

# 1.0 INTRODUCTION

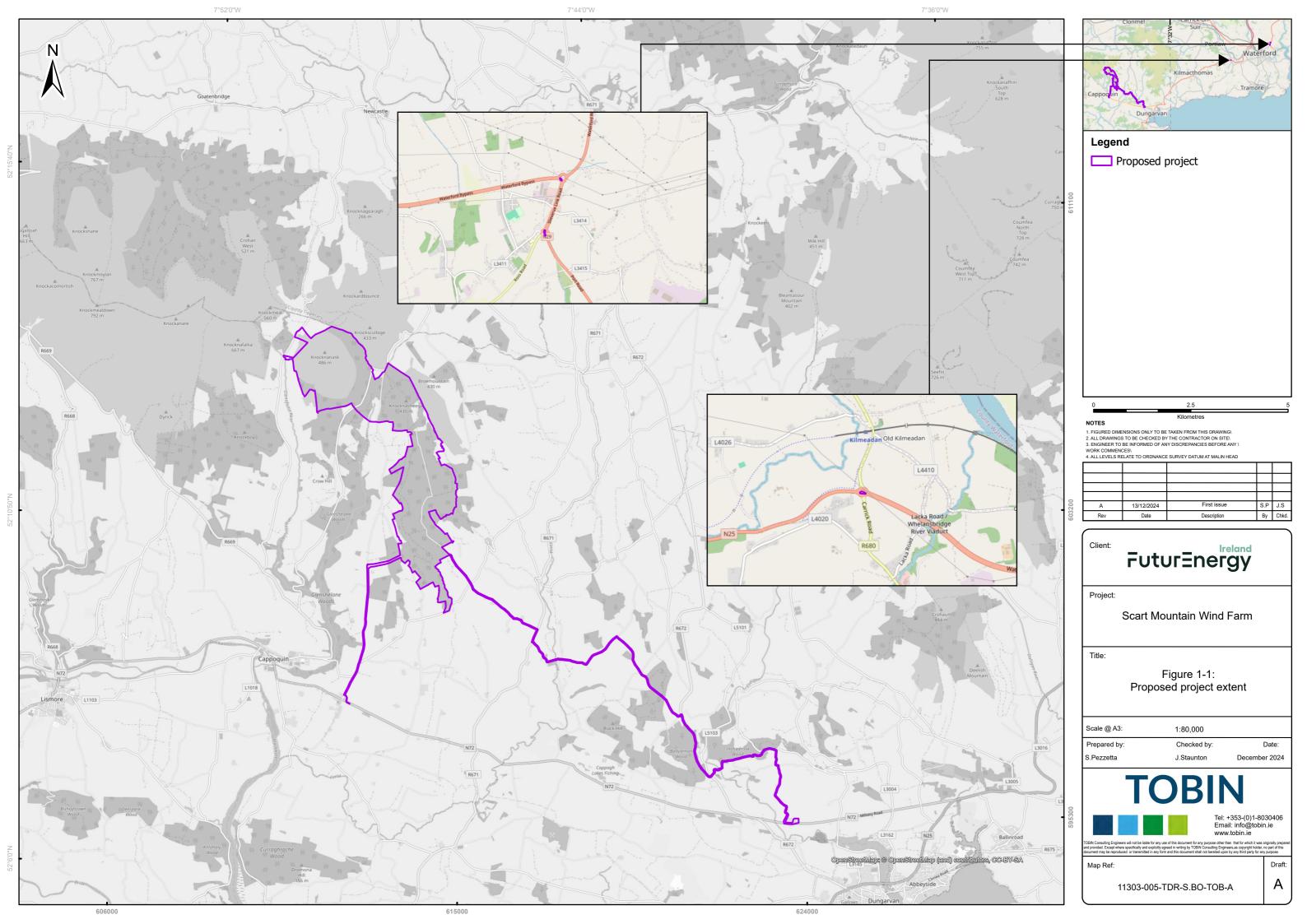
TOBIN Consulting Engineers (hereafter referred to as TOBIN) has prepared this Environmental Impact Assessment Report (EIAR) on behalf of FuturEnergy Scart Mountain Designated Activity Co. Ltd., who intend to apply to An Bord Pleanála for planning permission to construct the proposed Scart Mountain Wind Farm in County Waterford (which along with all of the associated infrastructure and works is hereafter referred to as the proposed project). The site of the proposed wind farm is located approximately 4 km northeast of Cappoquin, and approximately 13 km northwest of Dungarvan. The proposed wind farm will have an electrical output of between 85.5-108 MW.

The proposed project comprises a wind farm of 15 no. wind turbines and all associated infrastructure including turbine foundations, hardstanding areas, borrow pits, access tracks, 110kV grid connection and works along the road network for turbine/material delivery.

In this regard, it is proposed to supply the power from the Scart Mountain Wind Farm to the electricity network via 110kV underground cables (approximately 15.5 km cable length of which approximately 13.3 km of which is within the public road corridor) to the existing Dungarvan 110kV substation in the townland of Killadangan, Co. Waterford. The proposed project also comprises facilitating works on the public road network and at private properties to accommodate the delivery of turbine components. The proposed development refers only to the elements for which planning permission is being sought as part of this application, however this EIAR accounts for the overall proposed project.

A full description of the proposed project is provided in Chapter 2 (Description of the Proposed Project). A full set of planning drawings are available as Appendix 1-1 of this EIAR.

The project will be the subject of two main applications for planning permission/approval. The first for the wind farm itself along with the onsite substation and works associated with the turbine delivery route under section 37E of the Planning and Development Act 2000 as amended. The second for the grid connection, as it comprises development for the purposes of electricity transmission, under section 182A of the Planning and Development Act 2000, as amended. There will be a subsequent planning procedure utilised for the relatively minor works within the public road corridor where necessary. The entire project is assessed in this EIAR. Each technical chapter of this EIAR (Chapter 5 to 17) considers a study area to which its own assessment refers, however, the overall location of the proposed project and general EIAR study area is shown in Figure 1-1 and incorporates the proposed wind farm site, the electrical grid connection route (GCR) and turbine delivery route (TDR). The proposed wind farm site covers an area of approximately 981.4 hectares (ha).





# 1.1 BACKGROUND TO ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

Environmental Impact Assessment (EIA) is the process that examines the potential environmental effects of a proposed project. Where potential significant effects are identified, appropriate measures for the prevention and/or mitigation of effects are prescribed.

The EIA process consists of the preparation of an EIAR, the carrying out of consultations, the examination by the competent authority of the information presented in the EIAR and any supplementary information provided, followed by the reasoned conclusion by the competent authority on the significant effects of the project on the environment arising from the examination of the information presented. The EIAR is a statement of the effects, if any, that the proposed project would have on the environment and is used to inform the EIA process. This EIAR has been prepared by TOBIN on behalf of the Applicant.

The proposed project is subject to the EIA process as it falls within the project class specified in Schedule 5 of the *Planning and Development Regulations, 2001,* as amended. Schedule 5 sets out a comprehensive list of project types and development thresholds which are subject to EIA. Specifically, Part 2 Category 3(i) states that EIA is required for the following project type:

"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".

An EIA is required of the grid connection as it is an integral element of a project which requires an EIA (i.e. an Installation 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). This EIAR has been prepared in accordance with the requirements of the codified *Directive 2011/92/EU* as amended by *Directive 2014/52/EU* (hereafter referred to as the 'amended Directive'.

Further information on the legislative context for EIA is provided in Chapter 4 (Policy, Planning and Development Context).

#### 1.2 THE APPLICANT

The applicant for permission is FuturEnergy Scart Mountain Designated Activity Company (hereafter referred to as the applicant), which is owned by FuturEnergy Ireland. FuturEnergy Ireland is a joint venture company owned on a 50:50 basis by Coillte and ESB. FuturEnergy Ireland is actively looking to drive Ireland's transition to a low carbon economy, The company's ambition is to develop more than 1 GW of renewable energy capacity by 2030 and make a significant contribution to Ireland's commitment to produce 80% of electricity from renewable sources by the end of the decade.

#### 1.3 THE NEED FOR THE PROPOSED PROJECT

In terms of setting out the need for the proposed project, and renewable wind energy in general, it is important to place this proposed project in an international and national policy context from the perspectives of environment, energy and planning. Some of the key national policy targets and objectives are summarised here and are more fully described in Chapter 4 and the Planning Statement that accompanies this planning application. Some brief statistics and research on renewable energy use are also presented. This all gives context to the current dependency on imported fossil fuels in Ireland and emphasises the need for the proposed project in general and at this particular location.



#### **International Policy**

There are a number of global agreements which Ireland has agreed to and has committed to achieving, including United Nations Framework Convention on Climate Change, the Kyoto Protocol and its amendments, and the Paris Agreement. These (among others) set out a road map to decarbonise the world economies, while within Europe, there have also been a number of additional policies and legislation that Ireland must adhere to, including Europe 2030 Climate and Energy Framework, Renewable Energy Directive 2009/28/EC & Recast Directive 2018/2001/EU, the European Green Deal, REPowerEU Plan & Council Regulation (EU) 2022/2577 and Council Regulation (EU) 2022/1854 (EU Emergency Regulations). See below text (under Energy Security & Independence) in this section for information on the latter of these which is also the most recent.

Additional discussion around international policy is provided in Chapter 4 of this EIAR (Planning Policy & Development Context).

# **National Policy**

From a National perspective, the Government's *Climate Action Plan* 2024 is the key document which provides a roadmap for Ireland to meet its EU target to halve our emissions by 2030 and reach net zero no later than 2050. The action plan maintains the target from previous plans of 80% of electricity to be produced by renewable energy sources by 2030 with an indicative contribution target of 9.0 Gigawatts (GW) (i.e. 9,000 MW) to be provided from increased onshore wind capacity. In Ireland (as of May 2022 – latest data that is available at the time of writing), there is an installed wind capacity of 4,333 MW¹ which leaves a gap of 4,667 MW of wind energy capacity to be installed in order to meet the 2030 targets. In essence, a more than doubling of current wind capacity is needed. As such, given the timelines required for a wind farm to become permitted and operational, every commercial scale wind farm plays an essential role in achieving Ireland's renewable energy goals.

The Sustainable Energy Authority of Ireland (SEAI) *Energy in Ireland – 2022* (SEAI, December 2022)<sup>2</sup> states that 36.4% of electricity generated in 2021 was from renewable sources and that 29.5% of all electricity generated was from wind alone. The latest Monthly Energy Data<sup>3</sup> from the SEAI for the 12 month period up to and including October 2024 indicates that wind contributed 11,835 gigawatt hours (GWh) of electricity, which represents a contribution of approximately 40.6% of total domestic energy generation in GWh.

# **Energy Security & Independence**

Energy security comprises many diverse factors, including import dependency, fuel diversity, the capacity and integrity of the supply and distribution infrastructure, energy prices, physical risks, supply disruptions and emergencies. According to information published by the SEAI in  $2022^4$ , indigenous production accounted for 32% of Ireland's energy requirements in 1990, and only ever reached a peak of 34% since then. Ireland's dependency on imported energy has grown steadily since the 1990's, with a sharp fall in 2016 following the opening of the Corrib gas field. Since 2016 as the Corrib gas field production capacity has declined, Ireland's import dependency has increased to 80% in 2021.

<sup>&</sup>lt;sup>1</sup> https://windenergyireland.com/about-wind/the-basics/facts-stats (Accessed 17<sup>th</sup> August 2023)

<sup>&</sup>lt;sup>2</sup> https://www.seai.ie/publications/Energy-in-Ireland-2022.pdf (Accessed on 17<sup>th</sup> August 2023)

<sup>&</sup>lt;sup>3</sup> https://www.seai.ie/data-and-insights/seai-statistics/monthly-energy-data/electricity/ (Accessed on 17<sup>th</sup> August 2023)

<sup>&</sup>lt;sup>4</sup> https://www.seai.ie/publications/Energy-in-Ireland-2022.pdf Energy In Ireland - 2022 Report.



This dependence on fuel imports makes Ireland highly susceptible to price fluctuations in the international supply market and vulnerable to volatile international trade wars and political decisions. This is very apparent in the recent energy price situation since 2022. The EU Council Regulation 2022/2577<sup>5</sup> states that "the aggravated situation in the energy markets has substantially contributed to the general inflation in the euro area, slowing down economic growth across the Union. That risk will persist regardless of any temporary reduction of wholesale prices and will be even more pertinent next year...". The war in Ukraine demonstrated the volatility within the energy market and the importance of security of energy supplies. Under council regulation 2022/2577 a temporary measure, a rebuttable presumption, that "renewable energy projects are of overriding public interest and serving public health and safety" has been introduced. This measure aims to increase security of energy supply across the EU and reduce energy prices. Renewable energy is crucial to fight climate change and reduce dependency on fossil fuels. The regulation states that "the construction and operation of energy plants from renewable sources and the development of the related grid infrastructure should be given priority" at least where such a project is of public interest. This priority should only be given if appropriate species conservation measures are undertaken and if sufficient financial resources are made available for this purpose if required.

In this context, the addition of between 85.5–108 MW of installed wind energy capacity from the proposed project will improve our security of supply and reduce our reliance on energy imports.

#### **Carbon Pricing**

Carbon pricing also plays a role in establishing a need for the proposed project. The Government has committed to progressively raise the carbon tax rate to reach EUR 100 per tonne of carbon dioxide by 2030, while recycling revenue to prevent fuel poverty, finance climate-related investment and ensure a just transition <sup>6</sup>.

#### **Economic Benefit**

It should be noted that there is a considerable economic benefit to the development of wind farms nationally and specifically at this location. In the National context, a Pöyry report published in March 2014 entitled *The Value of Wind Energy to Ireland* stated that the sector could support 22,510 jobs in the construction stage and double the amount of existing jobs in the operational phase by 2030. It also projected an investment of €4.8 billion in the time period from 2020 to 2030. The potential local economic effect in the Waterford area will also be positive by bringing employment to the area during the construction works. A 2021 report by KPMG for Wind Energy Ireland estimated that jobs in the wind industry in Ireland could grow to over 7,000 by 2030. A 2018 report by Baringa<sup>7</sup> discusses the potential financial costs and savings of the use of renewable electricity for the end customer when compared to a fossil fuel use scenario. The report found that although there were some additional costs in certain areas associated with the use of renewable energy, there were also savings that could be made, and overall, there was a potential to make significant cost savings to the end customer by 2030 when compared to a purely fossil fuel scenario. Furthermore, a recent International Monetary Fund

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<sup>&</sup>lt;sup>5</sup>https://eur-lex.europa.eu/legal-

<sup>&</sup>lt;sup>6</sup> https://www.oecd.org/climate-action/ipac/practices/a-credible-carbon-tax-trajectory-for-ireland-a39128a3/ (Accessed on 23 Sept. 2022)

<sup>&</sup>lt;sup>7</sup> https://www.iwea.com/images/files/70by30-report-final.pdf



publication<sup>8</sup> revealed that fossil fuel subsidies in 2022 amounted to approximately 7.1 trillion dollars in 2022.

The proposed project will bring the south eastern region of Ireland closer to achieving carbon neutrality by providing a significant source of renewable electricity that will reduce the need for using fossil fuel-based energy. The proposed project will facilitate Waterford City and County Council in fulfilling many of their obligations and targets as discussed in Chapter 4 (Policy Planning and Development Context)

The development of renewable energy is a natural step in the evolution of locally generated electricity. Electricity generation has brought significant economic gain to many areas in Ireland over the years. Ireland is now on a path of swift and significant decarbonisation and the energy that we use is changing from fossil fuels to renewables, particularly wind. The potential to extract local, economic and societal gains is a major benefit associated with the development of renewable energy projects.

All renewable projects that are developed over the coming years will attract a significant community benefit fund for the local area which will bring significant opportunities for local communities.

#### 1.4 SITE LOCATION AND BACKGROUND

The overall proposed project is shown on Figure 1-1. The wind farm site (Figure 1-2 and Plates 1-1 and 1-2) extends to approximately 981.4 ha, of which approximately 827 ha is owned by Coillte and the remaining area is under third party land ownership.

The proposed wind farm site is located between Cappoquin, Bellinamult and Millstreet, in Co. Waterford. The site of the proposed wind farm is located approximately 4 km northeast of Cappoquin, and approximately 13 km northwest of Dungarvan.



Plate 1-1: Photo of the northern end of the site, looking northwest towards Knocknanask Mountain.

<sup>8 &</sup>lt;u>https://www.imf.org/en/Publications/WP/Issues/2023/08/22/IMF-Fossil-Fuel-Subsidies-Data-2023-Update-537281</u>





Plate 1-2: Photo within the site, looking southwest near Knocknasheega Mountain



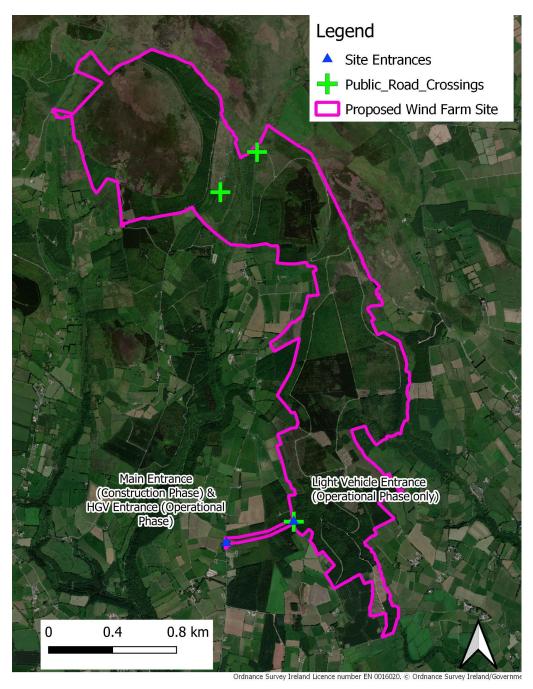


Figure 1-2 Wind Farm Site with aerial imagery, showing proposed site entrances



The landscape is predominately hilly to mountainous in the wider area, with the proposed wind farm site being located on an elevated area beside the Glenshelane river valley with a topography of between 130 m and 486 m Ordnance Datum (OD). The Knockmealdown Mountains to the north and northwest of the site are also elevated and are the most significant landscape features in the surrounding area.

Current land cover within the proposed wind farm site, based on the available Environmental Protection Agency (EPA) CORINE land cover maps and examination of aerial imagery, comprises predominantly of 'Coniferous Forest', with some areas classified as 'Peat Bogs' or 'Transitional Woodland-Shrub'. The wider landscape is predominantly comprised of 'Pastures' with some smaller areas classified as 'Land principally occupied by agriculture, with significant areas of vegetation'.

The main access to the site is via a local access road (L5055) which, along with the L1029, connects the site to the N72 to the south. The site will also be accessed via the L5054, which is only proposed during the operational phase and only for light vehicles.

In general terms, the area surrounding the proposed wind farm site can be described as rural with dispersed settlement type. Wind energy developments are an existing part of the wider landscape of the region.

The proposed GCR extends to the southeast from the wind farm onsite substation, and is mostly contained within the public road corridor, with the exception of where it is originates within the proposed wind farm site, in the area around the Colligan River crossing, and also within/adjacent to the existing Dungarvan substation.

#### 1.5 SUMMARY OF THE PROPOSED PROJECT

A summary of the project elements associated with the wind farm, onsite substation and associated works along the Turbine Delivery Route, under section 37E of the Planning and Development Act 2000, as amended, is as follows:

- Erection of 15 no. wind turbines with an overall blade tip height range from 179.5 m to 185 m inclusive, a rotor diameter range from 149 m to 163 m inclusive, a hub height range from 102.5 m to 110.5 m inclusive, and all associated foundations and hard-standing areas in respect of each turbine;
- Permanent upgrade to the existing forest entrance onto the L5055 local road in the townland of Lackenrea to be used as a construction entrance. It will also be used for operational phase access for HGVs only;
- Construction of 6 no. permanent site entrances to form 3 no. local road crossing points to enable site access during construction (on the L5054, L5055 and L1026 in the townlands of Moneygorm, Knocknasheega and Tooranaraheen respectively). The entrance associated with the crossing point on the L5054 will also function as an operational phase access for light vehicles only;
- Temporary improvements and modifications to 1 no. location at the junction of the N72 and the L1027 (known as Boheravaghera Cross or Affane Cross) to facilitate delivery of oversized loads and turbine delivery, in the townland of Crinnaghtaun West, Co. Waterford;
- Construction of 2 no. temporary construction compounds located within the northern and southern ends of the site, with associated temporary site offices, parking areas and security fencing;
- Erection of 1 no. Meteorological Mast of 100 metres above existing ground level for the measuring of meteorological conditions, with a lightning finial extending above the mast;



- 2 no. temporary borrow pits;
- Permanent construction of 11.9 km new internal site access roads and upgrade of 7.2 km existing internal site roads, to include passing bays and all associated drainage, all within the wind farm site;
- Construction of temporary and permanent drainage and sediment control systems;
- Construction of 1 no. permanent 110kV electrical substation including:
  - o 1 no. EirGrid control building containing worker welfare facilities and equipment store;
  - o 1 no. Independent Power Producer control building containing high voltage switch room, site offices, kitchen facilities, storeroom and toilet amenities.
  - All electrical plant and infrastructure and grid ancillary services equipment;
  - Parking;
  - o Lighting;
  - Security Fencing;
  - Wastewater holding tank;
  - Rainwater harvesting equipment;
  - All associated infrastructure and services including site works and signage;
- All related site works and ancillary development including signage, berms, landscaping, and soil excavation;
- Forestry felling (both permanent and temporary) to facilitate construction and operation including biodiversity enhancement measures, of the proposed project and any onsite forestry replanting; and
- All associated underground electrical and communications cabling connecting the wind turbines to the proposed wind farm substation.

A summary of the project elements associated with the proposed GCR, under section 182A of the Planning and Development Act 2000, as amended, is as follows:

- All works associated with the connection of the proposed wind farm to the national electricity grid, which will be via a 110 kV underground cable connection (approximately 15.5 km cable length of which approximately 13.3 km of which will be in the public road corridor) to the existing 110 kV Dungarvan Substation in the townland of Killadangan, Co. Waterford, including connection to existing infrastructure within that substation;
- 4 no. watercourse crossings on the proposed GCR (of which 3 are classed as rivers and 1 is a stream);
- All related site works and ancillary development including berms, landscaping, and soil excavation, and;
- A small area of permanent forestry felling to facilitate construction and operation of the proposed project.

Given the recent advances in turbine technology, and the anticipated lifespan of wind turbines, 35-years is the operational life for the proposed project. The duration of this operational life allows the proposed turbines to be used to generate clean renewable energy until they have reached the end of their life, rather than being removed prematurely. The proposed substation and proposed GCR cabling will be retained as a permanent element of EirGrid's network assets.

All elements of the proposed project, including the elements which form part of the overall project but are not part of the above two planning applications such as all works required on public roads to accommodate turbine delivery, have been considered and are addressed as part of this EIAR. Further information on the overall proposed project is provided in Chapter 2 (Description of the Proposed Project).



# 1.6 LEGISLATIVE CONTEXT AND DEVELOPMENT GUIDELINES

As mentioned above the proposed project is the subject of a number of separate planning applications. The first for the wind farm itself and on-site substation along with the works associated with the TDR. The second for the proposed GCR. Any minor works (mostly within the public road corridor) which are not included in these two main planning applications will also be subject to a future consenting processes.

The proposed project is subject to EIA and to the requirements inter alia set out in the following legislative provisions:

- Part X of the Planning and Development Act 2000, as amended; and
- The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018.

This EIAR will assess the entire project, and therefore will accompany both planning applications.

A Natura Impact Statement (NIS) has also been prepared for the proposed project and is provided separately with both planning applications.

#### Application 1: Wind Farm, Onsite Substation and Turbine Delivery Route

The proposed project will comprise 15 no. wind turbines with an electrical output of between 85.5-108 MW and is a project meeting the criteria for SID as set out in the 7<sup>th</sup> Schedule of the Planning and Development Act 2000, as amended (i.e. an "*installation for the harnessing of wind power for energy production… having a total output greater than 50 megawatts*"). As such, the planning application for this element of the project is submitted to An Bord Pleanála in accordance with Section 37E of the Planning and Development Act 2000 as amended. Correspondence from the An Bord Pleanala confirming the SID status of the application is included in Appendix 1-2.

# **Application 2: Grid Connection Route Infrastructure**

The electrical GCR infrastructure will supply the power from the proposed wind farm to the electricity network via 110kV underground cables to the existing Dungarvan 110kV substation in the townland of Killadangan, Co. Waterford. The proposed GCR is approximately 15.5 km in length, of which approximately 13.3 km is within the public road corridor. This element of the project is subject of an application under section 182A of the Planning and Development Act 2000 as amended. Correspondence from the An Bord Pleanala confirming the SID status of the application is included in Appendix 1-2.

#### 1.6.1 Information to be Contained in an EIAR

The minimum information that must be contained in an EIAR is set out in Part X of the *Planning and Development Act, 2000*, as amended, and Schedule 6 of the *Planning and Development Regulations, 2001*, as amended. They are also set out in the amended EIA Directive. The structure and content of this EIAR fully complies with these legislative requirements. This EIAR has also been prepared in accordance with the *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports*, published by the EPA in May 2022 as well as 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 (DoHPLG) in August 2018 and all others listed below.



This EIAR contains information on the scale and nature of the proposed project, a description of the existing environment, impact assessment of the proposed project, mitigation measures to reduce or negate potential effects on the receiving environment and residual effects.

This EIAR is arranged in four volumes, as follows:

Volume I: Non-Technical Summary (NTS);

• Volume II: Main Environmental Impact Assessment Report;

Volume III: Appendices; andVolume IV: Photomontages.

#### Volume I: Non-Technical Summary

This document provides an overview and summary of the EIAR using non-technical terminology. It is a standalone document and is intended to offer a clear and concise summary of the existing environment, characteristics of the project and mitigation measures for the project.

### Volume II: Environmental Impact Assessment Report

To allow for ease of presentation and consistency when considering the various elements of the environment, a systematic structure will be adopted for the main body EIAR. This structure is known as a *'Grouped Format'*. The structure is used for each particular environmental aspect, as provided below.

<u>Chapter 1 - Introduction</u>: this chapter of the EIAR provides an introduction and a brief background to the project and the legislative requirements under which the document is prepared. It describes the EIA consultation and scoping procedures, the structure of the EIAR, the study team and contributors to the EIAR.

<u>Chapter 2 - Description of the Proposed Project:</u> provides a detailed description of the proposed project, which includes details of the site layout and infrastructure. It details the construction procedures, and the materials required, the operational and maintenance phases, in addition to the decommissioning and rehabilitation procedures.

<u>Chapter 3 – Reasonable Alternatives:</u> provides a description of the reasonable alternatives, in terms of project design, technology, location, size and scale, which were considered by the Applicant and the Project Team in the preparation of the EIAR.

<u>Chapter 4 – Policy, Planning and Development Context:</u> considers the proposed project works in terms of legislative context and in relation to strategic, national, regional and local planning policies and objectives, in order to ascertain whether it is consistent with the relevant legislation and with the proper planning and sustainable development of the area.

The remaining chapters in the EIAR are as follows:

- Chapter 5: Population and Human Health
- Chapter 6: Biodiversity: Flora & Fauna
- Chapter 7: Biodiversity: Ornithology
- Chapter 8: Land, Soils and Geology
- Chapter 9: Hydrology and Hydrogeology
- Chapter 10: Shadow Flicker
- Chapter 11: Material Assets
- Chapter 12: Noise and Vibration
- Chapter 13: Landscape and Visual Impact
- Chapter 14: Air Quality & Climate



- Chapter 15: Cultural Heritage
- Chapter 16: Traffic and Transportation
- Chapter 17: Major Accidents and Natural Disasters
- Chapter 18: Interactions of the Foregoing
- Chapter 19: Schedule of Mitigation Measures

Each of the chapters (Chapters 5 – 16) provides an examination of specific environmental aspects and uses the following standard approach and headings (noting some chapters will have variations of this approach depending on the relative best practise guidance):

*Introduction* – this section specifies the content and background of the subsequent assessment.

**Methodology** – this section describes the study methodology employed in carrying out the assessment. Each chapter assesses the full range of any flexibility proposed (e.g. the turbine dimensions and power output).

**Existing Environment** – this section provides a description of the existing environment (without the proposed project) into which the proposed project will be located, specifically in the context of the relevant environmental aspects under consideration. This section will also identify any other proposed projects (with decisions pending from the relevant planning authority) or existing and approved projects in the vicinity which are relevant to the assessment.

**Potential Effects** – this section provides a description of the direct/ indirect effects, which the proposed project may have on the environment. This is carried out with reference to the existing environment and characteristics of the proposed project, while also referring to the magnitude, duration, consequences, and significance of the proposed project during the construction, operational and decommissioning phases.

*Mitigation Measures* – this section includes a description of any remedial, or mitigation measures that are either practicable or reasonable having regard to the potential effects. It will also outline, where relevant, monitoring proposals to be carried out should consent be granted in order to demonstrate that the project in practice conforms to the predictions made.

Cumulative Effects – a description of those effects that accrue over time and space from the proposed project as well those effects as a result of other projects or activities which could result in a more significant overall effect.

**Residual Effects** – this section describes the degree of environmental impact that will occur after the proposed mitigation measures have been put in place.

# Volume III: Appendices

Supporting documentation and references, referred to in the Main EIAR (Volume II) are included in this volume (Photomontages are in a separate Volume).

#### Volume IV: Photomontages

This volume consists of a set of photomontages identifying the visibility from a variety of locations towards the proposed wind farm site as described in Chapter 13 (Landscape and Visual Impact Assessment).

#### Guidelines

The following EIA Guidelines have been taken into consideration in the preparation of this EIAR:



- European Commission (EC), Guidance on Screening (2017);
- European Commission (EC), Guidance on Scoping (2017);
- Department of Housing, Planning and Local Government (DoHPLG), Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018) and
- EPA, Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (May 2022).

In the context of wind energy development, the following guideline documents have been consulted:

- Department of the Environment, Heritage and Local Government (DoEHLG), Wind Energy Development Guidelines (2006);
- Department of Housing, Planning and Local Government (DoHPLG), Draft Revised Wind Energy Development Guidelines (December 2019);
- Irish Wind Energy Association, Best Practice Guidelines for the Irish Wind Energy Industry 2012;
- Irish Wind Energy Association, Community Engagement Strategy March 2018; and
- European Commission, Guidance document on wind energy development and EU nature legislation (November 2020).

It is relevant to note that the DoHPLG and the Department of Communications, Climate Action & Environment (DoCCAE) launched a public consultation on the proposed revisions to the Wind Energy Development Guidelines (Draft 2019 WEDGs) on 12 December 2019. The final date for receipt of submissions under the public consultation was 19 February 2020. As set out on the Department website<sup>9</sup>, "to enable focused input into the technical aspects of the revised Guidelines, the Department is interested in your views prior to finalisation". As such, the proposed Draft 2019 WEDGs have not been adopted and may be subject to change before finalisation.

Nonetheless, the provisions set out in the Draft 2019 WEDGs have been considered in the design of the proposed project in terms of noise, shadow flicker, visual amenity setback, environmental assessment, consultation obligations, community dividend and grid connections. Application of the Draft Guidelines is discussed in more detail in each of the individual chapters in this EIAR. At the time of writing this EIAR, the relevant guidelines remain those published in 2006. It is possible that a version of the draft guidelines may be finalised during the consideration period for the current proposed project. Towards this end, it is anticipated that the design of the proposed wind farm will be capable of adhering to the new guidelines as required.

# 1.6.2 Description of Likely Significant Effects

As per the *Guidelines on the Information to be contained in Environmental Impact Assessment Reports* (May 2022), the main purpose of an EIAR is to identify, describe and present an assessment of the likely significant effects of a project on the environment. The description of the likely significant effects on the environmental factors should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the project.

Annex III of the amended EIA Directive uses the following criteria to consider such effects:

 $<sup>^9</sup>$  https://www.gov.ie/en/consultation/8f3c71-public-consultation-on-the-revised-wind-energy-development-guideline/ (Accessed on 17th August 2023)



- The magnitude and spatial extent of the effect (for example geographical area and size
  of the population likely to be affected);
- The nature of the effect;
- The transboundary nature of the effect;
- The intensity and complexity of the effect;
- The probability of the effect;
- The expected onset, duration, frequency, and reversibility of the effect;
- The cumulation of the effect with the effect of other existing and/or approved projects;
   and
- The possibility of effectively reducing the effect.

The classification and description of effects in this EIAR follows the terms provided in Table 3-4 of the 2022 EPA Guidelines and are duplicated in Table 1-1 below for reference. As per the Guidelines, the terms listed in Table 1-1 can be used to consistently describe specific effects, but all categories of terms do not need to be used for every effect.

Table 1-1: Description of Effects (extract from EPA Guidelines (May 2022))

Quality of Effects	Positive Effects
It is important to inform the non-specialist	A change which improves the quality of the environment (for
reader whether an effect is positive, negative	example, by increasing species diversity; or the improving
or neutral	reproductive capacity of an ecosystem, or by removing nuisances
or neatral	or improving amenities).
	Neutral Effects
	No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.
	Negative/adverse Effects
	A change which reduces the quality of the environment (for example, lessening species diversity or diminishing the reproductive capacity of an ecosystem, or damaging health or
D	property or by causing nuisance).
Describing the Significance of Effects	Imperceptible
'Significance' is a concept that can have	An effect capable of measurement but without significant
different meanings for different topics – in the absence of specific definitions for	consequences.
different topics the following definitions may	Not significant
be useful (also see <i>Determining</i>	An effect which causes noticeable changes in the character of the environment but without significant consequences.
Significance).	Slight Effects
oignineance).	An effect which causes noticeable changes in the character of the
	environment without affecting its sensitivities.
	Moderate Effects
	An effect that alters the character of the environment in a
	manner that is consistent with existing and emerging baseline
	trends.
	Significant Effects
	An effect which, by its character, magnitude, duration or intensity
	alters a sensitive aspect of the environment.
	Very Significant
	An effect which, by its character, magnitude, duration or intensity
	significantly alters most of a sensitive aspect of the environment.
	Profound Effects
	An effect which obliterates sensitive characteristics.
Describing the Extent and Context of Effects	Extent
Context can affect the perception of	Describe the size of the area, the number of sites, and the
significance. It is important to establish if the	proportion of a population affected by an effect.
effect is unique or, perhaps, commonly or	Context
increasingly experienced.	Describe whether the extent, duration, or frequency will conform
	or contrast with established (baseline) conditions (is it the
	biggest, longest effect ever?)



Describing the Probability of Effects	Likely Effects
Descriptions of effects should establish how	The effects that can reasonably be expected to occur because of
likely it is that the predicted effects will	the planned project if all mitigation measures are properly
occur – so that the CA can take a view of the	implemented.
balance of risk over advantage when making	Unlikely Effects
a decision.	The effects that can reasonably be expected not to occur because
a decision.	
	of the planned project if all mitigation measures are properly
	implemented.
Describing the Duration and Frequency of	Momentary Effects
Effects	Effects lasting from seconds to minutes
'Duration' is a concept that can have	Brief Effects
different meanings for different topics – in	Effects lasting less than a day
the absence of specific definitions for	Temporary Effects
different topics the following definitions	Effects lasting less than a year
may be useful.	Short-term Effects
	Effects lasting one to seven years
	Medium-term Effects
	Effects lasting seven to fifteen years
	Long-term Effects
	Effects lasting fifteen to sixty years
	Permanent Effects
	Effects lasting over sixty years
	Reversible Effects
	Effects that can be undone, for example through remediation or
	restoration
	Frequency of Effects
	Describe how often the effect will occur. (once, rarely,
	occasionally, frequently, constantly – or hourly, daily, weekly,
D 11: 11 T CECC 1	monthly, annually)
Describing the Types of Effects	Indirect Effects (a.k.a. Secondary or Off-site Effects)
	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 Effects
	The addition of many minor or significant effects, including
	effects of other projects, to create larger, more significant
	effects.
	'Do-Nothing Effects'
	The environment as it would be in the future should the subject
	project not be carried out.
	`Worst case' Effects
	The effects arising from a project in the case where mitigation
	measures substantially fail.
	Indeterminable Effects
	When the full consequences of a change in the environment
	cannot be described.
	Irreversible Effects
	When the character, distinctiveness, diversity or reproductive
	capacity of an environment is permanently lost.
	Residual Effects
	71001010101 = 11 0 0 00
	The degree of environmental change that will occur after the
	proposed mitigation measures have taken effect.
	Synergistic Effects
	Where the resultant effect is of greater significance than the
	sum of its constituents, (e.g. combination of SOx and NOx to
	produce smog).

# 1.7 STUDY TEAM AND CONTRIBUTORS TO THE EIAR

TOBIN have been engaged by the applicant to coordinate and prepare this EIAR and to submit it to An Bord Pleanála as part of the planning applications for statutory consent. The relevant



inputs of the various contributors and competent experts of the Project Team are provided in Tables 1-2 and 1-3.

Table 1-2: List of Contributors to the EIAR

Company	Name	Contribution to the EIAR
TOBIN Consulting Engineers	(EIAR Chapter number for which primary author) Dr. John Staunton (1, 2, 3, 10, 11) Orla Fitzpatrick (1,2,3,5 Review) Oonagh Fleming (5, 17) Serena Byrne (18) Louise Byrne (4 Review) Eirene Varghese (4) John Dillon (8, 9 Review) Michelle Gaffney (9) Mistaya Langridge (Flood Risk Assessment) Michael Nolan (10) Samuele Pezzetta (GIS) Gabriela Iha (16 support author) Juliana Cordoso (16) Maria Rooney (16 Review) Kevin Duffy (Autotrack Assessment) Áine Sands (6 Review) Joe Freijser (6)	Project Direction and Management, Scoping and Consultation, Co-Ordination, Preparation of Figures, and the following Chapters:  1 - Introduction  2 - Description of the Proposed Project  3 - Reasonable Alternatives  4 - Policy, Planning and Development Context  5 - Population and Human Health  6 - Biodiversity: Flora & Fauna / Appropriate Assessment Screening and Natura Impact Statement  8 - Land, Soils and Geology  9 - Hydrology and Hydrogeology  10 - Shadow Flicker  11 - Material Assets  16 - Traffic and Transportation  17 - Interactions of the Foregoing  18 - Schedule of Mitigation Measures TOBIN has also prepared the planning applications and planning drawings
AWN Consulting	Dermot Blunnie (12) Dr. Avril Challoner (14)	Noise and Vibration Air Quality & Climate
Macroworks	Richard Barker (13 Review) Cian Doughan (13)	Landscape and Visual Impact (incl. design review of the site)
IAC	Faith Bailey (15)	Cultural Heritage
Independent Consultant	Dr. Tom Gittings (7)	Ornithology / Collision Risk Model
Ground Investigations Ireland	Diarmuid MagLochlainn (8 – SI Input) Conor Finnerty (8 – SI Input)	Site Investigation Report (Appendix 2-9)
Ciaran Reilly & Associates	Dr Ciaran Reilly (8 - PSRA Input)	Peat Stability Risk Assessment (Appendix 8-1)
Eire Ecology.	John Curtin	Bat Report (Appendix 6-1)
Western Forestry Co-op	Marina Conway (Review) Joseph McManus Kenneth Moore	Forestry Report (Appendix 2-7)
AECOM	Nick Dadds	Specialist habitat survey (Appendix 6-2)
APEM	See Appendix 7-4	Ornithology surveys Winter 2022/23 – Summer 2024 (Appendices 7-4 – 7-6)
MWP	See Appendix 7-4	Ornithology surveys until-Winter 2022/23 (Appendix 7-2 and 7-3)



Table 1-3: List of Competent Experts Contributing to the EIAR

Company/Individual	Competent Experts	Qualifications	No. of Years' Relevant Experience to Role/Input in this EIAR
TOBIN Consulting Engineers	Dr John Staunton	BSc. Environmental Science (2008), National University of Ireland Galway (NUIG) PhD. Environmental Science (2014), NUIG	15
TOBIN Consulting Engineers	Orla Fitzpatrick	B.Sc. (Hons) Geophysical Science (1999), University College Dublin (UCD) M.Sc. Environmental Consultancy (2003), University of Newcastle-upon-Tyne Chartered Environmentalist (2012)	22
TOBIN Consulting Engineers	Oonagh Fleming	B.A (Hons) Geography and Sociology, Trinity College Dublin.	1
TOBIN Consulting Engineers	Serena Byrne	B.Sc. (Hons) Psychology Applied to Information Technology (2010), IADT Dún Laoghaire M.Sc. Environmental Sustainability (2022), UCD	12
TOBIN Consulting Engineers	Louise Byrne	BA Hons International Geography & German (2004) UCD  Masters in Regional & Urban Planning (MRUP) (2006), UCD  Chartered Member of Royal Town Planning Institute (2010)  PG Certificate GIS (2016), University of Leeds	8
TOBIN Consulting Engineers	Eirene Varghese	BA Architecture, India (2018)  Masters in Regional and Urban Planning, UCD (2021)	3
TOBIN Consulting Engineers	John Dillon	BSc. Environmental Science (2000), NUIG MSc. and Diploma in Environmental Engineering (2003), Imperial College London Chartered Engineer, MCIWM Professional Geologist (PGeo) Member of the International Association of Hydrogeologists (Irish Group)	18
TOBIN Consulting Engineers	Michelle Gaffney	B.A Earth science (2019) Trinity College Dublin	4
TOBIN Consulting Engineers	Michael Nolan	City & Guilds in Computer Aided Design (2001), Griffith College Dublin	16
TOBIN Consulting Engineers	Samuele Pezzetta	MSc. Environmental Science and Geohazards (2019), UPEM, MARNE-LA-VALLE (Paris)	3



		BEng (Hons) Civil Engineering (2013), IT Carlow BEng (Ord.) Civil Engineering (2010),	6	
TOBIN Consulting Engineers	Maria Rooney	Dundalk Institute of Technology (DKIT)  MEng Road and Transport Engineering (2019) IT Sligo.		
		MIEI Member of Engineers Ireland Chartership (2021)		
		MASc Engineering (2020), University of Guelph		
TOBIN Consulting Engineers	Mistaya Langridge	BEng (Water Resources) (2019), University of Guelph	4	
		CertEnvSc (2018) University of Guelph MIEI Member of Engineers Ireland		
TOBIN Consulting Engineers	Kevin Duffy	BEng, Civil Engineering (2020), University of Limerick (UL)  Member of Engineers Ireland	3	
		BEng Civil Engineering (2016), Federal University of Sao Carlos (UFSCar)		
TOBIN Consulting Engineers	Juliana Cordoso	MSc Transportation Engineering (2019), University of Sao Paulo (USP)	2	
		MIEI Member of Engineers Ireland		
TOBIN Consulting	Gabriella Iha	BE. Civil Engineering (2017), Centro Universitário da FEI, Brazil	5	
Engineers		MSc Sustainable Transport and Mobility (2022), TU Dublin		
TOBIN Consulting	Áine Sands	BSc. In Applied Ecology (2013), University College Cork.	8	
Engineers		Irish Wild Flower Identification (NFQ Level 6) (2018) Sligo Institute of Technology	J	
TOBIN Consulting Engineers	Joe Freijser	BA (Hons) Coastal Zone Management Van Hall Larenstein University of Applied Sciences, Leeuwarden, The Netherlands MSc (Hons) Applied Marine Biology UCC ACIEEM	9	
TOBIN Consulting Engineers	Sinead O'Reily	BSc. Hons Degree of Science (2008) University College Dublin (UCD) M. Res. Environmental Science (2015), University of Glasgow (UoG)	13	
TOBIN Consulting		BSc. (Hons) Earth and Ocean Sciences. National University of Ireland Galway, 2012	_	
Engineers	Sarah Nolan	MEngSc. Water, Waste and Environmental Engineering. University College Dublin, 2020,.	7	
TOBIN Consulting Engineers	Ciara Byrne	BSc. Wildlife Biology (2022), Munster Technological University Kerry (MTU).	1	



Western Forestry Co-Op	Marina Conway	BAgrSc. Forestry (1996), UCD MAgrSc. (2006), UCD HETAC Postgraduate Cert. Water Pollution Control, Institute of Technology Sligo Native Woodland Scheme (Forest Service, Ireland) Cert. Upland Forest Design (Forestry Commission UK)	26
Western Forestry Co-Op	Joseph McManus	BSc in Forestry Professional Member of the Society of Irish Foresters	8
Western Forestry Co-Op	Kenneth Moore	BAgrSc in Forestry Professional Member of the Society of Irish Foresters	2
AECOM	Nick Dadds	BSc (Hons) CIEEM, BSc (Hons) Zoology	23
AWN Consulting	Dr. Avril Challoner	B.E. (Hons) Environmental Engineering National, (2009), University of Ireland, Galway PhD Indoor/Outdoor Air Pollution, (2012), Trinity College Dublin (TCD) Chartered Scientist (CSci), Member of Institute of Air Quality Management Member of Institution of Environmental Sciences	15
AWN Consulting	Dermot Blunnie	BEng (Hons) in Sound Engineering (2007), University of South Wales PG Diploma in Acoustics and Noise Control (2010) Institute of Acoustics MSc. in Applied Acoustics (2013) University of Derby	13
Macroworks	Cian Doughan	BSc Landscape Architecture (2015) UCD Corporate Member of the Irish Landscape Institute	6
Macroworks	PG Diploma in Forestry (1996)  BA Environmental Studies (1995)  Meeter's Degree in Landscape Architecture		18
IAC	Faith Bailey	BA (Hons) Archaeology, University of Wales (2001) MA Cultural Landscape Management, University of Wales (2003) Licence-eligible archaeologist Member of the Institute of Archaeologists of Ireland Member of the Chartered Institute for Archaeologists.	18
Independent Consultant	Dr. Tom Gittings	BSc. in Ecology (1988), University of East Anglia PhD. in Zoology (1994), UCC	26



Ciaran Reilly & Associates	Dr Ciaran Reilly	BEng in Civil, Structural and Environmental Engineering (2006), NUIG Postgraduate Diploma, Fire Safety Practice (Buildings & Other Structures) (2013), TCD PhD, Geotechnical Engineering (2014), TCD Chartered Engineer, Engineers Ireland	16
Ground Investigations Ireland	Diarmuid MagLochlainn	B.SC. (Hons) Geology (2014), UCD	12
MWP	See Appendix 7-8	See Appendix 7-4	See Appendix 7- 8
АРЕМ	See Appendix 7-8	See Appendix 7-4	See Appendix 7- 8

# 1.8 SCOPING AND CONSULTATION

The EIAR Scoping and consultation activities were carried out in accordance with all relevant guidance documents as set out in Section 1.6.

Scoping is a process of deciding what information should be contained in an EIAR and what methods should be used to gather and assess that information. The purpose of scoping for the EIAR is to provide a framework for the approach to be taken by the individual specialists in carrying out their evaluations, identifying environmental aspects for which potential significant environmental effects may arise. It also provides a framework for the consultation process and sets out the intended structure of the EIAR. Scoping/consultation is carried out with:

- An Bord Pleanála;
- Statutory & non-statutory consultees;
- Telecommunications providers;
- Public.

#### 1.8.1 Consultation with An Bord Pleanála

# Application 1: Wind Farm and Turbine Delivery Route

The first pre-application consultation meeting was held with An Bord Pleanála on 27th April 2023, with the second held on 12<sup>th</sup> September 2023. The purpose of the first meeting was to introduce the proposed project to An Bord Pleanála in order to provide them with the necessary information to enable it to decide on the strategic infrastructure development status of the proposed project. The first meeting was attended by the applicant, Macroworks and TOBIN representatives. The meeting discussion was centred around the following key points:

- Background to and overview of the proposed project;
- EIAR Scoping carried out;
- Public Consultation;
- Surveys carried out already and those still planned;
- Assessment of turbine dimensions;
- Landscape and Visual Impact;
- Importance of cumulative impact assessment;
- Next Steps.



An Bord Pleanála provided some guidance on key considerations for the EIAR and some points that they wanted to see addressed therein. A discussion followed about specific details of the proposed project, as well as a number of other topics as listed above.

In the second meeting, which was attended by the Applicant and TOBIN representatives, an update regarding the proposed project was given to the An Bord Pleanala. In addition, some of the topics discussed in the first meeting were revisited. The central updates surrounded the following key points:

- Nearby planning applications and context of the proposed development;
- Consultee engagement;
- Project Progression;
- Next Steps.

An Bord Pleanala confirmed on the 24<sup>th</sup> January 2024 that the proposed development relating to this application constitutes strategic infrastructure development and that a planning application should be made directly to the An Bord Pleanala (copy of this response is provided in Appendix 1-2).

Following this, the commencement of Section 37CC(1) of the Planning and Development Act 2000 as amended, in December 2023, necessitated a new preapplication consultation. A meeting was held relating to this on the  $22^{nd}$  of May 2024 discussing the proposed project and the reasoning for reopening the consultation.

A meeting was held with An Bord Pleanála on the  $22^{nd}$  of May 2024 to discuss the unconfirmed details for which design flexibility was requested for the proposed project. This related to the range of proposed turbine dimensions (tip height, rotor diameter and hub height). On the  $22^{nd}$  of August 2024 An Bord Pleanála issued their opinion on this, allowing for the application to proceed based on the proposed range of turbine dimensions.

Also, on the 22<sup>nd</sup> August 2024, An Bord Pleanála issued their SID determination, confirming that the proposed development relating to this application constitutes strategic infrastructure development and that a planning application should be made directly to the An Bord Pleanala (copy of this response is also provided in Appendix 1-2).

# Application 2: Grid Connection Route (GCR) Infrastructure

A pre-application consultation meeting was held with An Bord Pleanála on 12<sup>th</sup> September 2023. This meeting was attended by the Applicant and TOBIN representatives to discuss the Scart Mountain wind farm GCR and provide the An Bord Pleanala with the information required to determine the strategic infrastructure development status of the project. At this meeting the details of the proposed GCR were provided to the An Bord Pleanala, the discussion centred around the following key points:

- Project overview;
- Site location;
- Ecology and hydrology;
- Policy for wind energy and policy for grid connection;
- Planning overview;
- Public consultation;
- Project progression;
- Next steps.



An Bord Pleanála issued their SID determination for the GCR element of the proposed project on the 24<sup>th</sup> January 2024, confirming that the proposed development relating to this application constitutes strategic infrastructure development and that a planning application should be made directly to the An Bord Pleanala (copy of this response is also provided in Appendix 1-2).

# 1.8.2 Consultation with Statutory and Non-Statutory Bodies

An EIAR Scoping Report was prepared and submitted to relevant statutory and non-statutory bodies in January 2023 (either by email or post) for review and comment. The EIAR Scoping Report was accompanied by a cover letter introducing the proposed project and inviting comments or observations within a period of six weeks from the date of the letter. A copy of the Scoping Report, with a standard cover letter is provided in Appendix 1-3. All responses received from consultees are provided in Appendix 1-4.

The list of consultees and record of consultation is provided in Table 1-4.

Table 1-4: List of Consultees and Record of Consultation

Consultee	Consultation Date	Date of Response	Summary of Comments Received	Project Team Response to Comments Received
Department of Agriculture, Food and the Marine	26/01/23	30/01/23 and 15/02/23	Acknowledged receipt of consultation letter and has brought correspondence to attention of the Minister and relevant Department officials.  Second response notes that the developer must obtain a Felling License from the Department before trees are felled or removed. The developer should take note of the contents of Felling and Reforestation Policy Document.	All comments have been considered in the EIAR - See Forestry Report (See Appendix 2-7 to this EIAR, and EIAR Chapter 2 - Description)
Department of Housing, Local Government and Heritage	26/01/23	27/01/23	Acknowledged receipt of consultation letter. Notes that in the event of observations a coordinated heritage response will be received by email from Development Applications Unit (DAU).	No response required.
Development Applications Unit	26/01/23	13/03/23	Raised concerns regarding the Annex I (Birds Directive) Hen Harrier breeding pairs	All comments have been considered in the EIAR - See Chapter 6 (Biodiversity), Chapter 7



Consultee	Consultation Date	Date of Response	Summary of Comments Received	Project Team Response to Comments Received
			within the area. Further species that may be important include Annex I species and Birds of Conservation Concern (BoCCI) such as Merlin and Red Grouse.	(Ornithology) and Chapter 9 (Hydrology & Hydrogeology).
			Notes cumulative effects from all wind farms in the area should be considered as well as conservation value of Annex I habitat on the site.	
			Location on peatland and proximity to Glenshelane River section of the River Blackwater Special Area of Conservation (SAC) must be given due consideration.	
			A detailed drainage map will be required	
Department of Transport	26/01/23	16/02/23	The response advises consideration of the effects the construction involved in the development and especially, the connection cables to the national grid may have on the environment (1) and Regional and National Roads (2).  Notes that where cables are placed in one or more trenches within the extents of the public	All comments, which fall under the scope of the EIAR and planning application, have been considered in the following documents:  1) Chapter 6 (Biodiversity)  2) Chapter 4 (Consideration of Reasonable Alternatives) and Chapter 16 (Traffic & Transportation)  3) Typical design details are developed for planning however further engagement with the Roads Authority will take place during detailed design to incorporate maintenance procedures of the Roads Authority.  4) As above for no. 3.
			road network it is necessary to consider; restrictions on the Road Authority in carrying out its function to construct and maintain the public roads (3) and additional costs this may	<ul> <li>5) Chapter 8 (Land, Soils &amp; Geology)</li> <li>6) As above for no. 3.</li> <li>7) As above for no. 3.</li> <li>8) Chapter 4 (Consideration of Reasonable Alternatives)</li> <li>9) Chapter 4 (Consideration of Reasonable Alternatives)</li> </ul>



Consultee	Consultation Date	Date of Response	Summary of Comments Received	Project Team Response to Comments Received
	Date	Response	incur (4). The installation may affect the stability of the road (5). Effect of remaining available road space (6). The necessity to have the power in the cables switched off where the Road Authority considers necessary (7).  Consideration should be given to the examination of options other than routing the cables along the public road (8), of options for connection to the national grid at a point closer the wind farm in order to reduce adverse impacts on public roads (9), of details where road cross section cables are to be placed within the road so as to minimise the effect on the Roads Authority	10) Proposed project design drawings in Appendix 1-1 show the typical cross-sections however the exact details will be determined through detailed design.
Geological Survey Ireland	26/01/23	07/03/23	Letter encouraging the use of their datasets. Confirmation that there are no County Geological Sites near the proposed wind farm site. Also provided information on groundwater, geological mapping, geotechnical database resources, geohazards (noting presence of moderately high and high landslide susceptibility in the area of the proposed wind farm), natural resources, geochemistry (of soils, surface waters and sediments). They also requested that a copy of any reports detailing site investigations be	All comments have been considered in the EIAR - See Chapter 8 (Land Soils and Geology) and Chapter 9 (Hydrology and Hydrogeology).



Consultee	Consultation Date	Date of Response	Summary of Comments Received	Project Team Response to Comments Received
			sent to them to add to their data.	
Irish Aviation Authority (IAA)	26/01/23	02/02/23	Recommends that the developer engage with DAA Cork Airport (including IAA-ANSP) to make them aware of the proposal.  Provides conditions that would be offered during the planning process; agree an aeronautical obstacle warning light scheme for the development, provide coordinates in WGS84 format together with ground and blade tip height elevations at each wind turbine location and to notify the Authority of intention to commence crane operations with at least 30 days prior notification.	Note Cork Airport were consulted with, however at time of writing no confirmation response has been received (there were responses to request information). Note if the proposed project achieves planning approval the IAA will consult with all aviation users, including Cork Airport, prior to construction starting.
Inland Fisheries Ireland	26/01/23	21/02/23	Response provided information on ground stability, physical interference with stream channels, prevention of discharges of polluting matters such as cement, prevention of silt deposition in streams, storage of fuels/oils etc., stream crossings, highlights that the crossing of watercourses at fords is unacceptable and culvert pipes are not recommended, and that increased volumes of surface water runoff from hardcore areas must not impact river habitat by giving rise to erosion.	All comments have been considered in the EIAR - See Chapter 6 (Biodiversity), and Chapter 9 (Hydrology and Hydrogeology).



Consultee	Consultation Date	Date of Response	Summary of Comments Received	Project Team Response to Comments Received
Transport Infrastructure Ireland (TII)	26/01/23	14/02/23	Provided a response detailing best practice for EIAR preparations.	These points have been considered in the EIAR preparation, particularly in Chapter 16 (Traffic & Transportation).
Uisce Éireann	26/01/23	30/01/2023	Response states that they do not have the capacity to provide individual responses, but they include information to consider in EIAR preparation.	These points have been considered in the EIAR preparation. This is discussed in Chapter 9 (Hydrology and Hydrogeology).

The following groups did not provide a response to the scoping exercise:

- An Taisce;
- Bat Conservation Ireland;
- Birdwatch Ireland;
- CIE;
- Commission of Regulation of Utilities;
- Department of Tourism Culture Arts Gaeltacht, Sports and Media;
- Department of Defence;
- Environmental Protection Agency;
- Failte Ireland;
- The Arts Council;
- The Heritage Council;
- Health and Safety Authority;
- Health Service Executive;
- Irish Raptor Study Group;
- Irish Trails, Sport Ireland;
- Irish Wildlife Trust;
- Mountaineering Ireland;
- Office of Public Works;
- Southern Regional Assembly;
- Teagasc;
- Tipperary County Council;
- Waterways Ireland.

#### 1.8.3 Consultation with Telecommunications Providers

An extensive consultation exercise was also carried out with telecommunications providers that may have services in the area which could have the potential to be impacted by the proposed project. The list of telecommunications consultees, feedback received, and design implications are discussed in Chapter 11 (Material Assets).

#### 1.8.4 Public Consultation

The applicant commenced engagement with the local community during the early stages of the proposed project design. This had the objective of ensuring that the views and concerns of all members of the local community were considered as part of the project design and the Environmental Impact Assessment process. This engagement continued throughout the design



development stage and has ultimately informed the design of the proposed project. Two community liaison officers were appointed during this process to provide consistent and on-the-ground engagement with the local community. The community liaison officers role is to ensure project communications are distributed to the local community and to be the main point of contact for the community to discuss any queries or concerns that they might have. Contact details for the CLO (phone number and email address) were included in all project communications with the community. A Community Engagement Report has been prepared as an account of the pre-planning consultation undertaken by the Applicant (see Appendix 1-2).

The Applicant committed to active engagement, consultation and dialogue with the local community from an early stage and is committed to continuing with this throughout the planning, construction and operational process for the proposed project.

#### 1.9 ASSUMPTIONS AND LIMITATIONS OF ASSESSMENT

Specific assumptions relevant to environmental aspects are set out in the corresponding EIAR chapters. Some general assumptions that have been made during preparation of this EIAR are set out below:

- In undertaking cumulative assessments, consented, but as yet un-built, developments have been assumed to be built in accordance with and within the duration permitted by the associated grant of permission; and
- Information provided by third parties, including publicly available information and databases, is correct at the time of publication.

Specific limitations relevant to certain environmental aspects are set out in the corresponding EIAR Chapter. Some general limitations associated with the preparation of this EIAR are set out below:

 Baseline conditions and assessments are assumed to be accurate at the time of the physical surveys but may be subject to change, due to the nature of the surrounding environment and surrounding activities.



#### 1.10 REFERENCES

Department of Communications, Climate Action and Environment, *Climate Action Plan* (Nov 2021)

Department of Communications, Energy and Natural Resources, *Ireland's Transition to a Low Carbon Energy Future 2015-2030* (December 2015)

Department of Environment, Heritage and Local Government, *Wind Energy Development Guidelines* (2006)

Department of Housing, Planning and Local Government, *Draft Revised Wind Energy Development Guidelines (December 2019)* 

Department of Housing, Planning and Local Government, *Guidelines for Planning Authorities* and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018)

EirGrid Group All-Island Generation Capacity Statement 2019-2028

European Commission, Guidance on EIA Scoping (June 2001)

Environmental Protection Agency, *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* (May 2022)

Irish Wind Energy Association, *Good Neighbour – IWEA Best Practice Principles in Community Engagement & Community Commitment* (March 2013)

Waterford City and County Council, Waterford City and County Development Plan 2022-2028

Pöyry, The Value of Wind Energy to Ireland (March 2014)

Sustainable Energy Authority of Ireland, *Energy Security in Ireland (2016 Report)* 

Sustainable Energy Authority of Ireland, Energy in Ireland - 2022

# www.tobin.ie



in TOBIN Consulting Engineers



(atobinengineers

Galway Fairgreen House, Fairgreen Road, Galway, H91 AXK8, Ireland.

Tel: +353 (0)91 565 211

Dublin Block 10-4, Blanchardstown Corporate Park, Dublin 15, D15 X98N, Ireland. Tel: +353 (0)1 803 0406

Castlebar Market Square, Castlebar, Mayo, F23 Y427, Ireland.

Tel: +353 (0)94 902 1401