# 1 INTRODUCTION

## 1.1 INTRODUCTION

This chapter of the Environmental Impact Assessment Report (EIAR) introduces the proposed Dyrick Hill Wind Farm (the Development) and provides details of the Environmental Impact Assessment (EIA) Project team and the overall structure of the EIAR. It sets out the broad context and defines the key terms of reference used in the environmental assessment of the Development. The Development is subject to an EIA, under the EIA Directive 2011/92/EU (EIA Directive)[1] and the revised Directive 2014/52/EU (Revised EIA Directive)[2].

The EIAR has been prepared by Jennings O'Donovan & Partners Limited, on behalf of Dyrick Hill Wind Farm Limited, to accompany a planning application for the Development. This EIAR takes into account the Development as a whole, and all direct and indirect effects, the cumulative impacts and their interactions, including all relevant ancillary and subsidiary elements of the overall Development.

In addition to the identification, description and assessment of the Development, this EIAR identifies, describes and assesses the Project as a whole. The Development is also assessed cumulatively with other developments in the surrounding area.

Together, each of these elements comprises the EIA Development which is the subject of this EIAR. This EIAR also includes the conclusions of the competent and qualified experts as to the significance of any such environmental effects, to assist the competent authority in conducting its environmental impact assessment.

The planning application will also be accompanied by an Appropriate Assessment (AA) as required under Article 6(3) of the EU Habitats Directive (92/43/EC). The AA is an assessment of the potential for significant or adverse effects resulting from the Development, both individually and in combination with other activities, plans and Developments, on European Site(s) as designated under the EU Habitats Directive and the conservation objectives for their qualifying species and habitats. A Natura Impact Statement (NIS) has been developed and accompanies the planning application.

[1] The European Council Directive 2011/92/EU. Available online at https://eur-lex.europa.eu/eli/dir/2011/92/oj [Accessed 9th March 2023]
[2] The European Council Directive 2014/52/EU. Available online at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0052 [Accessed 21st April 2023]

This chapter is supported by Figures and the following Appendices in Volume IV:

- **Appendix 1.1:** Consultation Responses
- **Appendix 1.2**: Glossary of Common Acronyms
- **Appendix 1.3**: Community Report

## 1.2 KEY DEFINED TERMS

In order to provide clarity in the EIAR, the following defined terms will be used throughout.

**Table 1.1: Defined Terms used throughout the EIAR**

| Term | Definition |
|---|---|
| The Site | Refers to all lands that fall within the Proposed Development (Dyrick Hill Wind Farm) Boundary as shown in Figure 1.1. |
| The Redline Boundary | Refers to the proposed Development planning boundary extents. |
| The Baseline | Refers to the existing Project lands and their characteristics. |
| The Development | Refers to all elements of the application for planning permission for the Proposed Development (Dyrick Hill Wind Farm), the details of which will be set out within **Chapter 2: Development Description**. These elements include the wind turbines, all site infrastructure (access tracks, substation(s), temporary construction / storage compounds, permanent meteorological mast, borrow pit(s) etc.) including the works required within the Redline Boundary to accommodate the Grid Connection and Turbine Delivery Route. |
| The Project | The Project refers to the development works within the Redline Boundary, the Turbine Delivery Route details, and details of associated Turbine Delivery Route of any other construction materials to the Site which derive from outside the Redline Boundary. |
| The Application | Refers to this planning EIAR and all supporting documentation which will be submitted to An Bord Pleanála. |
| Survey Areas | Refers to areas within or over which surveys are undertaken. These are specifically defined within each technical chapter of the EIAR. |

| Term | Definition |
|---|---|
| Study Areas | Refers to areas which are considered as part of the assessment process. These are specific and defined within each technical chapter of the EIAR. |
| Developable Area | Refers to the area(s) within the Redline Boundary where turbines may be located. This does not apply to other ancillary site infrastructure. |
| Project boundary | Refers to the area under the applicant control shown in Figure 1.2. |
| The Council | Refers to Waterford City and County Council. |
| The Board | Refers to An Bord Pleanála. |
| The Developer | Dyrick Hill Wind Farm Limited. |
| The Applicant | Empower Limited |
| EIA Regulations | The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) transpose the requirements of The Revised EIA Directive into the Planning and Development Regulations 2001 (As Amended). |
| The EIA Directive | Refers to the EIA Directive 2011/92/EU. |
| The Revised EIA Directive | Refers to revised EIA Directive 2014/52/EU. |
| Scoping / Scoping Opinion | The process to identify key environmental issues, and to determine which elements of the Project are likely to cause significant environmental impacts and to identify elements that can be removed from the assessment. |
| The Onsite Substation and Control Building | Refers to the onsite substation and control building including the compound in which it is located. |
| Permanent Met Mast | Refers to a proposed permanent Meteorological Mast to be located on site. |
| Temporary Met Mast | Refers to a proposed temporary Meteorological Mast which is located on site. |
| Borrow Pit(s) | Excavation(s) within the Site used to extract rock for the purposes of construction of the Development. |
| Access Tracks | Refers to the internal road structure to facilitate the construction, operation and decommissioning of the Development. |

| Term | Definition |
|---|---|
| The Construction Haul Routes | Refers to the proposed routes from any local quarries and suppliers to the Site. |
| The Turbine Delivery Route | Refers to the proposed turbine delivery route from Waterford Port (Belview) to the Site. |
| Grid Connection | Refers to the proposed route of connecting the Development to the national grid. |
| Wind Farm Internal Cabling | Refers to the electrical cables connecting the turbines to the Onsite Substation. |
| Temporary Construction Compound | Refers to the compound to be developed and used by the appointed contractor(s) for the purposes of constructing the Development which will be reinstated following completion of construction. |
| Turbine Hardstand | Refers to the hardstand next to each turbine location used by cranes for erection of turbine hub, nacelles and rotor blades. |
| Turbine Foundation | Refers to turbine concrete base located under ground level and used to support the turbine hub. |
| Decommissioning | Refers to the plan at the end of the operational life of the Wind Farm. This plan is subject to assessment and approval at the time. This is when the turbines are dismantled and taken off-site for recycling. The turbine foundations will remain in-situ and will be covered with earth and reseeded as appropriate. The turbine hardstands will also be reinstated, and the site roads will be left in-situ. The underground cabling will be removed, while the ducting will remain in-situ. The substation building will be left in-situ. |
| Reinstatement | Reinstatement means restoring the habitat in the areas of the site where infrastructure was developed. |

## 1.3 THE APPLICANT

Dyrick Hill Wind Farm Ltd is a wholly owned subsidiary of EMPower (EMP). EMP was established in 2015 to serve the growing renewable energy sector internationally. Headquartered in Dublin, their primary business is the development of appropriately positioned and scaled greenfield wind and solar PV assets. EMP's management team have substantial experience in renewable energy development internationally and have applied

their combined 95 years' experience to emerging energy markets for renewables. This begins with the identification of suitable wind and solar sites, in line with international best practice in environmental and engineering design followed by the development of these sites in conjunction with local stakeholders.

EMP's vision is to expand the energy sectors in their respective markets, utilising clean, green power which can be deployed in a decentralised, modular configuration. EMP aims to be a market leader in renewable energy deployment globally, thereby reducing dependence on fossil fuels.

## 1.4 THE SITE

The Site extends to an area of 463 hectares. The land is comprised of a mix of private, third-party land and shared land (commonage). The principal land use in the general area is comprised of farmland, forestry and upland heath. The Site is located 13.3km northwest of Dungarvan, Co. Waterford and the northwest corner of the Site is adjacent to the County Waterford boundary with County Tipperary. The Site elevations range from 180m above ordnance datum (AOD) in the east side of the site to 400m AOD towards the north-west side of the site. A Site Location Map showing the Redline Boundary is appended as **Figure 1.1.** and the Project boundary, which comprises of all elements of the Project is outlined as **Figure 1.2**

The Site is located in a rural setting and housing density in the area is medium There are 112 dwellings within a 2km radius of the proposed turbines, predominantly comprising one-off houses and farm holdings (**Figure 1.3**). The nearest town is Cappoquin, located c. 6 km southwest of the Developable Area. The villages of Ballynamult, Tooraneena and Mountain Castle Bridge are located approximately 3km to the northeast, east and south respectively.

## 1.5 SUMMARY OF PROJECT DESCRIPTION

Permission is being sought by the Developer for the construction of 12 No. Wind Turbines, an On-Site Substation and all ancillary works and the construction of an underground Grid Connection to Dungarvan 110kV Substation. A full description of the Development is provided in **Chapter 2: Development Description**.

The Development will comprise of the following main components:

- Erection of 12 no. 6.0-7.2 MW wind turbines (Note* this is the current output available for the turbine of this size. It is possible that, with improvements in technology, the output may increase at the time of construction.) with an overall ground tip height of

185m. The candidate wind turbines will have a 162m rotor diameter and a hub height of 104m.

- Construction of Crane Hardstand areas and Turbine Foundations.
- Construction of new internal Site Access Tracks and upgrade of existing Site roads, to include passing bays and all associated drainage.
- Construction of a new wind farm Site entrance with access onto the R671 regional road in the townlands of Lickoran.
- Improvement of existing Site entrances with access onto local roads in the townlands of Broemountain.
- Improvements and temporary modifications to existing public road infrastructure to facilitate delivery of abnormal loads and turbine delivery.
- Construction of one Temporary Construction Compound with associated temporary site offices, parking area and security fencing.
- Development of on-site Borrow Pit.
- Installation of one Permanent Meteorological Mast up to a height of 110m.
- Development of a Site drainage network.
- Construction of one permanent 110 kV Substation.
- All associated Wind Farm Internal Cabling connecting the wind turbines to the Onsite Substation.
- All works associated with the connection of the wind turbines to the national electricity grid, which will be via 110 kV underground cable connection approximately 16.1km in length to the existing Dungarvan 110 kV Substation.
- Upgrade works on the Turbine Delivery Route from Waterford Port.
- Ancillary forestry felling to facilitate construction and operation of the Development.

A 15-year planning permission and 40-year operational life from the date of commissioning of the entire wind farm is being sought.

## 1.6 ENVIRONMENTAL IMPACT ASSESSMENT

### 1.6.1 Environmental Impact Assessment Requirements and National Legislation

The EIA Directive requires that, before consent is given for certain public and private projects, an assessment of the effects on the environment is undertaken by the relevant competent authority. The EIA Directive has been transposed to Irish legislation, for the purposes of this development, by the Planning and Development Act 2000, as amended ("the Planning Acts") and the Planning and Development Regulations 2001, as amended ("the Planning Regulations").

**Section 171A** of the Planning and Development Act 2000 (as amended) defines an EIA as an assessment, which includes an examination, analysis and evaluation carried out by a planning authority or An Bord Pleanála:

"*that shall identify, describe and assess in an appropriate manner, in light of each individual case and in accordance with Articles 4 to 11 of the Environmental Impact Assessment Directive, the direct and indirect effects of a proposed development on the following:*

*(a) human beings, flora and fauna*

*(b) soil, water, air, climate and the landscape*

*(c) material assets and the cultural heritage, and*

*(d) the interaction between the factors mentioned in paragraphs (a), (b) and (c)*".

**Section 172(1)(a)(ii)(I)** requires projects of a class specified in Part 2 of Schedule 5 of the Planning Regulations to be subject to an EIA where:

"(I) *such development would exceed any relevant quantity, area or other limit specified in that Part*".

Part 2 of Schedule 5 of the Planning Regulations includes the following classes of an EIA Development:

**Class 3(i)** *"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."*

**Class 10(dd)** "*All private roads which would exceed 2000 metres in length"*

**Class 15** "*Any project listed in this Part which does not exceed a quantity, area or other limit specified in this Part in respect of the relevant class of development but which would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7*".

It is considered that the Development comes within the scope of Class 3(i) and/or Class 15, and that it is appropriate to carry out EIA of the Development.

### 1.6.2 Directive 2014/52/EU

The EIA Directive has been amended on numerous occasions, most recently in 2014. The new approach to EIA seeks to address threats and challenges that have emerged since the original Directive came into force. The EIA Directive was amended by the revised EIA Directive (2014/52/EU) and entered into force from 15 May 2014. The Revised EIA Directive was transposed into Irish Law in in 2018.

On 1st September 2018, the Minister for Housing, Planning and Local Government published updated guidelines for planning authorities and An Bord Pleanála on carrying out Environmental Impact Assessments. The publication of the Guidelines coincided with the coming into operation, on 1st September 2018, of the provisions of the European Union (Planning and Development) (EIA) Regulations 2018 (S.I. No. 296 of 2018), which were signed by the Minister on 26th July 2018. These Regulations transpose into domestic planning law the requirements of the Revised EIA Directive , amending the previous EIA Directive .

Accordingly, this EIAR complies with the European Union (Planning and Development) (EIA) Regulations 2018 (S.I. No. 296 of 2018). To the extent relevant and necessary, regard has been given to the existing provisions of the Planning Acts and the Planning Regulations insofar as they transpose the EIA Directive. Article 5 of the EIA Directive as amended by the Revised EIA Directive provides that, where an EIA is required, the developer shall prepare and submit an EIAR previously referred to as an Environmental Impact Statement (EIS). The information to be provided by the developer shall include at least:

*(a) a description of the project comprising information on the site, design, size and other relevant features of theproject*

*(b) a description of the likely significant effects of the project on the environment*

*(c) a description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment*

*(d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment*

*(e) a non-technical summary of the information referred to in points (a) to (d) and*

*(f) any additional information specified in Annex IV relevant to the specific characteristics of a particular project or type of project and to the environmental features likely to be affected*

The relevant classes of development that normally require an EIA are set out in Schedule 5 (Part 2) of the Planning Regulations . The Development exceeds the 5 turbines and 5 Megawatts threshold, and therefore is subject to an EIA.

The EIAR provides information on the receiving environment and assesses the likely significant effects of the Development and proposes mitigation measures to avoid or reduce these effects. The function of the EIAR is to provide information to allow the competent authority to reach a reasoned conclusion on the effects of a development and inform subsequent decisions, such as planning. All elements of the Project (including the grid connection) have been assessed as part of this EIAR.

#### *1.6.2.1 EIA Definition*

The Revised EIA Directive defines EIA as a process. Article 1(2)(g) states that EIA means:

*"(i) the preparation of an environmental impact assessment report by the developer, as referred to in Article 5(1) and (2)*

*(ii) the carrying out of consultations as referred to in Article 6 and, where relevant, Article 7*

*(iii) the examination by the competent authority of the information presented in the environmental impact assessment report and any supplementary information provided, where necessary, by the developer in accordance with Article 5(3), and any relevant information received through the consultations under Articles 6 and 7*

*(iv) the reasoned conclusion by the competent authority on the significant effects of the project on the environment, taking into account the results of the examination referred to in point (iii) and, where appropriate, its own supplementary examination, and*

*(v) the integration of the competent authority's reasoned conclusion into any of the decisions referred to in Article 8a".*

The definition in full has been transposed into the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018), replacing Section 171A of the Planning Acts.

#### *1.6.2.2 Factors of the Environment*

The Revised EIA Directive requires the EIA to identify, describe and assess, in an appropriate manner and in light of each individual case, the direct and indirect significant effects of the Development on factors of the environment including:

(a) population and human health

(b) biodiversity, with particular attention to species and habitats protected under the Habitats and Birds Directives

(c) land, soil, water, air and climate

(d) material assets, cultural heritage and the landscape

(e) the interaction between the factors referred to in points (a) to (d)

The implications of the Revised EIA Directive in relation to (a) are considered specifically in Chapter 5; (b) in Chapters 6 and 7; (c) land and soil are considered over several chapters including Chapter 2 Development Description, Chapter 6 Biodiversity, Chapter 7 Ornithology, and Chapter 8 Soils and Geology, water is considered in Chapter 9, while air and climate are outlined in Chapter 12; (d) material assets are considered in Chapter 12; landscape and cultural heritage are considered in Chapters 11 and 13; (e) interactions of the foregoing are considered in the final chapter, Chapter 15.

**Table 1.2: Outline of respective chapters relating to the requirements of the revised EIA Directive**

| Revised EIA Directive | Chapter | Title |
|---|---|---|
| *(a) population and human health* | 5 | Population and Human Health |
| *(b) biodiversity, with particular attention to species and habitats protected under the Habitats and Birds Directives* | 6<br>7 | Biodiversity<br>Ornithology |
| *(c) land, soil, water, air and climate* | 2<br>6<br>7<br>8<br>9<br>12<br>16 | Development Biodiversity<br>Ornithology<br>Soils and Geology<br>Hydrology and Hydrogeology<br>Material Assets & Other Issues<br>Air Quality |
| *(d) material assets, cultural heritage and the landscape* | 11<br>12<br>13<br>14<br>15 | Landscape and Visual Impact<br>Material Assets & Other Issues<br>Cultural Heritage<br>Traffic and Transport<br>Shadow Flicker & EMI |
| *(e) the interaction between the factors referred to in points (a) to (d)* | 17 | Interactions of the Foregoing, Cumulative Effects and Summary of Mitigation Measures |

#### 1.6.2.3 Alternatives to the Development

Article 5(1) of the EIA Directive sets out the information to be contained in an EIAR, and these provisions have been clarified by the Revised EIA Directive, in particular in relation to the requirement that the EIAR includes 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.

The obligation to address alternatives to the project is enhanced under the Revised EIA Directive. The Revised EIA Directive provides that the information to be provided by the developer shall include at least, inter alia:

> *"(d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment*".

This is elaborated upon under Annex IV (2) of the Revised EIA Directive as follows:

> "*a description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects*".

The implications of the Revised EIA Directive in relation to alternatives are considered in **Chapter 3**, **Alternatives Considered** of this EIAR.

#### 1.6.2.4 National Guidance

The following documents have been referred to in the preparation of this EIAR:

- Environmental Protection Agency (2002) Guidelines on the information to be contained in Environmental Impact Statements
- Environmental Protection Agency (2003) Advice notes on current Practice (in the preparation of Environmental Impact Statements)
- Environmental Protection Agency (2015) DRAFT Advice notes for preparing Environmental Impact Statements
- The Revised EIA Directive Circular PL 05/2018

- Environmental Protection Agency 'Guidelines on the information to be contained in Environmental Impact Assessment Reports' (2022)
- Department of Housing, Planning and Local Government 'Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment' (August 2018)

#### *1.6.2.5 Competent Experts and Quality of the EIAR*

Article 5(3) of the Revised EIA Directive states that, in order to ensure the completeness and quality of the EIAR, (a) the developer shall ensure the EIAR is prepared by competent experts; (b) the competent authority shall ensure that it has, or has access to, sufficient expertise to examine the EIAR, and (c) where necessary, the competent authority shall seek from the developer any supplementary information, in accordance with Annex IV (the information to be contained in the EIAR), which is directly relevant to reaching a reasoned conclusion on the significant effects of the project on the environment.

The Revised EIA Directive (2011/92/EU as amended by 2014/52/EU)[3] Consultation states that:

> *"It is not proposed to define the terms 'competent experts' or 'sufficient expertise' in legislation given the broad and diverse range of EIA topics and the different areas of specialist expertise.*
>
> *It is proposed that the competency of experts preparing an EIAR should be a matter for each competent authority, having regard to the diverse range of EIA topics and areas of specialist expertise.*
>
> *Guidance will address the issue of 'expertise' in both the preparation and assessment of EIARs.*
> *It would be good practice for the EIAR to state who prepared each element of the EIAR and list the qualifications and experience of each such person to assist the competent authority satisfy itself as to the competency of the experts who prepared the EIAR. The level of expertise required for each element of the EIAR would depend on the nature and importance of that element vis-à-vis the size, nature and location of the project and the receiving environment and the likely significant impact on that environment*".

[3] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0052&rid=1

The Applicant has considered that each of the experts involved in the preparation of this EIAR is competent, having regard to the task he or she has performed, and, taking account of the scope of the study for which he or she undertook the work, the person/s possess sufficient training, experience and knowledge appropriate to the nature of the work.

This EIAR has been prepared by Jennings O'Donovan & Partners Limited (JOD), Consulting Engineers, Finisklin Business Park, Sligo, F91 2HH9, on behalf of the Applicant.

JOD are one of the longest established and most reputable multi-disciplinary engineering consultancies in Ireland. Established in 1950, it has grown to be the largest engineering consultancy in the north-west of Ireland. JOD have been an established presence in the Renewable Energy Wind Farm sector since 1998. To date, the company has a portfolio of project involvement extending to over 2,040 MW of power in Ireland and Northern Ireland and is a recognised market leader in the area of Wind Energy development. This portfolio will equate, when completed, to an investment of €3 billion in the Wind Energy Sector. Additionally, JOD has attained certificates in line with industry standards as follows:

- ISO 9001:2015 – Quality Management System
- ISO 14001:2015 – Environmental Management System
- ISO 45001:2018 – Occupational Health and Safety Management System

ISO certification demonstrates that JOD have developed, maintained and implemented systems in quality, safety and environmental related matters and are therefore competent experts.

This project has been completed in line with JOD's Integrated Management System (IMS) which is based on the current versions of ISO 9001 (Quality Management System), ISO 14001 (Environment Management System) and ISO 45001 (Safety Management System).

JOD has developed a Quality Policy Statement, an Environmental Policy Statement and a Safety Health and Welfare Policy Statement. It is a stated objective in our Quality Policy Statement that:

> *"…Jennings O'Donovan and Partners Limited is committed to complying with the requirements of the quality management system and to continually improve its effectiveness…".*

JOD staff are degree qualified in their respective specialist fields and have developed their competence through both experience on the job and through training. Each team member has developed the following:

- Sufficient knowledge of the specific tasks to be undertaken and the risks which may arise
- Sufficient experience and ability to carry out their duties in relation to this EIAR and to take appropriate actions required under the EIA Directive

Specialist consultancies have been employed to complete some of the EIAR Chapters. Each Chapter of the EIAR includes a Statement of Authority regarding the competency of the author and relevant qualifications.

## 1.7 NEED FOR THE PROJECT

The extent of the challenge to reduce greenhouse gas emissions in line with our International and EU obligations is well understood by Government and is reflected in the National Policy Position on Climate Action and Low Carbon Development (2014) and the Climate Action and Low Carbon Development Acts 2015 to 2021. Both the policy position and legal framework are key elements of the effort to progress the national low carbon transition agenda.

In 2015 the Irish Government made a commitment to transform Ireland into a Low Carbon Economy by the year 2050.

The Government quantified this as:

- An aggregate reduction in $CO_2$ emissions of at least 80% (compared to 1990 levels) by 2050 across the electricity generation, built environment and transport sectors; and
- In parallel, an approach to carbon neutrality in the agriculture and land-use sector, including forestry, which does not compromise capacity for sustainable food production.

**The Climate Action Plan 2023**

The Climate Action Plan 2023 provides a detailed plan to achieve a 51% reduction in $CO_2$ emissions by 2030 and net zero by 2050.

In relation to electricity generation, there is a commitment to increase the reliance on renewable energy sources to facilitate a 75% reduction in $CO_2$ emissions from the electricity

generation sector by 2030. This requires increasing the target of on-shore wind energy to 9 GW in line with the National Climate Action Plan 2023 commitments.

The contribution of the Development to the de-carbonisation of the Irish electricity network will contribute positively to an issue of strategic social importance and highlights the need to remove barriers to the development of renewables, including onshore wind, such as streamlining regulation and encouraging reinforcement of the grid to facilitate greater renewables penetration. The significance of the National Climate Action Plan 2023 is underlined by the Irish government's declaration of a Climate Emergency in 2019.

**The Renewable Energy Directive 2018**

The Renewable Energy Directive (recast) 2018/2001/EU entered into force in December 2018 and was transposed into Irish law in September 2020 by the Renewable Energy Regulations 2020. The regulations set the parameters for the establishment of future Renewable Electricity Support Schemes (RESS), and build on the existing regime, which was created by the European Union (Renewable Energy) Regulations 2014 (as amended) (the "2014 Regulations").

The ambition of increased electricity from renewable sources will be significantly ramped up.Ireland is facing significant challenges in efforts to meet these targets, alongside its commitment to transition to a low carbon economy by 2050. Ireland did not meet its 2020 target for renewable energy and is falling behind in the longer-term movement away from fossil fuels.

The Development is critical to helping Ireland address these challenges as well as addressing the country's over-dependence on unsustainable imported fossil fuels. The need for the Development is driven by the following factors:

- A requirement to diversify Ireland's energy sources, to achieve national renewable energy targets;
- A desire to avoid significant fines from the EU (the EU Renewables Directive);
- A legal commitment under the Kyoto protocol from Ireland to limit greenhouse gas emissions;
- A requirement to increase Ireland's national energy security as set out in the Energy White Paper;
- Provision of cost-effective power production for Ireland which would deliver local benefits;

- Increase energy price stability in Ireland by reducing an over-reliance on imported gas and exposure to international market price and supply fluctuations.

The Development will also offer opportunities such as:

- Provision of clean energy whilst minimising environmental impacts;
- Contributing to renewable energy targets which will continue to drive down the overall cost of energy with benefits to the Irish consumer.

The Project will create additional jobs and will encourage continued investment in the renewable industry in Ireland. Wind Energy Ireland (WEI), Ireland's largest renewable energy organisation, in its annual Wind Energy Report for 2022 noted that Ireland's wind energy share of electricity demand in 2022 was 34% compared to 30% in 2021.

The total installed capacity of the Republic of Ireland's wind farms is now 4,375 MW[4]; this is approximately enough to power 2.2 million Irish homes annually.

**Chapter 4: Policy and Planning** of the EIAR relates to the Planning Policy Context and presents a full description of the international and national renewable energy policy context for the Development. **Chapter 16: Air & Climate** addresses Climate Change, including Ireland's current status with regard to meeting greenhouse gas emission reduction targets.

## 1.8 INFORMATION TO BE INCLUDED IN A DECISION TO GRANT

Article 8a (1) of the Revised EIA Directive states:

> *"The decision to grant development consent shall incorporate at least the following information:*
> *(a) the reasoned conclusion referred to in Article 1(2)(g)(iv);*
> *(b) any environmental conditions attached to the decision, a description of any features of the project and/or measures envisaged to avoid, prevent or reduce and, if possible, offset significant adverse effects on the environment as well as, where appropriate, monitoring measures".*

To assist An Bord Pleanála with this requirement, the EIAR includes at the end of each chapter a summary of all proposed mitigation and monitoring measures outlined within the technical assessments .

[4]https://windenergyireland.com/images/files/20221026windenergyirelandoireachtasmembersbriefing.pdf [Accessed on the 01/02/2023].

## 1.9 EIAR STRUCTURE

This EIAR uses the grouped structure method to describe the existing environment, the potential impacts of the Project thereon and the proposed mitigation measures. Background information relating to the Project, scoping and consultation undertaken and a description of the Project are presented in separate sections. The grouped format sections describe the impacts of the Project in terms of human beings, flora and fauna, soils and geology, hydrology and hydrogeology, air and climate, noise and vibration, landscape and visual, cultural heritage and material assets such as traffic and transportation, together with the interaction of the foregoing. Please note that the Irish Transverse Mercator (ITM) coordinate system is used in the EIAR document.

The layout of this EIAR is arranged in four volumes, I-IV.

**Volume I**: This volume includes the opening **Non-Technical Summary (NTS).** It is a condensed and easily comprehensible version of the EIAR document. The NTS is presented in a similar format to the main EIAR document and comprises descriptions of the Project, the receiving environment, impacts, mitigation measures and interactions presented in a grouped format. It is a standalone document.

**Volume II**: This volume contains the **Environmental Impact Assessment Report (EIAR).** The EIAR is presented using the grouped structure method and describes the existing environment, the potential impacts of the Project thereon and the proposed mitigation measures. Background information relating to the Project, scoping and consultation undertaken and a description of the Project are presented in separate Chapters.

The chapters in this Volume II: in the EIAR are as follows:

- Chapter 1: Introduction
- Chapter 2: Development Description
- Chapter 3: Alternatives Considered
- Chapter 4: Planning and Policy
- Chapter 5: Population and Human Health
- Chapter 6: Biodiversity
- Chapter 7: Ornithology
- Chapter 8: Soils and Geology
- Chapter 9: Hydrology and Hydrogeology
- Chapter 10: Noise

- Chapter 11: Landscape and Visual Impact
- Chapter 12: Material Assets and Other Issues
- Chapter 13: Cultural Heritage
- Chapter 14: Traffic and Transportation
- Chapter 15: Shadow Flicker & EMI
- Chapter 16: Air & Climate
- Chapter 17: Interactions of the Foregoing, Major Accidents, Cumulative Effects and Summary of Mitigation Measures

**Volume III: EIAR Figures and Drawings**

The Figures and Drawings referred to in each chapter of the EIAR are compiled separately in Volume III. Figures are numbered sequentially for each chapter in which they are principally referred.

**Volume IV: Appendices**

The Appendices referred to in each chapter of the EIAR are compiled separately in Volume IV. They are also numbered sequentially for each chapter in which they are principally referred.

## 1.10 EIAR PREPARATION

### 1.10.1 Introduction

JOD had overall responsibility for the coordination of the EIAR with input from other independent specialist consultants where necessary. The competency of JOD has been outlined in Section 1.6.2.5. Table 1.3 provides details of the contributors of each aspect of the EIAR. Further details on the qualifications of each lead author can be found in **Appendix 1.1** and in the Statement of Authority in each individual technical assessment chapter.

**Table 1.3: EIAR Preparation Details**

| EIAR Chapter | Contributor & Qualifications |
|---|---|
| 1: Introduction | Mr. Justin Lohan, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited<br><br>Mr. Ryan Mitchell, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited |

| EIAR Chapter | Contributor & Qualifications |
|---|---|
| 2: Development Description | Mr. David Kiely, BSc., MSc., Director, Jennings O'Donovan & Partners Limited<br><br>Mr. Justin Lohan, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited<br><br>Mr. Ryan Mitchell, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited |
| 3: Alternatives Considered | Mr. Ryan Mitchell, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited<br><br>Mr. Justin Lohan, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited |
| 4: Planning Policy | Mr. Ryan Mitchell, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited<br><br>Mr. Justin Lohan, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited |
| 5: Population and Human Health | Mr. Ryan Mitchell, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited<br><br>Mr. Justin Lohan, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited |
| 6: Biodiversity | Mr. Pat Doherty, MSc., BSc., CIEEM, Director, Doherty Environmental Services |

| EIAR Chapter | Contributor & Qualifications |
|---|---|
| 7: Ornithology | Mr. Jon Kearney, Principle Ecologist. Fehily Timoney and Company / Doherty Environmental Consultants Limited<br><br>Mr. Ben O'Dwyer, BSc, Fehily Timoney and Company / Doherty Environmental Consultants Limited<br><br>Ms. Catherine Elder, BSc., MSc. Fehily Timoney and Company / Doherty Environmental Consultants Limited<br><br>Ms. Chandra Walter, BSc., MSc. Fehily Timoney and Company / Doherty Environmental Consultants Limited<br><br>Mr. David Daly., Fehily Timoney and Company / Doherty Environmental Consultants Limited<br><br>Mr. Gary Locke, BA., HDip., MSc., Fehily Timoney and Company / Doherty Environmental Consultants Limited<br><br>Mr. Joseph Adamson, BSc., MSc., CIEEM., Fehily Timoney and Company / Doherty Environmental Consultants Limited<br><br>Ms. Kate Mahony, BSc., MSc., PhD., Fehily Timoney and Company / Doherty Environmental Consultants Limited<br><br>Mr. Noel Linehan, BSc., Fehily Timoney and Company / Doherty Environmental Consultants Limited<br><br>Mr. Paul Rowe, Fehily Timoney and Company / Doherty Environmental Consultants Limited<br>Ms. Rebecca Furlong, Fehily Timoney and Company / Doherty Environmental Consultants Limited<br><br>Mr. Seán Ronayne.,BSc., MSc., Fehily Timoney and Company / Doherty Environmental Consultants Limited |
| 8: Soils and Geology | Mr. Andrew Garne, BSc., MSc., PGeo, MIAH, IGI, EcoQuest Environmental Limited |
| 9: Hydrology and Hydrogeology | Mr. David Parkinson, BSc., FIEMA, Director, EcoQuest Environmental Limited |
| 10: Noise | Brendan O'Reilly, MPhil ISEE SFA EAA, Noise & Vibration Consultants Limited<br><br>Shane Carr, Director, BSc (Hons), MIA, CIEH, Noise & Vibration Consultants Limited |

| EIAR Chapter | Contributor & Qualifications |
|---|---|
| 11: Landscape and Visual Impact | Mr Cian Doughan, Landscape Architect, BSLA., MILI.,Macro Works Limited<br><br>Mr Richard Barker MLA., MILI., Director, Macro Works Limited |
| 12: Material Assets and Other Issues | Mr. Ryan Mitchell, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited<br><br>Mr. Justin Lohan, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited |
| 13: Cultural Heritage | Mr. Tony Cummins, BA., MA., Senior Archaeologist, John Cronin & Associates |
| 14: Traffic and Transport | Mr. David Kiely, BSc., MSc., Director, Jennings O'Donovan & Partners Limited<br><br>Mr. John Doogan, NC., NDip. CEng. (HND), Senior Roads Technician, Jennings O'Donovan & Partners Limited |
| 15: Shadow Flicker | Mr. Ryan Mitchell, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited<br><br>Mr. Justin Lohan, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited |
| 15: Air and Climate | Mr. Ryan Mitchell, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited<br><br>Mr. Justin Lohan, BSc, Senior Environmental Consultant, Jennings O'Donovan & Partners Limited |
| 17: Interactions of the Foregoing, Major Accidents, Cumulative Effects and Summary of Mitigation Measures | Jennings O'Donovan & Partners Limited |

### 1.10.2 Chapter Structure

Each technical assessment included in the EIAR has followed the same general format:

- Assessment Methodology and Significance Criteria: A description of the methods used in baseline surveys and in the assessment of the significance of effects
- Baseline Description: A description of the Site's existing baseline, based on the results of surveys, desk information and consultations, and a summary of any information required for the assessment that could not be obtained

- Assessment of Potential Environmental Effects: A description of how the baseline environment could potentially be affected by the Project including a summary of the measures taken during the design of the Project to minimise effects
- Mitigation Measures and Residual Effects - A description of measures recommended that will be implemented to reduce and/or off-set potential negative effects and a summary of the assessed level significance of the effects of the Development and/or the Project after mitigation measures have been implemented
- Cumulative Effects: A description identifying the potential for effects of the Project to combine with those from other existing, pending and/or permitted developments to affect resources
- Statement of Significance of Effects

The significance of effects resulting from the Project will be determined through consideration of a combination of the sensitivity of the receiving environment and the predicted level of change from the baseline state. Environmental sensitivity can be categorised by several aspects including factors such as the transformation of natural landscapes, the protection afforded to, and presence of, European sites, rare or endangered species, land use and fisheries.

Sensitivity of classification of the receiving environment can vary between the different technical areas of assessment e.g., biodiversity, hydrology and hydrogeology, population and human health and landscape and visual impact. In general, this EIAR largely follows the principles and terminology of the 2022 EPA 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports[5] in relation to the identification of significant effects. Where a technical assessment has adopted an alternative to this process, such as following technical guidance bespoke to that topic, such assessment criteria are made clear in that chapter. **Table 1.4** highlights the general framework for the assessment of significance of effects.

**Table 1.4: Impact Classification Terminology (EPA Guidelines, 2017)**

| 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 |

[5] https://www.epa.ie/publications/monitoring--assessment/assessment/EIAR_Guidelines_2022_Web.pdf [Accessed 09th March 2023]

| Impact Characteristic | Term | Description |
|---|---|---|
| | 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 significantly alters most of a sensitive aspect of the environment |
| | Very significant | An effect which, by its character, magnitude, duration or intensity significantly alters 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 |
| | 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 |

| Impact Characteristic | Term | Description |
|---|---|---|
| | 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 |
| | Synergistic | Where the resultant effect is of greater significance than the sum of its constituents |

### 1.10.3 Turbine Parameters used for EIAR Assessments

The determination of the worst-case scenario in the assessments contained within this EIAR is based on the professional judgment of each expert contributor to the same. In this regard the European Commission "*Guidance document on wind energy developments and EU nature legislation*, (November 2020)[6] the only parameter with a range is the MW output for the turbines. Therefore. the "worst case" scenario assessed is the actual dimensions of the turbines combined with the greater MW output.

Guidance document on wind energy developments and EU nature legislation, (November 2020) notes that:

> *"The key issue for a competent national authority to authorise a wind energy development project based on an envelope rather than a specific design relates to environmental impact. From an environmental impact perspective, the applicant must*

6 https://ec.europa.eu/environment/nature/natura2000/management/docs/wind_farms_en.pdf, [Accessed 9th March 2023].

*ensure that the EIA and the Appropriate Assessment undertaken has considered the worst-case design possible within the different options available in the design envelope."*

The turbine specification is specific V162 type turbine with fixed dimensions outline below. The only parameter with a range is the MW output for the turbines, as presented in Table 1.5 and Figure 1.4. It is very specific, with a difference of 1.2 MW within each of the turbine size envelopes outlined. Where a section/chapter of this EIAR chapter needs to specify the size range of each turbine component, Table 1.5 below sets out those that do.

It should be noted that the NIS similarly assessed the worst-case scenario impacts as the same project design parameters and description were considered. . For the purposes of this EIAR /planning application, the documentation submitted assesses the environmental impact associated with the following turbine dimension parameters:

Turbine Tip Height –185 Metres

Hub Height –104 metres

Blade Length - 79 metres

Rotor Diameter - 162m

**Table 1.5:** Turbine Parameters Used in EIAR Assessments

| Assessment | Hub Height | Rotor Diameter (Blade Length) | Tip Height | Discussion – Worst Case Assessment |
|---|---|---|---|---|
| Chapter 5 Population and Human Health – | 104m | 162m (Blade Length 79m) | 185m | Chapter 5 considers population and human health<br><br>Consideration of impacts from other sections (e.g. noise, visual, traffic) are also incorporated based on their individual assessments in later chapters. |
| Chapter 6 Biodiversity – Bat Assessment | 104m | 162m (Blade Length 79m) | 185m | Bat buffer zone extents will be outlined and associated impacts for bat species using the Site assessed |
| Chapter 7 Ornithology - Bird Collision Risk | 104m | 162m (Blade Length 79m) | 185m | Collision Risk Modeling for relevant bird species is presented for each of the associated design envelope parameters in Chapter 7 and associated appendices. |

| Assessment | Hub Height | Rotor Diameter (Blade Length) | Tip Height | Discussion – Worst Case Assessment |
|---|---|---|---|---|
| Chapter 8 Soils, & Geology | 104m | 162m (Blade Length 79m) | 185m | The associated impact of turbine foundation and hardstand design and delivery requirements associated with worst case of turbine specification is considered in this EIAR chapter. |
| Chapter 9 Hydrology and Hydrogeology | 104m | 162m (Blade Length 79m) | 185m | The associated impact of turbine foundation and hardstand design and delivery requirements associated with worst case of turbine specification is considered in this EIAR chapter. |
| Chapter 10 Noise | 104m | 162m (Blade Length 79m) | 185m | The associated impact of noise propagation between noise source and nearest residential receptors is assessed. |
| Chapter 11 Landscape & Visual Amenity | 104m | 162m (Blade Length 79m) | 185m | A Landscape and Visual Impact Assessment has been carried out that represents the wind farm being built out according to its sought blade tip height scenario. |
| Chapter 12 Material Assets and Other Issues | 104m | 162m (Blade Length 79m) | 185m | The Material Assets and Other Issues will consider the impact of the Development. |
| Chapter 13 Cultural Heritage | 104m | 162m (Blade Length 79m) | 185m | The Cultural Heritage Chapter will assess the potential impact of the wind farm being developed and requiring additional buffer zone distance to listed Sites and Monuments and extent of archaeological monitoring needed to supervise groundworks. |
| Chapter 14 Traffic and Transportation | 104m | 162m (Blade Length 79m) | 185m | The range in MW output will not affect Traffic and Transport. |

| Assessment | Hub Height | Rotor Diameter (Blade Length) | Tip Height | Discussion – Worst Case Assessment |
|---|---|---|---|---|
| Chapter 15: Shadow Flicker Assessment | 104m | 162m (Blade Length 79m) | 185m | This chapter comprehensively assesses the proposed Project (which includes the turbine range). The relevant Irish guidance for shadow flicker is derived from the 'Wind Energy Development Guidelines for Planning Authorities' (Department of the Environment, Heritage and Local Government (DoEHLG), 2019 draft and the 'Best Practice Guidelines for the Irish Wind Energy Industry' (Irish Wind Energy Association, 2012). The DoEHLG Guidelines state that at distances greater than 10 rotor diameters from a turbine, the potential for shadow flicker is very low. Taking the above into consideration, JOD examined maps to identify receptors (dwellings) in the local area within a study area, a distance ten times the maximum proposed rotor diameter of the proposed turbines (10 x 162m = 1620m)., a rotor diameter of 162m was used to calculate this distance which was then rounded up to 2km to ensure a conservative assessment. |
| Chapter 16: Air & Climate | 104m | 162m (Blade Length 79m) | 185m | The assessment in this chapter considers an overall power output from the proposed project (which includes the Turbine Range) of between 72 and 86.4 MW.<br><br>The Carbon Calculator, which is assessed for both the lower range (6.0MW) and the higher range (7.2MW), |

| Assessment | Hub Height | Rotor Diameter (Blade Length) | Tip Height | Discussion – Worst Case Assessment |
|---|---|---|---|---|
| | | | | accounts for improvement works and the years taken for the Site to return to its original characteristics.<br><br>Carbon Losses and Savings were calculated based on the lower and higher ranges of output to ensure all scenarios within the proposed range are assessed. |

### 1.10.4 Significance Criteria

The significance of the potential effects of the Development have been classified by taking into account the sensitivity of receptors and the magnitude of the potential effect on them, combined with the likelihood of an impact occurring as defined in **Table 1.6**.

**Table 1.6: Rating of Significant Environmental Impacts (EPA Guidelines, 2017)**

| Description of Impact Character/Magnitude/Duration/Probability/Consequences | | | | | |
|---|---|---|---|---|---|
| **Magnitude of Significance /Sensitivity** | | **Negligible** | **Low** | **Medium** | **High** |
| | **Extremely High** | Not Significant | Profound/ Very Significant | Profound | Profound |
| | **Very High** | Not Significant | Moderate | Significant | Profound/ Very Significant |
| | **High** | Not Significant | Slight | Significant/ Moderate | Very Significant |
| | **Medium** | Not Significant/ Imperceptible | Slight | Moderate | Significant/ Moderate |
| | **Low** | Imperceptible | Slight/ Not Significant | Slight | Slight/ Moderate |
| | **Negligible** | Imperceptible | Imperceptible | Imperceptible | Imperceptible |

#### *1.10.4.1 Mitigation Measures and Residual Effects*

There are three established strategies for impact mitigation - avoidance, reduction and remedy. The efficacy of each is directly dependent on the stage in the design process at which environmental considerations are taken into account, (i.e. impact avoidance can only be considered at the earliest stage, while remedy may be the only option available to fully designed projects).

The EIA co-ordinator has engaged with stakeholders, which has provided the benefit of developing and refining mitigation through an iterative process rather than 'adding on' such measures at the end of the Project. Mitigation measures have been prioritised and embedded into the design phase of the Project to avoid, reduce and offset any significant adverse effects. These are referred to within this EIAR as 'embedded mitigation'.

Relevant mitigation measures are discussed within each technical Chapter of this EIAR. **Chapter 17: Interactions of the Foregoing** provides a summary of mitigation measures for all technical assessments.

#### *1.10.4.2 Cumulative Effects*

The assessment has considered 'cumulative effects'; these are effects that result from increasing changes caused by developments past, present or those which are reasonably foreseeable together with the Project. Consideration has been given to the combined cumulative effects of several developments that may, on an individual basis, be insignificant, but which cumulatively may give rise to a significant effect.

The closest proposed wind farm development is Scart Mountain Wind Farm.This project is currently in pre-planning stage and in the public domain. In accordance with the European Commission Guidelines: *''on the Assessment of Indirect and Cumulative Impacts as well as Impact interactions''*[7]*.* the flowing criteria is required to assess wind farms cumulatively:

- nature of the project;
- project phasing;
- the scale of the project;
- the site layout;
- emissions to land, air and water;
- ancillary development;
- proposed mitigation measures

7 https://ec.europa.eu/environment/archives/eia/eia-studies-and-reports/pdf/guidel.pdf

The criteria outlined above is not available in the public domain to date[8] for Scart Mountain Wind Farm. Therefore, this project cannot be cumulatively assessed and has not been in not been included in any other EIAR Chapters.

#### *1.10.4.3 Statement of Significance of Effects*

The statement of significance outlines the conclusion of each technical assessment in order to provide a final overall conclusion as to the significance of the Project under the terms of the EIA Directive 2011/92/EU (EIA Directive) and the revised EIA Directive 2014/52/EU (Revised EIA Directive).

## 1.11 SCOPING AND CONSULTATION

The scoping and consultation process was carried out in accordance with the Revised EIA Directive and in accordance with the Guidelines on the information to be contained in Environmental Impact Assessment Reports (EPA, 2022).

The Revised EIA Directive Circular notes that:
*"It is a requirement of the EIA process to consult with statutory consultees and to take into account any submissions made by these consultees. Such submissions may contain expert specialist opinions on topics to be assessed in the EIA process…".*

A scoping exercise was carried out in April 2022. **Table 1.7** documents individuals and organisations that have been consulted as part of the EIA process. The purpose of this consultation process was to provide a focus for the EIA by identifying the key issues of relevance. As such, the consultation process informs the various organisations of the Project, thereby providing an opportunity to submit comments and to offer information relevant to the preparation of this EIAR. Responses can be found in **Volume IV**, **Appendix 1.1: Consultation Responses.**

[8] https://scartmountainwindfarm.ie/ [Accessed: 9th March 2023]

**Table 1.7: Scoping Responses Received on The Project**

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
|---|---|---|---|
| Waterford City and County Council | Email scoping response received 23/11/2022.<br><br>*Below is the response to the Scoping Request for Dyrick Hill Wind Farm, Ballinamult, Co. Waterford sought by Jennings O'Donovan & Partners Ltd., Consulting Engineers (JOD).*<br><br>***Proposed Development***<br><br>*The proposed development is 12 no. wind turbines each typically of 6.2 megawatts (MW) with a combined output of up to 74MW (stated). The proposed turbines will have a max tip height of 185m. The developer intends to connect the development if permitted to the 110kV substation in Dungarvan. The haul route for the turbines is from Belview Port via the N25, N72, R672 and via the Local Road Network from Cloncogaile Cross on the Regional Road to the subject site.*<br><br>***The Waterford City and County Development Plan 2022-2028***<br><br>*Under the adopted Development Plan the entire development site is located within an Exclusion Zone for Wind Energy – in excess of 1.5km-2km from areas Preferred or Open for Consideration. This designation means WCCC would not be supportive of the proposal as same would not comply with the Policies, Objectives or Designations of the Development Plan.*<br><br>*Notwithstanding WCCC would not be supportive of the development the following information may also be useful as part of the preparation of the EIAR if the applicant chooses to proceed with the development.*<br><br>*The turbine bases appear to be within the 160m and 350m contours with locally elevated points being Dyrick Hill – 285m and Broe Mountain 429m.*<br><br>*8 of the proposed turbines are in an area identified as Most Sensitive in the Landscape and Seascape Character Assessment, 1 is in a* | All items considered during the design process.<br>No implications for the EIA/Design | **Ecology** addressed in Chapter 6<br><br>**Ornithology** addressed in Chapter 7<br><br>**Soils and Geology** addressed in Chapter 8<br><br>**Hydrology** addressed in Chapter 9<br><br>**Traffic and Transport** addressed in Chapter 14<br><br>**Landscape and Visual Amenity** addressed in Chapter 11 |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
|---|---|---|---|
| | *High Sensitive designation and 1 in Low Sensitive designation. Full regard must also be had to schedule of protected views and scenic routes as designated.*<br><br>*The site is 3km west of Tournaneena, 6.3km north east of Cappoquin and 13.3km north west of Dungarvan. The site is also in close proximity to Ballinamult and the Tipperary County Boundary.*<br><br>*The site is 2km west of the Finisk River and 1.3km east of the Glenshelane River with functional connection to the Blackwater River SAC – all Natura sites within 15km should be considered as part of Appropriate Assessment.*<br><br>*The site is immediately east of the Blue Dot Subcatchment of the Glendshelane River.*<br><br>***Scale of the Development***<br><br>*WCCC has concerns regarding the scale of the proposed development specifically the size of the turbines with 185m tip - An acknowledgement that the 2006 Windfarm Guidelines would not have envisaged or considered development of the proposed scale must be considered as part of any EIAR – the standards contained in the 2006 do not simply scale up, there can be a multiplier effect.*<br><br>*The Draft Wind Guidelines provided for review with regard to shadow flicker, noise etc. in terms of assessment and this should be considered as part of any proposal.*<br><br>***Traffic & Transportation***<br><br>• *The TIA, RSA etc. should address concerns in relation to construction traffic, oversized loads, passing bays and road damage particularly on the local roads.*<br>• *Haul routes- The EIAR shall record the roadside/field boundary types and ecological corridors along proposed haul routes and assess how they will be impacted by transport of proposed wind* | | |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
|---|---|---|---|
| | *energy infrastructure i.e. sections of realignment, loss of hedgerows, mitigatory planting etc .*<br><br>***Grid Connection***<br><br>*WCCC is currently not in favour of grid connections in the public road/ private company owning ducts / cables under the public road network. Alternative means of connection need to be considered .*<br><br>***Hydrology***<br><br>*Direct and indirect impacts on water quality from excavation and soil stability shall be given particular attention. The EIAR needs to demonstrate how the proposed development will impact on the objectives for protection of Blue Dot Catchments under the Water Framework Directive.*<br><br>***Vernacular heritage***<br><br>*Protected Structures and features within the vicinity and along the haul routes such as historic bridges, wells, mile markers and stone depots should be recorded and assessed or potential effects.*<br><br>***Consultation***<br><br>*Inclusion of Mountaineering Ireland and Waterford Hillwalking Groups could usefully be included in the list of consultees e.g. Comeragh Mountaineering Club, Kilmacthomas Walking Group, Dungarvan Hillwalking Club. The scope of the public consultation/ leaflet drop should be appropriately extended to reflect the rural nature of the surrounding environments and should consider parishes and townlands as opposed to a simple radius of the site. The purpose of the consultation is to advise and engage with as many as practicable to raise awareness and allow for public engagement.* | | |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
|---|---|---|---|
| Tipperary County Council | Scoping response received 30/05/2022.<br><br>*Without prejudice to any future issues that arise in any subsequent applications Tipperary County Council request that you consider the following in any EIAR content:*<br><br>• *The impact of the development on the landscape character noting the sensitivities of the Knockmealdown Mountains that are designated as Primary Amenity Areas/ Secondary Amenity Areas under the South Tipperary County Development Plan 2009, as varied and the draft Tipperary County Development Plan 2022.*<br>• *The protected views of the Knockmealdowns Mounatins as designed under the South Tipperary County Development Plan 2009, as varied and the draft Tipperary County Development Plan 2022.*<br>• *The Tipperary Renewable Energy Strategy as contained under the South Tipperary County Development Plan 2009, as varied and the draft Tipperary County Development Plan 2022 noting in particular the designation of the lands in Tipperary north of the development site as unsuitable for wind energy development.*<br>• *Water supply and abstraction sources located withing the Knockmealdowns and south of Goatenbridge.*<br>• *Haul Route capacity and condition for transport components, concrete or aggregate to the site including any easements or works to facilitate turbine or load delivery.*<br>• *The impact of the development on the cultural heritage of the area.*<br>• *The impact of the development on the tourism potential of the area.* | All items considered during the design process.<br>No implications for the EIA/Design | **Traffic and Transport** addressed in Chapter 14<br><br>**Landscape and Visual Amenity** addressed in Chapter 11<br><br>**Cultural Heritage** addressed in Chapter 13 |
| **Aviation** | | | |
| Irish Aviation Authority | Scoping response received 30th May 2022. | | **Material Assets** addressed in Chapter 12 |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
|---|---|---|---|
| | *As the blade tip height and elevations of each turbine is not provided, Safety Regulation Division - Aerodromes cannot make any specific comments at this time.*<br>*The development appears to be approximately 63km North East of Cork Airport and 46km East of Waterford airport., as such, it is likely that the following general observations would be proffered during a formal planning process: In the event of planning consent being granted, the applicant should be conditioned to contact the Irish Aviation Authority to: (1) agree an aeronautical obstacle warning light scheme for the wind farm development, (2) provide as-constructed coordinates in WGS84 format together with ground and blade tip height elevations at each wind turbine location and (3) notify the Authority of intention to commence crane operations with at least 30 days prior notification of their erection.* | | |
| Cork Airport | No response received. | N/a | |
| Waterford Airport | No response received. | N/a | |
| **Ecology** | | | |
| An Taisce | No response received. | N/a | |
| Bat Conservation Ireland | No response received. | N/a | |
| Birdwatch Ireland | Scoping response received 22nd June 2022.<br><br>Thank you for your email. Please note that we receive a high volume of emails. We endeavour to respond as quickly as possible, but during busy periods please note that there may be a delay.<br><br>Many thanks for your patience,<br>The BirdWatch Ireland team.<br><br>No further response was received. | N/a | |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
|---|---|---|---|
| | | | |
| Inland Fisheries Ireland | No response received. | N/a | |
| Irish Wildlife Trust | No response received. | N/a | |
| Irish Peatland Conservation Council | Scoping response received 18th July 2022. The main points were as follows:<br><br>*We have a number of concerns pertaining to the proposed development which need to be given due consideration within the pre-planning stage before IPCC could support the project.*<br><br>***Legal Obligations to Protect Peatlands***<br>*We are legally bound by National and European legislation (The Wildlife Acts, EU Habitats and Bird's Directives) and international conventions (Ramsar, Bern Convention, Convention on Biological Diversity) to do our utmost to protect peatlands now and for future generations.*<br><br>***Bogland***<br>*The IPCC would advise any developer planning construction in, or within close proximity to peatland habitat to be familiar with the Environmental Protection Agency funded project BOGLAND (www.ucd.ie/bogland). This project recommends the best practice guidelines to ensure no damaging development occurs on, or affects peat soils and peatlands of conservation value. Its overall objective was to develop guidance in the development of strategies for the sustainable future management of peatlands in Ireland.*<br><br>***Designated Sites (See Map 1 & 2)***<br>*The Irish Peatland Conservation Council have identified a number of designated sites within the proximity of the proposed windfarm which need to be given due attention in ascertaining the impacts to biodiversity from the proposed projects.*<br><br>***Nitrogen Deposition***<br>*In 2018 in the UK 39 of 57 Special Areas of Conservation listed on the APIS website (http://www.apis.ac.uk) exceeded the Critical Load Threshold for nitrogen. This is having negative impacts on the vegetation of the designated habitats. There are various sources of excess nitrogen such as construction (e.g. roads, developments), urban waste water (pollution) and agriculture* | N/a | **Ecology** addressed in Chapter 6<br><br>**Ornithology** addressed in Chapter 7<br><br>**Geology and Soils** addressed in Chapter 8<br><br>**Hydrology** addressed in Chapter 9 |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
|---|---|---|---|
| | *(e.g. fertilizer/piggerys) and can enter a habitat via wet or dry deposition. The proposed development needs to account for nitrogen within pre-planning coupled with a nitrogen monitoring agenda which could highlight possible pathways of nutrient enrichment. Peatlands are naturally nutrient poor and the excessive loads can decimate botanical species.*<br><br>***Biosecurity***<br>*Peatlands are susceptible to invasive species when they are drained and/or degraded as when the peat dries out it allows species which would not normally survive in the wet acidic conditions to take hold. The introduction of invasive species can exacerbate erosion and transpiration increasing degradation of the peatland.*<br><br>***National Monuments***<br>*Peatlands in Ireland hold a great deal of cultural and ancestral history, preserved in the anaerobic conditions. Ireland has international obligations under the European Convention on the Protection of the Archaeological Heritage, ratified by Ireland in 1997.*<br><br>***Water Framework Directive***<br>*Ireland has legal obligations under the WFD to ensure that all rivers and lakes are of "Good Ecological Status" by 2027.*<br><br>***Curlew***<br>*The Curlew is one of the most endangered species in Ireland and the breeding population has declined by 78% over the past 40 years with less than 130 breeding pairs left (Birdwatch Ireland I-WeBS Newsletter August 2017).*<br><br>***Wetland Surveys Ireland***<br>*Wetland Surveys Ireland (www.wetlandsurveysireland.com) have identified a number of wetlands which have had or need to have an ecological survey to ascertain the biodiversity and ecological value within them. Please liaise with WSI to gather as much information about the sites as possible within an appropriate distance of the proposed project area and ensure that the proposed development will not have an adverse effect on the habitats or species that are utilising them or moving/migrating between them and other significant sites.*<br><br>***Landslide Susceptibility***<br>*Looking at the Geological Surveys of Ireland's Landslide Susceptibility Map shows that the locations for turbines 8 & 6 are in zones graded to be of a "* | | |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
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| | *High Landslide Susceptibility". The proposed turbine locations are a cause for concern and need to be extensively reviewed.*<br><br>***BirdWatch Ireland Species Sensitivity to Windfarms***<br>*A study conducted by BirdWatch Ireland on the sensitivity of certain bird species to windfarm developments shows that Red Grouse and Hen Harrier need to have a focussed survey initiated as they have shown sensitivity in this proposed location and need due attention and assessment to determine if they will be affected by the proposed development.* | | |
| Irish Raptor Study Group | No response received. | N/a | |
| NPWS | Scoping response received 28th July 2022.<br>*The Department of Housing, Local Government and Heritage have no comment to on this application at this time.* | N/a | |
| **Soils and Water** | | | |
| Geological Survey of Ireland | Scoping response received 26th April 2022.<br><br>**Geoheritage**<br>A national inventory of geoheritage sites known as County Geological Sites (CGSs) is managed by the Geoheritage Programme of Geological Survey Ireland. CGSs, as adopted under the National Heritage Plan, include sites that are of national importance which have been selected as the very best examples for NHA (Natural Heritage Areas) designation. NHA designation will be completed in partnership with the National Parks and Wildlife Service (NPWS). CGSs are now routinely included in County Development Plans and in the GIS of planning departments, to ensure the recognition and appropriate protection of geological heritage within the planning system. CGSs can be viewed online under the Geological Heritage tab on the online Map Viewer<br><br>The audit for Co. Waterford was carried out in 2011. The full report details can be found at here. Our records show that there are no CGSs in the vicinity of the proposed wind farm and turbine delivery route.<br><br>**Groundwater**<br>Geological Survey Ireland's Groundwater and Geothermal Unit, provides advice, data and maps relating to groundwater distribution, quality and use, which is especially relevant for safe and secure drinking water supplies and healthy ecosystems. | N/a | **Geology and Soils** addressed in Chapter 8<br><br>**Hydrology** addressed in Chapter 9 |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
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| | Proposed developments need to consider any potential impact on specific groundwater abstractions and on groundwater resources in general. We recommend using the groundwater maps on our Map viewer which should include: wells; drinking water source protection areas; the national map suite - aquifer, groundwater vulnerability, groundwater recharge and subsoil permeability maps. For areas underlain by limestone, please refer to the karst specific data layers (karst features, tracer test database; turlough water levels (gwlevel.ie). Background information is also provided in the Groundwater Body Descriptions. Please read all disclaimers carefully when using Geological Survey Ireland data.<br><br>The Groundwater Data Viewer indicates a 'Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones ', underlies the proposed wind farm. The Groundwater Vulnerability map indicates the area covered is variable. We would therefore recommend use of the Groundwater Viewer to identify areas of High to Extreme Vulnerability and 'Rock at or near surface' in your EIAR to assess potential impacts to groundwater.<br><br>Authorities, and there is now national coverage of GWPS mapping. A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater. The Groundwater Protection Response overview and link to the main report is here: https://www.gsi.ie/en-ie/publications/Pages/Waterford-Groundwater-Protection-Scheme-Reports.aspx.<br><br>**Geological Mapping**<br>Geological Survey Ireland maintains online datasets of bedrock and subsoils geological mapping that are reliable and accessible. We would encourage you to use these data which can be found here, in your future assessments.<br><br>**Geohazards**<br>Geohazards can cause widespread damage to landscapes, wildlife, human property and human life. In Ireland, landslides, flooding and coastal erosion are the most prevalent of these hazards. We recommend that geohazards be taken into consideration, especially when developing areas where these risks are prevalent, and we encourage the use of our data when doing so.<br>Landslides are common in areas of peat, rock near surface and in fine to coarse range materials (such as glacial tills), areas which are found within the proposed wind farm area. The Landslide Susceptibility map indicates | | |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
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| | variable landslide susceptibility within the wind farm boundary area, including areas of 'Moderately High' to 'High' susceptibility. Geological Survey Ireland has information available on landslides in Ireland via the National Landslide Database and Landslide Susceptibility Map both of which are available for viewing on our dedicated Map Viewer. Associated guidance documentation relating to the National Landslide Susceptibility Map is also available.<br><br>**Natural Resources (Minerals/Aggregates)**<br>Geological Survey Ireland provides data, maps, interpretations and advice on matters related to minerals, their use and their development in our Minerals section of the website. The Active Quarries, Mineral Localities and the Aggregate Potential maps are available on our Map Viewer.<br>We would recommend use of the Aggregate Potential Mapping viewer to identify areas of High to Very High source aggregate potential within the area. In keeping with a sustainable approach we would recommend use of our data and mapping viewers to identify and ensure that natural resources used in the proposed wind farm development are sustainably sourced from properly recognised and licensed facilities, and that consideration of future resource sterilization is considered.<br><br>**Geochemistry of soils, surface waters and sediments**<br>Geological Survey Ireland provides baseline geochemistry data for Ireland as part of the Tellus programme. Baseline geochemistry data can be used to assess the chemical status of soil and water at a regional scale and to support the assessment of existing or potential impacts of human activity on environmental chemical quality. Tellus is a national-scale mapping programme which provides multi-element data for shallow soil, stream sediment and stream water in Ireland. At present, mapping consists of the border, western and midland regions. Data is available at https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx. This page also hosts Geochemical Mapping of Agricultural and Grazing Land Soil of Europe (GEMAS) and lithogeochemistry (rock geochemistry) from southeast Ireland datasets. Geological Survey Ireland and partners are undertaking applied geochemistry projects to provide data for agriculture (Terra Soil), waste soil characterisation (Geochemically Appropriate Levels for Soil Recovery Facilities) and mineral exploration (Mineral Prospectivity Mapping).<br><br>**Other Comments**<br>Should development go ahead, all other factors considered, Geological Survey Ireland would much appreciate a copy of reports detailing any site investigations carried out. Should any significant bedrock cuttings be | | |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
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| | created, we would ask that they will be designed to remain visible as rock exposure rather than covered with soil and vegetated, in accordance with safety guidelines and engineering constraints. In areas where natural exposures are few, or deeply weathered, this measure would permit on-going improvement of geological knowledge of the subsurface and could be included as additional sites of the geoheritage dataset, if appropriate. Alternatively, we ask that a digital photographic record of significant new excavations could be provided. Potential visits from Geological Survey Ireland to personally document exposures could also be arranged.<br>The data would be added to Geological Survey Ireland's national database of site investigation boreholes, implemented to provide a better service to the civil engineering sector. Data can be sent to the Geological Mapping Unit, at mailto:GeologicalMappingInfo@gsi.ie, 01-678 2795. | | |
| The International Association of Hydrogeologists (IAH) Irish Group | No response received. | N/a | |
| **Archaeology** | | | |
| The Heritage Council | No response received. | N/a | |
| **Telecommunications** | | | |
| ENET | Scoping response received 7th July 2022.<br><br>*This wind farm won't affect our current network* | N/a | **Material Assets** addressed in Chapter 12 |
| Broadcasting Authority of Ireland | Scoping response received 11th April 2022.<br><br>*The BAI does not perform an in-depth analysis of the effect of wind turbines on FM networks. However, we are not aware of any issues from existing windfarms into existing FM networks. Also, the proposed windfarms are not located close to any existing or planned FM transmission sites.* | N/a | **Material Assets** addressed in Chapter 12 |
| Eir Limited | Scoping response received 19th April 2022.<br><br>*We have no transmission links within the proposed area, and it has no risk to the network.* | N/a | **Material Assets** addressed in Chapter 12 |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
|---|---|---|---|
| RTÉ | Scoping response received 11th April 2022.<br><br>*The proposed site will not impact any of our fixed linking.*<br>*There is however a risk of interference to DTT viewers to the north east of the site receiving from our site in Dungarvan.*<br>*We would therefore request that a protocol be signed between the developer and 2rn should the site go ahead.* | | **Material Assets** addressed in Chapter 12 |
| Tetra Ireland Communications | Scoping response received 19th April 2022.<br><br>*We anticipate no impact from the development as proposed, can you ensure the development is also reviewed by eir.* | N/a | **Material Assets** addressed in Chapter 12 |
| ESB Telecoms | No response received. | N/a | |
| Virgin Media Television | No response received. | N/a | |
| Vodafone | Scoping response received 14th April 2022.<br><br>*I can see no impact to any current Vodafone infrastructure with this planned development.*<br><br>*Should any turbine locations, or size change, please let us know, and we can recheck.*<br><br>Final coordinates sent to Vodafone 26th April 2023.<br><br>Response received 26th April 2023<br>*I have updated the co-ordinates as outlined below and can see no impact to any current Vodafone infrastructure with this planned development.* | | **Material Assets** addressed in Chapter 12 |
| **Other** | | | |
| Health Service Executive | Scoping response received 13th April 2022.<br><br>*The Health and Safety Authority (the Authority), acting as the Central Competent Authority under the Chemicals Act (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2015 (S.I. 209 of* | N/a | **Human Health and Population** addressed in Chapter 5 |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
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| | *2015) gives technical advice to the Planning Authority when requested, under regulation 24(2) in relation to:*<br>*(a) the siting and development of new establishments;*<br>*(b) modifications to establishments of the type described in Regulation 12(1);*<br>*(c) new developments including transport routes, locations of public use and*<br>*residential areas in the vicinity of establishments, where the siting, modifications or developments may be the source of, or increase the risk or consequences of, a major accident.*<br><br>*Since the above-referenced application appears to be outside the scope of the Regulations - (the proposed Wind Farm at Dyrick Hill, Ballinamult, Co. Waterford is not in the vicinity of a COAMH establishment), the Authority has no observations to forward.* | | |
| Environmental Protection Agency | No response received. | N/a | |
| Department of Agriculture, Food and the Marine | Scoping response received 23rd May 2022. The main points were as follows:<br><br>*If the proposed development will involve the felling or removal of any trees, the developer must obtain a Felling License from this Department before trees are felled or removed.*<br><br>*It is important to note that when applying to a Local Authority, or An Bord Pleanàla, for planning permission where developments are:*<br><br>*a) subject to an EIA procedure (including screening in the case of a sub-threshold development) and any resulting requirement to produce an EIAR; and/or*<br><br>*b) subject to an Appropriate Assessment procedure (including screening) and any resulting requirement to a Natura Impact Statement (NIS); and* | N/a | **Material Assets** addressed in Chapter 12 |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
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| | *c) the proposed development in its construction or operational phases, or any works ancillary thereto, would directly or indirectly involve the felling and replanting of trees, deforestation for the purposes of conversion to another type of land use, or replacement of broadleaf high forest by conifer species,*<br><br>*1.that there is a requirement inter alia under the EIA Directive for an overall assessment of the effects of the project or the alteration thereof on the environment to be undertaken, including the direct and indirect environmental impact of the project;*<br><br>*and*<br><br>*2. pursuant to Article 2(3) of the EIA Directive, the Department of Agriculture, Food and the Marine strongly recommends that, notwithstanding the fact that a parallel consent in the form of felling licence may also have to be applied for, any EIAR and/or NIS produced in connection with the application for planning permission to the Local Planning Authority or An Bord Pleanàla, should include an assessment of the impact of and measures, as appropriate, to prevent, mitigate or compensate for any significant adverse effects direct or indirect identified on the environment arising from such felling and replanting of trees, deforestation for the purposes of conversion to another type of land use, or replacement of broadleaf high forest by conifer species.* | | |
| Irish Water | Scoping response received 20th October 2022<br><br>*At present, Irish Water does not have the capacity to advise on the scoping of*<br>*individual projects. However, in general the following aspects of Water Services*<br><br>*should be considered in the scope of an EIA where relevant;*<br><br>*a) Where the development proposal has the potential to impact an Irish Water*<br>*Drinking Water Source(s), the applicant shall provide details of measures to be taken to ensure that there will be no negative impact to Irish Waters*<br>*Drinking Water Source(s) during the construction and operational phases of the development. Hydrological / hydrogeological pathways between the* | N/a | **Hydrology** addressed in Chapter 9 |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
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| | *applicant's site and receiving waters should be identified as part of the report.*<br><br>*b) Where the development proposes the backfilling of materials, the applicant is required to include a waste sampling strategy to ensure the material is inert.*<br><br>*c) Mitigations should be proposed for any potential negative impacts on any water source(s) which may be in proximity and included in the environmental management plan and incident response.*<br><br>*d) Any and all potential impacts on the nearby reservoir as public water supply*<br>*water source(s) are assessed, including any impact on hydrogeology and any*<br>*groundwater/ surface water interactions.*<br><br>*e) Impacts of the development on the capacity of water services (i.e. do existing water services have the capacity to cater for the new development). This is confirmed by Irish Water in the form of a Confirmation of Feasibility (COF). If a development requires a connection to either a public water supply or sewage collection system, the developer is advised to submit a Pre-Connection Enquiry (PCE) enquiry to Irish Water to determine the feasibility of connection to the Irish Water network. All pre-connection enquiry forms are available from https://www.water.ie/connections/connection-steps/.*<br><br>*f) The applicant shall identify any upgrading of water services infrastructure that would be required to accommodate the proposed development.*<br><br>*g) In relation to a development that would discharge trade effluent – any upstream treatment or attenuation of discharges required prior to discharging to an Irish Water collection network.*<br><br>*h) In relation to the management of surface water; the potential impact of surface water discharges to combined sewer networks and potential measures to minimise and or / stop surface waters from combined sewers.*<br><br>*i) Any physical impact on Irish Water assets – reservoir, drinking water source,* | | |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
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| | *treatment works, pipes, pumping stations, discharges outfalls etc. including any relocation of assets.*<br><br>*j) When considering a development proposal, the applicant is advised to determine the location of public water services assets, possible connection points from the applicant's site / lands to the public network and any drinking water abstraction catchments to ensure these are included and fully assessed in any pre-planning proposals. Details, where known, can be obtained by emailing an Ordnance Survey map identifying the proposed location of the applicant's intended development to datarequests@water.ie.*<br><br>*k) Other indicators or methodologies for identifying infrastructure located within the applicant's lands are the presence of registered wayleave agreements, visible manholes, vent stacks, valve chambers, marker posts etc. within the proposed site.*<br>*l) Any potential impacts on the assimilative capacity of receiving waters in relation to Irish Water discharge outfalls including changes in dispersion / circulation characterises. Hydrological / hydrogeological pathways between the applicant's site and receiving waters should be identified within the report.*<br><br>*m) Any potential impact on the contributing catchment of water sources either in terms of water abstraction for the development (and resultant potential impact on the capacity of the source) or the potential of the development to influence/ present a risk to the quality of the water abstracted by Irish Water for public supply should be identified within the report.*<br><br>*n) Where a development proposes to connect to an Irish Water network and that network either abstracts water from or discharges wastewater to a "protected"/ sensitive area, consideration as to whether the integrity of the site / conservation objectives of the site would be compromised should be identified within the report.*<br><br>*o) Mitigation measures in relation to any of the above ensuring a zero risk to any Irish Water drinking water sources (Surface and Ground water). This is not an exhaustive list. Please note;*<br>*• Where connection(s) to the public network is required as part of the development proposal, applicants are advised to complete the Pre-* | | |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
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| | *Connection Enquiry process and have received a Confirmation of Feasibility letter from Irish Water ahead of any planning application.*<br>*• Irish Water will not accept new surface water discharges to combined sewer networks.* | | |
| The Local Authority Waters | No response received. | N/a | |
| Department of Transport | Scoping response received 5th May 2022<br><br>*The Department of Transport have no observations to make at this point in time.* | N/a | |
| Department of Defence | Scoping response received 13th May 2022<br><br>*Based on the information supplied and having consulted with our Air Corps colleagues, The Department of Defence would like to make the following observations:*<br>*• Single turbines or turbines delineating a windfarm should be illuminated by Type C, Medium intensity, Fixed Red obstacle lighting with a minimum output of 2,000 candela to be visible in all directions of azimuth and to be operational H24/7 days a week.*<br>*• Obstacle lighting should be incandescent or of a type visible to Night Vision equipment.*<br>*• Obstacle lighting must emit light at the near Infra-Red (IR) range of the electromagnetic spectrum, specifically at or near 850 nanometres (nm) of wavelength. Light intensity to be of similar value to that emitted in the visible spectrum of light.*<br>*• Due to the nature of flight operations by the Irish Air Corps the above lighting requirements are separate to ICAO and IAA lighting requirements.*<br>*Please contact me if you have any queries in this regard.* | N/a | **Material Assets** addressed in Chapter 12 (Section 12.8.2) |

| Consultee Organisation | Response Received | Implications for the EIA/Design | EIAR Chapter/Section where comments have been addressed |
|---|---|---|---|
| Forest Service (DAFM) | No response received. | N/a | |
| Coillte | No response received. | N/a | |
| Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media | No response received | N/a | |
| Údarás na Gaeltachta | No response received | N/a | |
| The Arts Council | No response received | N/a | |
| An Taisce | No response received. | N/a | |
| Dungarvan Hillwalking Club, Dungarvan, Co. Waterford, Ireland. | No response received. | N/a | |
| Peaks Mountaineering Club Clonmel | No response received. | N/a | |
| The Comeragh Mountaineering Club | No response received | N/a | |
| Waterford Regional Games Council | Scoping response received 11th October 2022.<br><br>*Thanking you firstly for your detailed response from an enquiry from one of our officers at your open meeting in Dungarvan. Have read throughout your scoping report our main interest being the biodiversity, landscape, flora and fauna habitat and all wildlife conservation within the area. As I see from the report all aspects seems to have come to the plan's attention and I am happy and hoping that if the plan goes ahead that you would contact me again maybe we could along with local clubs within that area could help with the habitat biodiversity and flora and fauna projects around your plan.* | N/a | **Biodiversity** addressed in Chapter 6<br><br>**Ornithology** addressed in Chapter 7 |

### 1.11.1 Public Consultation

#### *1.11.1.1 Public Information Days (PIDs)*

A multi-stage approach was given to public consultation, see **table 1.8 below** and (**Appendix 1.3**). Two No. public consultation project webinars were held with the public, one in April 2022, July 2022. The public were invited to attend these events via advertisements in the Dungarvan Observer. The webinars provided information on the project and the public were encouraged to submit questions via the chat function. In addition, three public events were held;

- the first initial information evening was held Dungarvan Park Hotel on 11th August 2022 and was advertised in the Dungarvan Observer. The public were given the opportunity to discuss the proposed Dyrick Hill Wind Farm project with members of the project design team and view the most up to date project information in person. The project information evening was attended by approximately 50-60 people.
- The 2nd and 3rd public events were both held at the Tooraneena Community Centre. These events were advertised in the Dungarvan Observer,
    - The second public event took place on the 7th December 2022 which was attended by approximately 65-75 people.
    - The third public event took place on the 1st March 2023 which was attended by approximately 55-65 people.

Letters were distributed to 117 Eircode's in the local areas before the events, informing them about the webinar and how to register, and the public information evening. The documents related to the webinars and public information evening including the issued letters, newsletters and questions submitted can be found in **Appendix 1.3**.

**Table 1.8 Public consultation and newsletter distribution records for local residents**

| Public information | Event details | Date |
|---|---|---|
| **Newsletter and Community Letters** | | |
| Newsletter 1 and Community Letter | Delivered to 117 Eircodes within 2km of project study area on weekend | 12/12/2021 |
| Newsletter 2 and Community letter | Delivered to 117 Eircodes within 2km of project study area on weekend of the 21/03/2022 | 21/07/2022 |
| Newsletter 3 and Community letter | Delivered to 117 eircodes within 2km of project study area Delivered on weekend of the 16/07/2022 | 16/07/2022 |
| Newsletter 4 and Community letter | Delivered to 117 eircodes within 2km of project study area | 03/12/2022 |

| Public information | Event details | Date |
|---|---|---|
| **Newsletter and Community Letters** | | |
| Newsletter 5 and Community letter | Delivered to 117 eircodes within 2km of project study area delivered to Eircodes on 11th and 12th Feb 23 | 11/02/2023 12/02/2023 |
| **Webinars** | | |
| Online Webinar 1 | Advertised in Dungarvan Observer | 07/04/2022 |
| Online Webinar 2 | Advertised in Dungarvan Observer | 21/07/2022 |
| Projects Innovision Room | Went live on the 24/01/2023 | 24/01/2023 |
| **Public Events** | | |
| 1st Public design open evening event | Dungarvan Park Hotel<br>Advertised in Dungarvan Observer | 11/08/22 |
| 2nd Public event | Tooraneena Community Centre<br>Advertised in Dungarvan Observer<br>Approx. 50 Newsletters also left at the Community centre for distribution to the local post office. | 07/12/22 |
| 3rd Public event | Tooraneena Community Centre<br>Advertised in Dungarvan Observer on 17th and 24th Feb 23<br>Posters advertising the open evening erected in Beerys crossroads shop, Creamery, community centre and Post office on 20.02.23 | 01/03/23 |

## 1.12 COMMUNITY BENEFIT AND COMMUNITY INVOLVEMENT

EMPower will set up a community benefit fund which will allocate funds from the wind farm to community groups in the area should the wind farm be granted planning permission and be successful under the Government's RESS support programme.

If consented, the proposed Dyrick Wind Farm will require a €105 million investment and will provide sustainable, low carbon energy generation infrastructure to meet Ireland's growing demand. The development benefits to the local community would include significant investment in local infrastructure and electrical systems, local job creation, and a contribution of approximately €23.8 million in Waterford City and County Council rates over the project lifetime of 40 years.

If consented the proposed Dyrick Hill Wind Farm will also provide a community fund calculated in accordance with the Renewable Electricity Support Scheme (RESS) Terms and Conditions at €2 per MW/h of electricity produced by the project. This is to be made available to the local community for the duration of the RESS (15 years). The average capacity factor of wind energy projects in Ireland is 28.3% (SEAI, 2019). Assuming this efficiency, and a capacity of c.40.8MW, the community benefit fund would amount to an average of €202,293 per annum. The actual fund will vary around this average from year to

year, depending on each year's wind conditions. Wind measurements at the Study Area suggest that Dyrick Hill could be capable of achieving an above-average capacity factor, and therefore a larger community fund.

It is proposed that an annual minimum payment of €1,000 will be provided to each household within 1km of any proposed turbine. An annual minimum payment of €500 will be provided to each household located between 1km and 2km of a turbine. It is proposed that these payments will be fixed and will not fluctuate. 40% of the fund, amounting to approximately €307,406 per year in this example, will be allocated to not-for-profit community enterprises, with an emphasis on low carbon initiatives. The remainder of the fund will be directed towards local clubs, societies and other initiatives. It is envisaged that the communities nearest the Development will benefit most from any Community Fund. It is envisaged that the Developer will engage directly with the local community to reach agreement on how the money can best be allocated.

## 1.13 STRATEGIC INFRASTRUCTURE DEVELOPMENT (SID) SCREENING PROCESS

Two pre-planning meetings were held with An Bord Pleanála as part of the SID screening process to determine if the Development was a SID.

On 5th April 2023, JOD was notified that this Development constitutes a SID in accordance with the 7th Schedule of the Planning and Development Act 2000 (as amended). The planning application for the Development will therefore be made to An Bord Pleanála under Section 37E of the Planning and Development Act 2000 (as amended).

## 1.14 AVAILABILITY OF INFORMATION

A copy of the EIAR may be viewed online on the dedicated project information portal site; https://www.dyrickhillwindfarm.ie

A paper copy of the EIAR can be viewed, during office opening hours at the following addresses:

1. An Bord Pleanála, 64 Marlborough Street, St. Rotunda, Dublin 1, D01 V902.
2. The Offices of Waterford City and County Council, Menapia Building, The Mall, Waterford City.
3. Jennings O'Donovan & Partners Limited, Consulting Engineers, Finisklin Business Park, Co. Sligo, F91 RHH9.

Paper copies can be provided at the cost of printing, by writing to: Jennings O'Donovan & Partners Limited at the above address.

## 1.15 GLOSSARY OF COMMON ACRONYMS

The common acronyms used throughout this EIAR are contained in Volume IV: **Appendix 1.2**.