

Sure Partners Limited

ARKLOW BANK WIND PARK
PHASE 2
**ONSHORE GRID
INFRASTRUCTURE**

**ENVIRONMENTAL IMPACT
ASSESSMENT REPORT**

VOLUME II

Glossary

ARUP

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Renewables

Glossary and Abbreviations

AA	Appropriate Assessment – An assessment of the potential adverse effects of a plan or project (in combination with other plans or projects) on the Natura 2000 network of European designated sites for biodiversity as defined by the Habitats Directive
AADT	Annual Average Daily Traffic
AAP	Area of Archaeological Potential
AAWT	Annual Average Weekday Traffic
ABP	An Bord Pleanála
ABWP	Arklow Bank Wind Park
AC	Alternating Current
ACA	Architectural Conservations Areas
AEP	Annual Exceedance Probability
AH	Archaeological Heritage sites
AIS	Air Insulated Switchgear
AONB	Area of Outstanding Natural Beauty
AQS	Air Quality Standards
Archaeological Heritage	the term ‘archaeological heritage’ is applied to objects, monuments, buildings or landscapes of an (assumed) age typically older than AD 1700 (and recorded as archaeological sites within the Record of Monuments and Places)
Architectural Heritage	<p>The term ‘architectural heritage’ is applied to structures, buildings, their contents and settings of an (assumed) age typically younger than AD 1700</p> <p>For the purpose of this report the terms ‘architectural heritage’ and ‘built heritage’ have the same intended meaning and are used interchangeably.</p>
Area of Archaeological Potential	An area with known potential for significant archaeological remains as identified in the Wicklow County Development Plan 2016 -2022
Arklow Bank Wind Park Phase 1	The 7 turbines and associated grid cable back to Arklow ESB switch station owned and operated by Arklow Energy Limited under a sublease to the main foreshore lease
Arklow Bank Wind Park Phase 2	<p>“The Project” the combination of the individual components listed below:</p> <ul style="list-style-type: none">• Arklow Bank Wind Park Phase 2 Offshore Infrastructure: This includes all elements of the project consented under the existing Foreshore Lease.• Arklow Bank Wind Park Phase 2 Onshore Grid Infrastructure: This relates to the onshore grid infrastructure.

	<ul style="list-style-type: none"> • Arklow Bank Wind Park Phase 2 Operations and Maintenance Facility Onshore Infrastructure: This includes the onshore infrastructure at the Operations and Maintenance Facility. • Arklow Bank Wind Park Phase 2 Operations and Maintenance Facility Nearshore Infrastructure: This includes the required berthing pontoons/nearshore infrastructure.
Arklow Bank Wind Park Phase 2 Offshore Infrastructure	This includes all elements of the project consented under the existing Foreshore Lease.
Arklow Bank Wind Park Phase 2 Onshore Grid Infrastructure	This relates to the onshore grid infrastructure Strategic Infrastructure Development (SID) application – the ‘proposed development’
Arklow Bank Wind Park Phase 2 Operations and Maintenance Facility Onshore Infrastructure	This includes the onshore infrastructure at the Operations and Maintenance Facility.
Arklow Bank Wind Park Phase 2 Operations and Maintenance Facility Nearshore Infrastructure	This includes the required berthing pontoons/nearshore infrastructure.
Assessment area	Study area considered in the environmental assessment for a given topic
AVR	Accurate Visual Representation
BCI	Bat Conservation Ireland
BH	Built Heritage sites
Birds Directive	European Council Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds
BNL	Basic Noise Level
BOCCI	Birds of Conservation Concern in Ireland
BRAG	Black, Red, Amber or Green
Brief Effects	Effects lasting less than a day
BS	British Standard
BSI	British Standards Institution
BWD	Directive 2006/7/EC concerning the management of bathing water quality (Bathing Waters Directive)
CAD	Computer Aided Design

CAFE	Clean Air For Europe Directive 2008/50/EC
CAT	Cable Avoidance Tool
CBGM	Cement Bound Granular Mixture
CCTV	Closed-circuit Television
CDP	County Development Plan
C&D	Construction and Demolition
CE	Circular Ecology
CEM	Community Engagement Manager
CEMP	Construction Environmental Management Plan
CFA	Continuous Flight Auger
CFRAM	Catchment Flood Risk Assessment Mapping
COMAH	Control of Major Accidents Hazards involving Dangerous Substances
COVID-19	Coronavirus Disease 2019
CIEEM	Chartered Institute of Ecology and Environmental Management
CITES	Convention on International Trade in Endangered Species
CIRIA	Construction Industry Research and Information Association
CPO	Compulsory Purchase Order
CRTN	Calculation of Road Traffic Noise
CSE	Cable Sealing End
CSM	Conceptual Site Model
CSO	Central Statistics Office
CTMP	Construction Traffic Management Plan
Cultural Heritage	<p>‘Cultural Heritage’ where used generically, is an over-arching term applied to describe any combination of archaeological, architectural and cultural heritage features.</p> <p>The term ‘cultural heritage’, where used specifically, is applied to other (often less tangible) aspects of the landscape such as historical event, folklore memories and cultural associations. This designation can also accompany an archaeological or architectural designation or describe features that have a more recent origin but retain cultural heritage significance.</p>
Cumulative effect	The addition of many minor or significant effects, including effects of other projects, to create larger, more significant effects. (EPA, 2017)
CWMP	Construction Waste Management Plan
DAFM	Department of Agriculture, Food and Marine
DC	Direct Current
DCCAE	Department of Communications, Climate Action and Environment

DECC	Department of Environment, Climate and Communications
Decibel (dB)	The ratio of sound pressures, which we can hear, is a ratio of 10 ⁶ (one million: one). For convenience, therefore, a logarithmic measurement scale is used. The resulting parameter is called the 'sound pressure level' (L _p) and the associated measurement unit is the decibel (dB). As the decibel is a logarithmic ratio, the laws of logarithmic addition and subtraction apply.
DHLGH	Department of Housing, Local Government and Heritage
DHPCLG	Department of Housing, Planning, Community and Local Government
DL	Demesne Landscapes
DMRB	Design Manual for Roads and Bridges
DN	'Do Nothing' Scenario - The environment as it would be in the future should the proposed project not be developed
DS	'Do Something' Scenario - The environment should the proposed project be developed
EC	European Council
ECoW	Environmental (Ecological) Clerk of Works
ED	Electoral Division
Effect	A change resulting from the implementation of a project
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EIS	Environmental Impact Statement
ELF-EMF	Extremely Low Frequency Electric and Magnetic fields
EMF	Electro Magnetic Fields
EMI	Electro Magnetic Interference
EPA	Environmental Protection Agency
ERT	Electrical Resistivity Tomography
ESB	Electricity Supply Board
ETS	Emissions Trading Scheme
EU	European Union
European designated site	The Natura 2000 site network, i.e. Special Areas of Conservation - (including candidate SACs) protected under the provisions of the Habitats Directive and Special Protection Area - (including proposed SPAs) protected under the provisions of the Birds Directive
Fluvial	Relating to a river, i.e. fluvial flow is the flow of freshwater
Foreshore	The area of the land and seabed between the high water mark of ordinary or medium tides and the 12 nautical mile limit

Foreshore Lease Area	The Arklow Bank Wind Park area in which the wind turbines, foundations, inter-array cables, export cables and offshore substations will be located.
FRA	Flood Risk Assessment
FRS	Flood Relief Scheme
GAC	Generic Assessment Criteria
GCL	Geosynthetic Clay Liner
GDA	Greater Dublin Area
GHG	Greenhouse Gas
GI	Ground Investigation
GIS	Gas Insulated Switchgear
GNI	Gas Networks Ireland
GOI	Government of Ireland
GPR	Ground Penetration Radar
GPS	Ground Positioning System
GSI	Geological Survey of Ireland
GW	Gigawatt
GWB	Groundwater body
HA	Hydrometric Area
Habitat	An area or natural environment formed of physical factors such as soil and moisture that reside in a defined topographical area in which organisms (fauna and flora) normally live.
Habitats Directive	Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora
H&S	Health and Safety
HDD	Horizontal Directional Drilling
HDPE	High Density Polyethylene
HGV	Heavy Goods Vehicle
HIA	Health Impact Assessment
HLGH	Housing, Local Government and Heritage
HSA	Health Service Authority
HSE	Health Services Executive
HV	High Voltage
HVAC	High Voltage Alternating Current
HWM	High Water Mark (Ordinance Survey Maps)
IAQM	Institute of Air Quality Management
IARC	International Agency for Research on Cancer

ICE	Institute of Civil Engineers
ICNIRP	International Commission on No-Ionizing Radiation Protection
ICPSS	Irish Coastal Protection Strategy Study
IEL	Industrial Emissions Licence
IED	Industrial Emissions Directive
IEMA	Institute of Environmental Management
IFI	Irish Fertilizer Industries
IFI	Inland Fisheries Ireland
IGBT	Insulated Gate Bipolar Transistor
IGI	Institute of Geologists of Ireland
Indirect Effects	Effects, which are not a direct result of the project, often produced away from or as a result of a complex pathway (EPA, 2017)
Interaction	The link between a pressure and the receptor. There must be an interaction for an impact to occur
Inter-related (Interactive) Effects	Likely significant effects arising from the interaction of different environmental factors that give rise to multiple effects on a single receptor
IPPC	Integrated Pollution and Prevention Control
IROPI	Imperative reasons of overriding public interest
ISMP	Invasive Species Management Plan
ISO	International Standards Organisation
IUCN	International Union for Conservation of Nature
kV	Kilovolt
LAP	Local Area Plan
Landfall	The area in which the offshore export cables make landfall and is the transitional area between the offshore cabling and the onshore cabling
LCA	Landscape Character Area
$L_{Aeq T}$	The equivalent continuous sound level. It is an average and is used to describe a fluctuating noise in terms of a single noise level over the sample period (T).
$L_{Ar T}$	The rated noise level, equal to the L_{Aeq} during a specified time interval (T), plus specified adjustments for tonal character and/or impulsiveness of the sound.
LED	Light Emitting Diode
Lg	Local sand and gravel aquifer
LGV	Light Goods Vehicle
LI	Locally Important

LOD	Limit of Detection
LoW	List of Wastes
LULUCF	Land Use, Land Use Change and Forestry
LV	Low Voltage
LV	Light Vehicle
m	metres
MAD	Major Accidents and Disasters
MASW	Multi-Channel Analysis of Surface Waves
MEC	Maximum Export Capacity
MHW	Mean High Water
Mitigation	This is defined as measures which avoid or reduce environmental effects which are not included in the design of the proposed development or otherwise included 'up front' in the development description
MTBM	Micro-Tunnel Boring Machine
MV	Medium Voltage
MW	Megawatt
NACE	Statistical Classification of Economic Activities in the EU
Natura 2000	the European network of nature conservation areas, including special areas of conservation, and special protection areas under the Birds Directive, provided for by Article 3(1) of the Habitats Directive
NBDC	National Biodiversity Data Centre
NDP	National Development Plan
NECP	National Energy and Climate Plan
NETN	National Electricity Transmission Network
NG4	Environmental Protection Agency (EPA) 'Guidance Note for Noise: Licence Applications, Survey and Assessments in Relation to Scheduled Activities'
NHA	National Heritage Area - the habitats present or which holds species of plants and animals whose habitat needs protection
NIAH	National Inventory of Architectural Heritage
NIS	Natura Impact Statement
NMFS	National Marine Fisheries Service
NMPF	National Marine Planning Framework
NPF	National Planning Framework
NPWS	National Parks and Wildlife Service
NRA	National Roads Authority

NSAI	National Standards Authority of Ireland
NSL	Noise Sensitive Locations
NTS	Non-Technical Summary
NVMP	Noise and Vibration Management Plan
OD	Outer Diameter
OGI	Onshore Grid Infrastructure
OH	Overhead
OHL	Overhead Line
OMF	Operations and Maintenance Facility
OPW	Office of Public Works
ORE	Offshore Renewable Energy
OREDPA	Offshore Renewable Energy Development Plan
OSI	Ordnance Survey Ireland
OSP	Offshore Substation Platform
PE	Population Equivalent
PfG	Programme for Government
PFRA	Preliminary Flood Risk Assessment
PIR	Pre-Insertion Resistors
Planning boundary	The boundary for planning purposes of the project in question, i.e. the red line boundary
PM	Particulate Matter
pNHA	Proposed Natural Heritage Area
PPE	Personal Protective Equipment
PPV	Peak Particle Velocity
The Project	The overall Arklow Bank Wind Park Phase 2 development, comprising all individual components
Proposed development	The specific title of the proposed development is called “Arklow Bank Wind Park Phase 2 Onshore Grid Infrastructure”. This is the development which is the subject of the EIAR. This proposed development forms part of an overall Project.
PVC	Polyvinyl Chloride
Receptor	Any ecological or other specific feature that is sensitive to or has the potential to be affected by a pressure
Residual Effect	The degree of environmental change that will occur after the proposed mitigation measures have taken effect
RESS	Renewable Electricity Support Scheme
RMP	Records of Monuments and Places

RPS	Records of Protected Structures
RSES	Regional Spatial and Economic Strategy
RWB	River Water Body
SA	Surge Arrestor
SAC	Special Areas of Conservation
SDG	Sustainable Development Goals
SEA	Strategic Environmental Assessment
Sensitive Receptor	Physical or natural resource, special interest or viewer group that may experience an impact
SEVESO site	Sites that are regulated under the EU SEVESO Directives due to the presence of dangerous substances in sufficient quantities
SF6	Sulphur Hexafluoride gas
Short-term Effects	Effects lasting one to seven years
SI	Site Investigation
SID	Strategic Infrastructure Development
Site	The entire area within the planning boundary for the proposed development
SMR	Sites and Monuments Record
SPA	Special Protection Area
SPL	Sure Partners Limited
SPZ	Source Protection Zone
STATCOM	Static Synchronous Compensator
SWMP	Surface Water Management Plan
TAO	Transmission Asset Owner
TII	Transport Infrastructure Ireland
TJB	Transition Joint Bay
TPO	Tree Protection Order
TRL	Transport Research Laboratory
TSO	Transmission System Operator
UKEA	UK Environment Agency
UN	United Nations
UPS	Uninterruptible Power Supply
UXO	Unexploded Ordnance
WCC	Wicklow County Council
WCDP	Wicklow County Development Plan
WFD	Water Framework Directive

WHO	World Health Organisation
WwTP	Wastewater Treatment Plant
ZON	Zone of Notification
Zone of Influence	The spatial extent over which an activity is predicted to have an impact on the receiving environment