechnical monitoring and reviewing, reinforced earth design and 3rd party checking of piling and ground improvement designs. Ian's experience also includes the design, supervision and interpretation of ground investigations, including desk studies, walkover surveys, hazard mapping of rock excavations and slopes.

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

Tom Clayton

Tom is a Chartered Engineer with 18 years' experience in geotechnical engineering, including over 12 years acting as geotechnical lead on major infrastructure and renewable energy projects.

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).

Tom was the Project Manager for the DECC / Geological Survey Ireland / National Parks and Wildlife Service scientific study into the three major peatland failures at Meenbog (Donegal), Shass Mountain (Leitrim) and Mount Eagle (Kerry), and was responsible for managing delivery of the project and overseeing the integration of multidisciplinary inputs across geotechnical, hydrological and environmental disciplines. He also acted in a senior technical review role for the study outputs. This project involved detailed assessment of the conditioning and triggering factors associated with peat failures, including rainfall, hydrology, slope, peat characteristics and land-use influences, and has informed national guidance and policy development in peatland stability.

In addition to this research work, Tom has extensive experience in peat stability assessments and EIAR geotechnical inputs for 30+ wind farm developments, including Ballivor, Sheskin South and Glenora Wind Farms. He has undertaken peat stability assessments in accordance with Scottish guidance for a

number of developments, including detailed desk studies, site walkovers, peat probing programmes and the development of mitigation strategies. His involvement in Kilgallioch Wind Farm in Scotland provides direct experience of Scottish peatland conditions and development constraints.

1.8.2.4 **AWN Consulting**

Dermot Blunnie BEng. MSc.

Dermot Blunnie (Senior Acoustic Consultant) holds a BEng in Sound Engineering, MSc in Applied Acoustics and has completed the Institute of Acoustics (IOA) Diploma in Acoustics and Noise Control. He has over 18 years of experience having worked 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 of all aspects of environmental surveying, noise modelling and impact assessment for various sectors including, energy, industrial, commercial and residential. Dermot specialises in wind farm noise modelling, compliance and complaint investigations.

Mike Simms BE. MEngSc.

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

Alistair Maclaurin BSc.

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 over 14 years of experience having worked in the field of acoustics since 2012. 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 various other environmental noise assessments for wind farms, infrastructure developments, and planning reports across the UK and Ireland.

Miguel Cartuyvels B.Eng (Hons)

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

1.8.2.5 **Tobar Archaeological Services**

Miriam Carroll BA. MSc.

Tobar Archaeological Services is a Cork-based company established in 2003. 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 has 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 EIS/EIAR stage through to

construction stage when archaeological monitoring is frequently required. Miriam holds a Degree in Archaeology (1993-1996) and a 2-year Masters in Methods and Techniques in Irish Archaeology (1996-1998) from UCC and has over 20 years' experience in private sector archaeology. Miriam has managed and co-ordinated numerous projects from commencement stage to completion on behalf of numerous small and large companies.

1.8.2.6 Alan Lipscombe Traffic and Transport Consultants

Alan Lipscombe

Alan is a competent expert in traffic and transport assessments with over 25 years' experience. In 2007 Alan set up a 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.

1.8.2.7 Triturus Environmental Ltd.

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.

1.8.2.8 AGL Consulting

Conor O'Donnell, BA, BAI, MS, FGS, CEng, MIEI, FConsEI

Conor is a Senior Geotechnical Consultant and Managing Director of AGL Consulting, based in Dublin, Ireland. He has an honours undergraduate degree in civil, structural and environmental engineering from Trinity College Dublin, and a master's degree in geotechnical engineering and structural mechanics from Cornell University in Ithaca, New York. He is a Chartered Engineer with Engineers Ireland, a Fellow of the Geological Society of London, and a Fellow Consulting Engineer with the Association of Consulting Engineers of Ireland with over 20 year of experience.

Conor has extensive experience with civil and earthworks design for wind farms and infrastructure works in Ireland and the UK and have developed a particular area of expertise in assessing and managing the risk of peat instability for wind farms on upland blanket bogs at planning, detailed design and construction stage.

He was the lead project geotechnical engineer responsible for managing the risk of peat stability for the completion of the civil works on the Derrybrien Wind Farm site after the peat slide in October 2003, which included the design, evaluation and testing of over 17.5km of floating roads across the site as well as geotechnical investigations and stability analyses to design repository sites to store peat excavated from 70 turbines and crane hardstanding areas and the substation site.

Since then he has carried out peat stability risk assessments and provided expert advice on geotechnical risk mitigation and management for several wind farms on upland blanket bogs including the Garvagh Glebe and Tullynahaw Wind Farms in Co. Leitrim and Co. Roscommon, the Grousemount Wind Farm in Co. Kerry, and the Crockagarran, Carrickatane and Crockdun Wind Farms in Co. Tyrone.

He has also provided expert advice and forensic investigation services to the Health and Safety Authority and insurance companies in relation to peat slides that occurred on wind farm sites in Ireland.

1.8.2.9 Tom Gittings

Tom Gittings BSc. PhD.

Tom Gittings is an ecologist with 27 years' experience in professional consultancy work and research. Tom specialises in ecological surveying, monitoring and evaluation, ecological impact assessment, habitat management, and avian, invertebrate, wetland and woodland ecology. He is currently working as an independent ecological consultant. His previous experience includes working for the RPS Group (a multi-disciplinary environmental consultancy) and carrying out research into forest and wetland biodiversity in the Department of Zoology Ecology and Plant Science at University College Cork. He has a BSc (Hons) and a PhD in Ecology and is a member of the Chartered Institute of Ecology and Environmental Management. His recent consultancy work includes assessments for planning applications (including Appropriate Assessments, Environmental Impact Statements, and expert witness work at oral hearings), large-scale habitat surveys, preparation of management plans, contributions to multi-disciplinary conservation plans, and specialist ecological survey and research.

Tom has specific expertise in ornithological assessments for wind farm projects. He has been involved in numerous wind farm projects. His input to these projects has variously included field surveys, collision risk modelling, population 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. He also has a wide range of other ornithological expertise, with a particular focus on waterbird ecology.

Tom has also lectured on Appropriate Assessment, Environmental Impact Assessment, Habitat Survey, Woodland Management, and Invertebrate Ecology to a number of courses in University College Cork and University College Dublin. Tom was the recipient of the Distinguished Recorder Award 2014 from the National Biodiversity Data Centre in recognition of his contribution to invertebrate recording in Ireland.

1.9 Difficulties Encountered

There were no technical difficulties encountered during the preparation of the rEIAR.

1.10 Viewing and Purchasing of the rEIAR

Copies of this rEIAR will be available online for the substitute consent application, including the Non-Technical Summary (NTS), on the Planning Section of the Commission website, under the relevant Planning Reference Number (to be assigned on lodgement of the application).

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

This rEIAR and all associated documentation will also be available for viewing at the offices of the Commission, and Donegal County Council. This rEIAR 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

Donegal County Council,
County House,
The Diamond,
Lifford,
Co. Donegal

This rEIAR 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 or rEIAR.

(<https://www.gov.ie/en/department-of-housing-local-government-and-heritage/services/eia-portal/>)