

Oriel Wind Farm Project Environmental Impact Assessment Report Volume 2A



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Environmental Impact Assessment Report Volume 2A: Glossary of Terms, Acronyms and Units

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ORIEL WIND FARM PROJECT - GLOSSARY OF TERMS, ACRONYMS AND UNITS

GLOSSARY

Term	Meaning
Applicant	Oriel Windfarm Limited
Baseline	The existing conditions as represented by the latest available survey and other data which is used as a benchmark for making comparisons to assess the impact of the Project.
Catchment	An area of land contributing to a river, lake or other water body.
Cumulative impacts	Impacts that result from incremental changes caused by other reasonably foreseeable actions alongside the project in question. This includes the impact of all other developments that were not present at the time of data collection.
"Do Nothing" Scenario	The environment as it would be in the future should the proposed project not be developed.
"Do Something" Scenario	The environment should the proposed project be developed.
Environmental Impact Assessment	A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Directive 2011/92/EU as amended by EIA Directive 2014/52/EU and European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018), including the publication of an Environmental Impact Assessment (EIA) Report.
Foreshore	The area of the land and seabed between the high-water mark of ordinary or medium tides and the 12 nautical mile limit.
Habitat	The natural home or environment of an animal, plant, or other organism.
Horizontal Directional Drilling (HDD)	A method of installing underground cables via directional drilling that does not require digging trenches.
Inter-array cables	Cables which connect the wind turbines to each other and to the offshore substation.
Intertidal	An area of a seashore that is covered at high tide and uncovered at low tide.
Joint bay	These are concrete lined chambers, that provide a clean and dry environment for jointing the sections of underground cables together. Link boxes and communication chambers will also be required along the onshore cable route adjacent to each joint bay.
Landfall	The area in which the offshore export cable makes landfall. It is the transitional area between the offshore cable and the onshore cables. The landfall is proposed 700 m south of Dunany Point.
Magnitude	Size, extent and duration of an impact.
Measures included in the Project	The Project design includes a number of designed-in measures and management measures (or controls) which are committed to be delivered by the Applicant as part of the Project. These measures are standard measures applied to offshore wind development, including lighting and marking of the Project, use of 'soft-starts' for piling operations etc, to reduce the potential for impacts. These measures are integrated into the description of the development and have therefore been considered in the assessments in the EIAR.
Mitigation measure	Measure which would avoid, reduce, or remediate an impact.
Monopile	The cylindrical foundations in the seafloor used to support the wind turbines and OSS.
Nacelle	The housing of the generator components located at the height of the rotor hub.
National grid	Electricity transmission system.
Non-statutory stakeholder	Organisations with whom the regulatory authorities may choose to engage who are not designated in law but are likely to have an interest in a proposed development.
Offshore cable (or export cable)	The offshore cable (or export cable) will be installed in the offshore cable corridor. This cable will connect the offshore wind farm with the onshore cables at the landfall.
Offshore cable corridor	The corridor between the offshore wind farm area and the landfall in which the offshore export cable will be located.
Offshore substation (OSS)	An offshore substation is a pre-fabricated offshore structure housing electrical equipment to provide a range of functions, such as changing the voltage.

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Term	Meaning
Offshore wind farm area	This is where the offshore wind farm components will be located, which will include offshore foundations, the wind turbines, inter-array cables and offshore substation as well as a short section of the offshore export cable.
Onshore cable route	The route of the proposed underground electrical cables between the proposed landfall site and the proposed onshore substation site.
Onshore cables	Cables that transfer power from the Transition Joint Bay to the onshore substation. The onshore cables will be installed within a single trench of approximately 1 m in width, along an onshore cable route that connects the TJB to the substation site at Stickillin, east of Ardee on the N33.
Onshore components	The onshore substation, onshore cables, joint bays including link boxes and communication chambers, communication cables, Transition Joint Bay and other ancillary onshore electrical components.
Onshore substation	A site containing the equipment required to filter, monitor and control electricity received from the offshore wind farm and transmit it to the existing electricity Transmission System (National Grid). This includes gas insulated switchgear (GIS) located inside a building; and outdoor air insulated switchgear (AIS).
Onshore substation site	The site location of the proposed onshore substation.
Passing bay	Temporary passing bays will be installed adjacent to joint bays to enable through traffic during the construction of the onshore cable.
Prescribed bodies	Organisations that are required to be consulted by the Regulatory Authorities, and who also have a duty to respond to that consultation within a set deadline. This includes consultees that the Applicant is required to consult with. Not all consultees will be statutory consultees.
Project	The Oriel Wind Farm Project. The Project includes the construction, operation and maintenance, and decommissioning of offshore and onshore infrastructure.
Project design parameters	These are the design details and measurements of the Project infrastructure that are used to inform the assessment of the likely significant effects of the Project on the environment. These also include details on the Project construction, operation and maintenance and decommissioning phase activities. Where design flexibility applies under Section 287B of the Planning and Development Act 2000 as amended, the project design parameters include a description of the parameters or options e.g. the wind turbine hub height will vary within the range 145-152 metres above Lowest Astronomical Tide (maLAT).
Residual effects	Residual effects are the final effects that occur after the proposed mitigation measures have been put into place, as planned.
Scour protection	A solution for preventing scour around subsea structures, typically comprised of rock or concrete mattresses.
Sensitive receptor	Physical or natural resource, special interest or viewer group that will experience an impact.
Sensitivity	Vulnerability of a sensitive receptor to change.
Subtidal	Area extending seaward of low tide to the edge of the continental shelf.
Transition joint bay (TJB)	An underground chamber located close to the landfall and above the HWM that connects the offshore export cable to the onshore export cables.
Wind Turbine Generator (WTG)	All of the components of a wind turbine, including the tower, nacelle, blades and rotor.
Unexploded Ordnance (UXO)	Explosive weapons that did not explode when they were employed and still pose a risk of detonation.
Zone of Influence (Zoi)	The Zoi (or 'spatial extent of the impact' as described in Annex III(3) of the EIA Directive) is the area which may be subject to significant impacts as a result of the proposed development and associated activities.
Zone of Theoretical Visibility (ZTV)	A mapped visualisation of the areas over which a development could theoretically be seen, based on a Digital Terrain Model (DTM). The ZTV presents a 'bare earth' scenario (i.e. a landscape without screening structures or vegetation) (NatureScot, 2012).

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ACRONYMS

Term	Meaning
AA	Appropriate Assessment
ABP	An Bord Pleanála
AC	Alternating Current
AHSQ	Areas of High Scenic Quality
AIS	Air Insulated Switchgear
AJ	Access Junction
ANIFPO	Anglo-North Irish Fish Producers Organisation
AONB	Areas of Outstanding Beauty
ASSI	Area of Special Scientific Interest
BMP	Best Management Practice
CAA	Civil Aviation Authority
CAFÉ	Cleaner Air for Europe
CAP	Climate Action Plan
CBGM	Cement Bound Granular Mixture
CBRA	Cable Burial Risk Assessment
CDP	County Development Plan
CEMP	Construction Environment Management Plan
CfD	Contract for Difference
CGS	County Geological Site
CHC	Canadian Helicopters Corporation
CIA	Cumulative Impact Assessment
CIÉ	Córas Iompair Éireann
CIEEM	Chartered Institute of Ecology and Environmental Management
CIL	Commissioner of Irish Lights
CIRIA	Construction Industry Research and Information Association
CLO	Community Liaison Officer
CPPA	Corporate Power Purchase Agreement
CRU	Commission for Regulation of Utilities
CSO	Central Statistics Office
cSPA	Candidate Special Protection Area
CTMP	Construction Traffic Management Plan
CTV	Crew Transfer Vessel
DAA	Dublin Airport Authority
DAERA	Department of Agriculture, Environment and Rural Affairs (Northern Ireland)
DC	Direct Current
DCCAE	Department of Communications, Climate Action and Environment
DECC	Department of Environment, Climate and Communications
DHPLG	Department of Housing, Planning and Local Government
DHLGH	Department of Housing Local Government and Heritage
DKIT	Dundalk Institute of Technology

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Term	Meaning
DMAPs	Designated Maritime Area Plans
DoD	Department of Defence
DP	Dynamic Positioning
DPV	Dynamic Positioning Vessel
DRA	Design Risk Assessment
DSO	Distribution System Operator
EC	European Commission
ECR	Export Cable Route
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EIS	Environmental Impact Statement
EMC	Electro-magnetic Compatibility
EMF	Electro-magnetic Field
EMP	Environmental Management Plan
EMRA	Eastern and Midlands Regional Assembly
EPA	Environmental Protection Agency
ESB	Electricity Supply Board
EU-IMP	European Union Integrated Maritime Policy
FID	Final Investment Decision
FRA	Flood Risk Assessment
FRMP	Flood Risk Management Plan
FTE	Full Time Equivalent
GCA's	Grid Connection Assessments
GDP	Gross Domestic Product
GIS	Geographic Information Systems
GIS	Gas Insulated Switchgear
GNI	Gas Networks Ireland
GPR	Ground Penetrating Radar
GSI	Geological Survey Ireland
GVA	Gross Value Added
HAT	Highest Astronomical Tide
HDD	Horizontal Directional Drilling
HDPE	High Density Polyethylene
HGV	Heavy Goods Vehicle
HOOW	Harnessing Our Ocean Wealth - An Integrated Marine Plan for Ireland
HRA	Habitats Regulations Assessment
HSE	Health, Safety and Environment
HV	High Voltage
HVAC	High Voltage Alternating Current
HWM	High Water Mark
IAA	Irish Aviation Authority

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Term	Meaning
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
IAPS	Invasive Alien Plant Species
IBGRG	Irish Brent Goose Research Group
ICES	International Council for the Exploration of the Sea
IEFs	Important Ecological Features
IFA	Irish Farmers Association
IFI	Inland Fisheries Ireland
IHPA	Irish Hang Gliding and Paragliding Association
INISMP	Invasive Non-Indigenous Species Management Plan
IPPHA	Irish Powered Paragliding and Hang Gliding Association
IRCG	Irish Coast Guard
IW	Irish Water
IWDG	Irish Whale and Dolphin Group
JB	Joint Bay
JNCC	Joint Nature Conservation Committee
JRC	Joint Research Centre
JUV	Jack-up Vessel
LAT	Lowest Astronomical Tide
LB	Link Box
LCC	Louth County Council
LCIM	Line Cable Interface Mast (colloquially – pylon)
LV	Low Voltage
LWM	Low Water Mark
MAC	Maritime Area Consent
MAPA	Maritime Area Planning Act
MARA	Maritime Area Regulatory Authority
MarPAMM	Marine Protected Area Management and Monitoring
MBES	Multi-Beam Echo Sounder
MCA	Maritime and Coastguard Agency (UK)
MEC	Maximum Export Capacity
MFE	Mass Flow Excavation
MHWS	Mean High Water Springs
MIND	Mass Impregnated Non-Draining
MJA	Maritime Jurisdiction Act
MoD	Ministry of Defence (UK)
MP	Monopile
MPA	Marine Protected Area
MPCP	Marine Pollution Contingency Plan
MPPS	Marine Planning Policy Statement
MSO	Marine Survey Office
MV	Medium Voltage
NATS	National Air Traffic Services

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Term	Meaning
NDP	National Development Plan
NECP	National Energy and Climate Plan
NED	Natural Environmental Division
NHA	Natural Heritage Area
NI	Northern Ireland
NIFPO	Northern Ireland Fish Producers' Organisation
NIS	Natura Impact Statement
NMPF	National Marine Planning Framework
NMS	National Monuments Service
NPWS	National Parks and Wildlife Service
NRA	Navigation Risk Assessment
NTS	Non-Technical Summary
O&M	Operations and Maintenance
OHL	Overhead Line
OPW	Office of Public Works
ORE	Offshore Renewable Energy
OREI	Offshore Renewable Energy Installation
ORESS	Offshore Renewable Electricity Support Scheme
OSS	Offshore Substation
OWDT	Offshore Wind Delivery Taskforce
OWL	Oriel Windfarm Limited
OWMP	Outline Waste Management Plan
PAX	Passengers
PCI	Projects of Common Interest
PLGR	Pre-Lay Grapple Run
QHSE	Quality, Health, Safety and Environment Management
RED	Renewable Energy Directive
RESS	Renewable Electricity Support Scheme
RMP	Record of Monuments and Places
RNA	Rotor Nacelle Assembly
ROV	Remotely Operated Vehicle
RSES	Regional Spatial and Economic Strategy
SAC	Special Area of Conservation
SAR	Search and Rescue
SBP	Sub-bottom Profiler
SCADA	Supervisory Control and Data Acquisition
SCAR RCS	SCAR Route Clearance System
SCI	Special Conservation Interest
SDR	Standard Dimension Ratio
SEAI	Sustainable Energy Authority of Ireland
SOV	Service Operation Vessel
SPA	Special Protection Area

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Term	Meaning
SSS	Side Scan Sonar
SuDS	Sustainable Drainage Systems
TAO	Transmission Asset Owner
TII	Transport Infrastructure Ireland
TJB	Transition Joint Bay
TP	Transition Piece
TSO	Transmission System Operator
UI	Uisce Eireann
UKHO	UK Hydrographic Office
UN	United Nations
UNECE	United Nations Economic Commission for Europe
UPS	Uninterruptible Power Supply
UXO	Unexploded Ordnance
VSC	Voltage Source Converter
WD	Water Depth
WTG	Wind Turbine Generator
XLPE	Cross Linked Polyethylene
ZoI	Zone of Influence
ZTV	Zone of Theoretical Visibility

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UNITS

Term	Meaning
€	Euro
dBa	Decibel
GW	Gigawatt
Hz	Hertz
kg	Kilogram
kHz	Kilohertz
kJ	Kilojoule
km	Kilometre
km ²	Square kilometre
kV	Kilovolt
L	Litre
m	Metre
m bgl	Metre below ground level
m/s	Metre per second
m ²	Square metre
m ³	Cubic metre
maLAT	Metre above Lowest Astronomical Tide
mAOD	Metre above Ordnance Datum
mm	Millimetre
MW	Megawatt
nm	Nautical mile
rpm	Revolutions per minute
t	Tonne
