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**Illaunbaun Wind Farm - Environmental Impact
Assessment Report**

Volume II – Front Matter



Client

JC Mont-Fort Holding SA

Project Title

Illaunbaun Wind Farm

Date

20/08/2025

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ACRONYMS

Acronym	Definition
$\mu\text{S}/\text{cm}$	Microsiemens per centimeter
AA	Appropriate Assessment
AADT	Annual Average Daily Traffic
ABP	An Bord Pleanála
ACA	Architectural Conservation Area
AH	Archaeological Heritage
AL	Abnormal Loads
ALA	Abnormal Loads Assessment
ALD	Common Alder
AM	Amplitude Modulation
AMOC	Atlantic Meridional Overturning Circulation
AMSL	Above Mean Sea Level
AOD	Above Ordnance Datum
ARC	Amphibian and Reptile Conservation
ASI	Archaeological Survey of Ireland
ATCs	Automatic Traffic Counters
ATC	Air Traffic Control
AWS	Automatic Weather Station
BA	Bachelor of Art
BCI	Bat Conservation Ireland
BOCCI	Birds of Conservation Concern Ireland
BOD	Biochemical Oxygen Demand
BRE	Building Research Establishment
BS	British Standard
BSBI	Botanical Society of Britain and Ireland
BSc	Bachelor of Science
BSI	British Standards Institution
BTO	British Trust for Ornithology
BWI	Birdwatch Ireland

Acronym	Definition
CACC	Climate Change Advisory Council
CAFE	Clean Air For Europe
CAP	Climate Action Plan
CAP24	Climate Action Plan 2024
CCC	Clare County Council
CCG	Central Clare Group
CCRA	Climate Change Risk Assessment
CDP	County Development Plan
CEMP	Construction Environmental Management Plan
CESSM	Civil Engineering Standard Method of Measurement
CGS	County Geological Site
CH	Cultural Heritage
CIEEM	Chartered Institute of Ecology and Environmental Management
CIRIA	Construction Industry Research and Information Association
CLO	Community Liaison Officer
CLP	Classification, Labelling and Packaging (of substances and mixtures)
CMP	Construction Management Plan
CO ²	Carbon Dioxide
COMAH	Control of Major Accident Hazards
COP	Conference of the Parties
CORDEX	Coordinated Regional Downscaling Experiment
CORINE	Coordination of Information on the Environment
CRM	Collision Risk Modelling
CSO	Central Statistics Office
CTA	Control Area
CTMP	Construction Traffic Management Plan
CV	Carbon Budget
CWES	County Clare Wind Energy Strategy
DAFM	Department of Agriculture, Food and the Marine
DAHG	Department of Arts, Heritage, Gaeltacht and the Islands
DAU	Development Application Unit

Acronym	Definition
DBH	Diameter at Breast Height
DCC	Dublin City Council
DCCAE	Department of Communications, Climate Action and Environment
DCENR	Department of Communications, Energy and Natural Resources
DECC	Department of the Environment, Climate and Communications
DECC	Department of Energy and Climate Change
DECLG	Department of the Environment, Community and Local Government
DEFRA	Department for Environment, Food and Rural Affairs
DEHLG	Department of the Environment, Heritage and Local Government
DEMP	Decommissioning Environmental Management Plan
DHLGH	Department of Housing, Local Government and Heritage
DHPLG	Department of Housing, Planning and Local Government
DMP	Dust Management Plan
DMRB	Design Manual for Roads and Bridges
DoD	Department of Defence
DoEHLG	Department of Environment, Heritage and Local Government
EAS	Emergency Aeromedical Service
EASA	European Union Aviation Safety Agency
EC	European Commission
ECoW	Ecological Clerk of Works
EEA	European Economic Area
EEC	European Economic Community
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EQS	Environmental Quality Standards
ERP	Emergency Response Plan
ESB	Electricity Supply Board
ESD	Effort Sharing Decision

Acronym	Definition
ESEG	Energy Security Emergency Group
ESR	Effort Sharing Regulation
ETS	Emissions Trading Scheme
ETS	Emissions Trading System
ETSU	Energy Technology Support Unit
EU	European Union
FIR	Flight Information Region
FoS	Factor of Safety
FRA	Flood Risk Assessment
FSA	Formal Safety Assessment
FWPM	Freshwater pearl mussels
GAA	Gaelic Athletic Association
GASU	Garda Air Support Unit
GCR	Grid Connection Route
GDG	Gavin & Doherty Geosolutions Ltd.
GFDRR	Global Facility for Disaster Reduction and Recovery
GBGS	Ground Granulated Blastfurnace Slag
GHG	Greenhouse Gas
GHGA	Greenhouse Gas Assessment
GI	Ground Investigations
GIR	Ground Investigation Report
GIS	Geographic Information System
GLVIA	Guidelines for Landscape and Visual Impact Assessment
GNI	Gas Networks Ireland
GPP	Guidance for Pollution Protection
GPS	Global Positioning Satellite
GSI	Geological Survey Ireland
GW	Gigawatt
GWB	Groundwater Body
GWDTE	Groundwater Dependent Terrestrial Ecosystem
GWh	Giga Watt Hour

Acronym	Definition
ha	Hectare
HDD	Horizontal Directional Drilling
HDV	Heavy Duty Vehicle
HF	Heritage Feature
HGV	Heavy Goods Vehicle
HIA	Health Impact Assessment
HSA	Health and Safety Authority
HSE	Health Service Executive
HSE	Health and Safety Executive
HV	High Voltage
HVO	Hydrotreated Vegetable Oil
Hz	Hertz (unit of frequency)
IAA	Irish Aviation Authority
IAQM	Institute of Air Quality Management (UK)
IBA	Important Bird Area
ICAO	International Civil Aviation Organization
ICOMOS	International Council on Monuments and Sites
IEC	International Electrotechnical Commission
IEF	Important Ecological Features
IEMA	Institute of Environmental Management and Assessment
IENvSc	Institution of Environmental Sciences
IFI	Inland Fisheries Ireland
IFP	Instrument Flight Procedure
IGI	Institute of Geologists of Ireland
IMO	International Maritime Organization
INSN	Irish National Seismic Network
IOA	Institute of Acoustics
IPCC	Intergovernmental Panel on Climate Change
IPH	Institute of Public Health
IPPC	Integrated Pollution Prevention and Control
IR	Infrared

Acronym	Definition
ISCC	International Sustainability and Carbon Certification
ISMP	Invasive Species Management Plan
ISO	International Standards Organisation
IT	Interim Target
ITM	Irish Transverse Mercator
IWEA	Irish Wind Energy Association
I-WeBS	Irish Wetland Bird Survey
IWT	Irish Wildlife Trust
JR	Judicial Review
KPH	Kilometre per hour
Kt	Kilo tonne
LAP	Local Area Plan
LCA	Landscape Character Area
LCT	Landscape Character Type
LCV	Local Community View
LED	Light Emitting Diode
LGV	Large Goods Vehicle
LI	Locally Important (Aquifer)
LiDAR	Light Detection and Ranging
LP	Lodgepole Pine
LULUCF	Land Use, Land-use Change and Forestry
LVIA	Landscape and Visual Impact Assessment
LWA	Sound Power Level
MCA	Multi-Criteria Analysis
MECC	Minister for the Environment, Climate and Communications
MEngSc	Master of Engineering and Science
mg/l	Milligram per litre
mg/m ² /day	Milligram per metre square per day
MIAQM	Member of the Institute of Air Quality Management
MIEvSc	Member of the Institution of Environmental Sciences
MIT	Massachusetts Institute of Technology

Acronym	Definition
MLURI	Macaulay Land Use Research Institute
MMaRC	Motorway Maintenance and Renewals Contract
MOA	Military Operating Area
mOD	Metres above Ordnance Datum
MR	Major Route
MSA	Minimum Safe Altitude
MSc	Master of Science
MSIF	Member of the Society of Irish Foresters
Mt	Megatonne
MW	Megawatt
N/A	Not Applicable
NAM	Normal Amplitude Modulation
NAVAID	Aeronautical Navigation Aid
NBD	Non-Directional Beacon
NBDC	National Biodiversity Data Centre
NCC	National Control Centre
NCRBS	North Clare Road Bridge Survey
NDCs	Nationally determined contributions
NDP	National Development Plan
NECD	National Emission Ceiling Directive
NECP	National Energy and Climate Plan
NEHS	National Environmental Health Service
NESF	National Energy Security Framework
NFCS	National Forest Carbon Stock
NH ₃	Ammonia
NHA	Natural Heritage Area
NIAH	National Inventory of Architectural Heritage
NIS	Natura Impact Statement
NM	Nautical Miles
NMI	National Museum of Ireland
NML	Noise Monitoring Location

Acronym	Definition
NMPF	National Marine Planning Framework
NMS	National Monuments Service
NMVOC	Non- Methane Volatile Organic Compounds
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
NPF	National Planning Framework
NPO	National Policy Objectives
NPWS	National Parks and Wildlife Service
NPWS	National Parks and Wildlife Services
NRA	National Roads Authority
NREAP	National Renewable Energy Action Plan
NSL	Noise Sensitive Locations
NSO	National Strategic Outcomes
NTS	Non-Technical Summary
NU	Namurian Undifferentiated
NZIA	Net-Zero Industry Act
OAM	Other Amplitude Modulation
OCEMP	outline Construction Environmental Management Plan
ODPM	Office of the Deputy Prime Minister (UK)
OHL	Overhead Line
OPR	Office of the Planning Regulator
OPW	Office of Public Works
OS	Ordnance Survey
OSI	Ordnance Survey Ireland
OSM	Open Street Map
PeSR	Peat Stockpile Restrictions
PIA	Personal Injury Accidents
PM ₁₀	Particular matter of an aerodynamic diameter of equal or less than 10 micrometres
PM _{2.5}	Particular matter of an aerodynamic diameter of equal or less than 2.5 micrometres
pNHA	Proposed Natural Heritage Area
PO	Preservation Order

Acronym	Definition
PoE	Port of Entry
PP	Poorly Productive
PPE	Personal Protective Equipment
PPP	Public-Private Partnership
PRA	Peat Repository Area
PRA	Preliminary Roost Assessment
PRAs	Peat Repository Areas
PSCS	Project Supervisor Construction Stage
PSMP	Peat and Spoil Management Plan
PSR	Peat Stockpile Restriction
PSR	Primary Surveillance Radar
PSRA	Peat Stability Risk Assessment
PV	Photovoltaic
PWS	Public Water Supply
QI	Qualifying Interests
RCP	Representative Concentration Pathway
RED	Renewable Energy Directive
RES	Renewable Energy Strategy
RESPF	Renewable Electricity Spatial Policy Framework White Paper
RESS	Renewable Electricity Support Scheme
RIGS	Regionally Important Geodiversity Site
RMP	Record of Monuments and Places
RPO	Regional Policy Objective
RPS	Record of Protected Structures
RQD	Rock quality designation
RSES	Regional Spatial and Economic Strategy
RTÉ	Raidió Teilifís Éireann
RUG	Rock Unit Group
S.I.	Statutory Instrument
SAC	Special Area of Conservation
SBZ	Safety Buffer Zones

Acronym	Definition
SCI	Special Conservation Interests
SEA	Strategic Environmental Assessment
SEAI	Sustainable Energy Authority of Ireland
SEC	Sectoral emissions ceiling
SEVESO	Refers to the Seveso Directive (e.g., Seveso III Directive 2012/18/EU)
SFRA	Strategic Flood Risk Assessment
SHD	Strategic Housing Development
SHMP	Species and Habitats Management Plan
SID	Strategic Infrastructure Development
SIS	Soil Information System
SMR	Sites and Monuments Record
SNH	Scottish Natural Heritage (now NatureScot)
SO ₂	Sulphur Dioxide
SOP	Standard Operating Procedure
SPA	Special Protection Area
S-P-R	Source-pathway-receptor model
SPT	Standard Penetration Tests
SR	Scenic Route
SRA	Southern Regional Assembly
SS	Sitka Spruce
SSR	Secondary Surveillance Radar
SSSI	Site of Special Scientific Interest
SST	Sea Surface Temperature
STE	Serrated Trailing Edge
TBC	To Be Confirmed
TDR	Turbine Delivery Route
TII	Transport Infrastructure Ireland
TMP	Traffic Management Plan
TSO	Transmission System Operator
TTA	Traffic and Transport Assessment
TV	Television

Acronym	Definition
U.S.	United States
UCD	University College Dublin
UCS	Uniaxial Compressive Strength
UGC	Under Ground Cable
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
USA	United States of America
VOC	Volatile organic compounds
VP	Vantage Point
VP / VRP	Viewpoint / Viewshed Reference Point
VSL	Vibration Sensitive Locations
VTT	Technical Research Centre of Finland
WES	Wind Energy Strategy
WFD	Water Framework Directive
WHO	World Health Organisation
WMP	Waste Management Plan
WTG	Wind Turbine Generator
YC	Yield Class
ZOC	Zones of Contribution
ZoI	Zone of Influence
ZTV	Zone of Theoretical Visibility
$\mu\text{g}/\text{m}^3$	Microgram per metre cube

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GLOSSARY OF TERMS

Term	Definition
"Do Nothing" Scenario	The situation or environment which could exist if a proposed, development, project or process were not carried out. This scenario needs to take account of the continuation or change of current management regimes, as well as the continuation of trends currently evident in the environment.
Abnormal Load	A vehicle load that exceeds standard legal limits for weight, width, or length and therefore requires special planning, route assessment, and escort arrangements under Irish road regulations.
Acrotelm	The upper, active layer of peat, typically aerated and fibrous, which is subject to seasonal wetting and drying. It plays a role in water movement and vegetation growth within peatlands.
Afforestation	The establishment of a forest in areas where the preceding land use was not forestry.
Ambient	The ambient noise level is the noise level measured in the absence of the intrusive noise or the noise requiring control. Ambient noise levels are frequently measured to determine the situation prior to the addition of a new noise source.
Appropriate Assessment (AA)	A scientific assessment of the potential effects of a proposed plan or project on a Natura 2000 site, required under the EU Habitats Directive.
Aquatic zone	Any natural river, stream or lake which feature on an Ordnance Survey 6-inch map.
Baseline	The existing environmental conditions before the Proposed Development, used as a reference for assessing potential changes.
Baseline Conditions	The existing environmental state of the project site and surrounding area prior to the development.
Bedrock Aquifer	A water-bearing geological formation composed of rock (e.g., sandstone, mudstone, siltstone) through which groundwater can move.
Biotope	The combination of physical environment (habitat) and its distinctive assemblage of conspicuous species.
Bivallate	Bivallate describes a ringfort with two sets of defensive banks and ditches
Blanket Peat	A type of peatland that forms in areas with high rainfall and low temperatures. It "blankets" the landscape and is characterised by high water content, low strength, and high compressibility.
Bunded Area	A containment area designed to prevent spillage or leakage of hazardous substances such as fuel.
Catotelm	The lower, permanently saturated and highly compressed layer of peat beneath the acrotelm, characterised by low permeability and limited decomposition.

Term	Definition
Central Clare Group	A geological formation of grey to dark grey mudstones, siltstones, and sandstones deposited in marine and fluvio-deltaic environments during the Carboniferous period.
Clear-felling	The final stage in a typical commercial forestry crop cycle, where an entire standing crop of trees is removed from an area.
Constraints mapping	A GIS-based process of identifying environmental, technical, and planning limitations within a site to inform the optimal positioning of infrastructure, based on an avoidance-first approach.
Construction Environmental Management Plan (CEMP)	A site-specific plan developed to ensure that environmental mitigation measures are implemented during construction.
Construction felling	Relates to the construction phase of a wind farm development, where the temporary removal of trees is required to facilitate the construction works (e.g. borrow pits for stone; temporary site compounds).
Construction Phase	The period during which physical works to build the wind farm are undertaken.
Control of Major Accident Hazards (COMAH)	Regulations aimed at preventing major accidents involving dangerous substances and limiting their consequences.
Coupe	A small area of forest within a compartment that is harvested in a single operation.
Cross-Bedding	A sedimentary structure characterised by inclined layers within a rock, typically formed by the migration of ripples or dunes in environments like rivers, deserts, or coastal areas, indicating the direction of past flow or wind.
cSPA	“Candidate Special Protection Area” means a site selected by the Minister under Regulation 15(1) and includes a site notified for the purposes of Regulation 15(5) and 15(6) but only until notification is given to pursuant to Regulation 16(7) and 16(8).
Cumulative Impacts	‘The addition of many minor or significant effects, including effects of other projects, to create larger, more significant effects’ (as per EPA, 2022).
Curtailment	The reduction or cessation of wind turbine operation, often for environmental, technical, or safety reasons.
dB	Decibel. The unit of sound level.
dBA	A-weighted decibel. The A-weighting approximates the response of the human ear.
Decommissioning	Refers to the end of the operational life of an onshore wind farm, involving the dismantling and removal of turbines and associated

Term	Definition
	infrastructure, followed by the restoration of the site to its natural state or another designated use.
Design envelope	A defined range of parameters (e.g. turbine height, rotor diameter) used during the EIA to assess potential impacts, allowing flexibility during procurement while ensuring compliance.
Designated Landscape	Areas of landscape identified as being of importance at international, national or local levels, either defined by statute or identified in local development plans.
Diameter at breast height (DBH)	A standard unit of measurement in forestry used to estimate tree volume/weight – the diameter of a tree is measured with a DBH tape at 1.3 metres (4.5 feet) above the ground.
Digital Elevation Model	A digital representation of ground surface topography or terrain.
Effect	Term used to express the consequence of an impact, i.e., the result of change or changes on specific environmental resources or receptors. The significance of an effect is determined by correlating the magnitude of the impact with the sensitivity of the receptor or resource in accordance with defined significance criteria.
EIA Regulations	The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) transpose the requirements of the 2014 EIA Directive into the Planning and Development Regulations 2001 (As Amended).
EirGrid	EirGrid Group is the state-owned company that manages and operates the transmission grid across the island of Ireland.
Embedded mitigation	Measures adopted as part of the Proposed Development and assessed within the EIA. Embedded mitigation includes both primary and tertiary mitigation: Primary Mitigation: Modifications to the location or design of the development made during the pre-application phase that are inherent to the project and do not require additional actions. Tertiary Mitigation: Actions that would occur with or without input from the EIA, including those required to meet existing legislative requirements or standard practices to manage common environmental effects.
Emergency Response Plan (ERP)	A document that outlines the procedures and responsibilities in case of an emergency such as fire or contamination.
Endemic windblow	The uprooting of trees in forests during typical winter storm events.
Environmental constraints	Physical or ecological features that limit development, such as protected habitats, watercourses, steep slopes, or designated site boundaries.
Environmental Impact Assessment (EIA)	A process used to identify, predict, and evaluate the environmental effects of proposed projects.
Environmental Impact Assessment Report (EIAR)	The formal report presenting the findings of the Environmental Impact Assessment.

Term	Definition
Eutrophication	A process where a high concentration of nutrients is introduced into a watercourse which promotes excessive growth of algae and can deplete oxygen levels in the water and deleteriously affect aquatic life.
Exclusion zone	A spatial buffer around a sensitive feature (e.g. residential dwelling, watercourse, protected habitat) within which certain project activities are restricted or prohibited.
Exclusion zone	A specific area where harvesting machines are not permitted to enter for environmental protection.
Extreme Groundwater Vulnerability	A classification denoting area where groundwater is most at risk from surface contamination due to thin or absent overlying subsoil and rapid vertical travel time.
Factor of Safety (FoS)	A measure used in geotechnical engineering to assess the stability of slopes or soil structures; values above 1.3 generally indicate acceptable stability for development.
Flood Zone	A geographical area that is at risk of flooding from rivers (fluvial) or surface water (pluvial).
Frack Out	The unintended release of drilling fluid into surrounding soils or surface water during directional drilling.
Frequency	Sound can occur over a range of frequencies extending from the very low, such as the rumble of thunder, up to the very high such as the crash of cymbals. Sound is generally described over the frequency range from 63Hz to 4000Hz (4kHz). This is roughly equal to the range of frequencies on a piano.
Further mitigation	Also referred to as secondary mitigation, this term refers to measures that are implemented to reduce or offset the adverse impacts of a development project that cannot be completely avoided or minimized by primary mitigation measures. These actions are designed to manage residual effects after primary mitigation has been applied, ensuring that any remaining impacts are as low as reasonably practicable.
Glacial Till	An unsorted mixture of clay, sand, gravel, and boulders deposited by glacial ice. It can be dense and compact or loose depending on formation processes.
Grid Connection	Refers to the proposed route for connecting to the national grid.
Groundwater Body	A defined volume of groundwater in aquifers that has coherent flow and quality characteristics. The Illaunbaun site lies within the Milltown Malbay GWB.
Groundwater-Dependent Terrestrial Ecosystem	Ecosystems that rely on groundwater to maintain their ecological structure and function.
Hard constraint	A feature or requirement that prohibits development in a specific area (e.g. legal restrictions, protected site boundaries, steep slopes, deep peat).

Term	Definition
Hazard	A potential source of harm or adverse effect on human health or the environment.
Hectare	A unit of land area equal to 10,000 square metres, or 2.4711 acres.
Hen Harrier (<i>Circus cyaneus</i>)	A protected raptor species listed under Annex I of the EU Birds Directive and commonly a Qualifying Interest of SPAs in Ireland. Considered sensitive to wind energy development due to potential for disturbance and displacement.
Heritage Landscape	Areas prioritised for natural and cultural heritage, often highly sensitive to change.
Horizontal Directional Drilling (HDD)	A trenchless method used for installing underground cables or pipelines.
HSE NEHS	The Health Service Executive – National Environmental Health Service
Hub Height	The distance from the ground to the centre of the wind turbine rotor.
Impact	Changes resulting from the Proposed Development on the environment, such as alterations to land, air, water, or biodiversity.
Indirect Impact	'Impacts on the environment, which are not a direct result of the project, often produced away from (the site) or as a result of a complex pathway' (EPA, 2022a).
Infrastructure felling	Relates to trees that are permanently removed from a site in order to make way for infrastructure associated with a wind farm, such as access roads and turbine bases.
Karst	A landscape formed from the dissolution of soluble rocks, often characterised by sinkholes, caves, and underground drainage. No karst features are present within or near the site.
Keyhole felling	Selective felling confined to areas intersecting with infrastructure footprints, reducing the extent of felling required.
LA90	The noise level exceeded for 90% of the measurement period. This is commonly referred to as the background noise level.
LAeq(t)	The equivalent continuous (time-averaged) A-weighted sound level. This is commonly referred to as the average noise level.
Lamination	Thin, parallel sedimentary layers less than one centimetre thick, often found in low-energy depositional environments such as marine basins.
Land division complexity	A measure of how many distinct land ownership parcels exist within a site, affecting feasibility due to the need for multiple landowner agreements.
Land Use	The use and management of the natural, semi-natural and built environment.
Landscape Character	The distinct and recognisable pattern of elements in the landscape that makes one area different from another.

Term	Definition
Landscape Character Area (LCA)	A defined geographical area with a consistent landscape character.
Landscape Character Type (LCT)	A classification of landscapes based on shared features and qualities.
Landscape Impact Assessment (LIA)	Evaluation of changes to the physical landscape and its character due to a proposed development.
Likelihood Rating	A numeric or qualitative estimate of the probability of a particular event occurring.
Magnitude	Size, extent and duration of an impact.
Magnitude of Impact	The scale and extent of change caused by a development.
<i>Margaritifera</i> Sensitive Catchments	Catchments designated due to the presence of Freshwater Pearl Mussel (<i>Margaritifera margaritifera</i>), a species listed in Annex II of the EU Habitats Directive, requiring strict hydrological protection and often subject to AA.
Micositing	The process of fine-tuning the location of wind turbines and infrastructure within a development site to optimise performance and reduce environmental and engineering impacts.
Mitigation	Measures to avoid, prevent, reduce, or if possible, offset any significant adverse effects on the environment. See also definitions for Embedded Mitigation and Further Mitigation.
Mitigation Measures	Actions taken to reduce or eliminate negative environmental impacts of a project.
Mounding	A method of ground preparation formed by an excavator digging drains at regular intervals (typically 12 metres) and heaping the spoil in mounds. Trees are then planted into the mounds, which provide an elevated, vegetation-free planting zone which promotes better root development.
Mudstone	A fine-grained sedimentary rock composed primarily of clay and silt-sized particles, typically formed in low-energy environments like deep marine settings, lakes, or floodplains.
Natural regeneration	Describes the renewal of forests via seeds that fall from trees and germinate in situ.
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.
Octave Band	Sound, which can occur over a range of frequencies, may be divided into octave bands for analysis. The audible frequency range is generally divided into 7 octave bands. The octave band frequencies are 63Hz, 125Hz, 250Hz, 1kHz, 2kHz and 4kHz.
Operational Phase	The period during which the wind farm is generating electricity.

Term	Definition
Operations and Maintenance (O&M)	Includes routing inspections, repairs and replacement of infrastructure and equipment associated with the Proposed Development.
Pallet wood	Wood cut from the middle section of trees – used for packaging, panels and garden furniture.
Peat Repository Area (PRA)	A designated location within the development boundary where excavated peat is permanently re-used or stored in accordance with best practice and regulatory guidance.
Peat Stability Risk Assessment (PSRA)	An analysis used to determine the risk of peat movement or landslides under proposed development conditions, incorporating site-specific geotechnical data and best practice guidelines.
Personal Injury Accident	An incident on a public road resulting in injury to one or more individuals, typically classified as fatal, serious, or minor based on severity, and used as a key road safety indicator.
Personal Protective Equipment (PPE)	Equipment worn to minimize exposure to workplace hazards causing injuries or illnesses.
Photomontage	A visual representation combining photographs and digital models to show how a development will appear.
Photosensitive Epilepsy	A condition in which seizures can be triggered by visual stimuli such as flickering light.
Plantation	A forest or tree crop established by the planting of saplings or seedling, especially for commercial purposes.
Qualitative multi-criteria ranking	A site selection method that evaluates potential options against several environmental and technical factors using a non-numerical, descriptive comparison (e.g. colour or score matrix).
Ranking Methodology (Site Selection)	A multi-criteria analysis framework used during site selection to score and compare candidate sites based on environmental, technical, and planning constraints, often using GIS data layers.
Reasonable Alternatives	In the context of EIA, these refer to alternative locations, layouts, scales or technologies that are technically and financially feasible and meet the Proposed Development's objectives with a lower potential for significant adverse environmental effects.
Receptor	An environmental component, such as air, water, land, wildlife, or human population, which may be affected, adversely or beneficially, by the Project.
Reinstatement	Restoring the habitat in the areas of the Site where infrastructure was developed.
Relevant watercourse	Any watercourse (other than an aquatic zone) that could potentially serve as a pathway for the movement of large amounts of sediment and/or nutrients from a site to an aquatic zone. These include existing channels, drains or other potential pathways that may contain flowing water during / immediately after periods of rain.

Term	Definition
Residential buffer	A distance maintained between project infrastructure and inhabited properties to reduce potential effects such as noise, shadow flicker, or visual intrusion.
Residual Effect	The remaining environmental impact of a project after all mitigation measures have been implemented.
Risk Score	The numerical product of likelihood and consequence ratings used to classify the severity of a risk.
Rotation	The number of years required to establish and grow a timber crop to a specified condition of maturity and harvested.
Rotor Diameter	The distance across the circular area swept by the turbine blades.
Sandstone	A clastic sedimentary rock composed mainly of sand-sized mineral particles or rock fragments, typically formed in high-energy environments such as rivers, beaches, or deserts, and often cemented by silica, calcite, or iron oxides.
Scenic Route	A designated road or path offering views of high landscape value.
Scoping	This is the process to identify key environmental issues, and to determine which elements of the Proposed Development are likely to cause significant environmental impacts and to identify elements that can be removed from the assessment.
Sensitivity of Receptor	The degree to which a landscape or viewer is susceptible to change.
Setback area	Setback areas are used at afforestation or reforestation to introduce a buffer strip between a new forest and sensitive habitats or features.
Settled Landscape	Areas where people live and work, typically more robust to development.
Seveso Site	An industrial site subject to EU Seveso Directive due to the presence of dangerous substances.
Shadow Detection System	A turbine control feature that can shut down operation to prevent shadow flicker impacts.
Significance of Effect	The importance of an impact, determined by combining sensitivity and magnitude.
Siltstone	A sedimentary rock composed predominantly of silt-sized particles, typically finer than sandstone but coarser than claystone, and is often deposited in moderate-energy environments such as river deltas or shallow marine settings.
Skylining	The visual effect of an object, such as a wind turbine, appearing on or above the skyline when viewed from a distance, often increasing its prominence.
Soft constraint	A non-mandatory but influential factor that can affect infrastructure layout, such as existing land use, access limitations, or engineering complexity.

Term	Definition
Source-Pathway-Receptor Model	An environmental risk assessment approach that evaluates potential impacts based on the existence of a contaminant source, a route for it to reach a receptor, and the receptor itself.
Special Area of Conservation (SAC)	A designated site under the EU Habitats Directive (Council Directive 92/43/EEC). This Directive requires all Member states to establish a strict protection regime for species listed in Annex IV, both inside and outside of Natura 2000 sites.
Special Protection Area (SPA)	A designated site under the Birds Directive (Council Directive 79/409/EEC). Under this Directive, Member States of the EU have a duty to safeguard the habitats of migratory birds and threatened birds
Stakewood	Wood taken from the middle section of a tree during first thinning – used for stakes and fencing products.
Stand	An aggregation of trees occupying a specific area, that are uniform enough in composition (species), age and arrangement to be distinguishable from forestry in adjoining areas - considered a homogenous unit for management purposes.
Statutory Instrument (S.I.)	A form of legislation which allows provisions of an Act of Parliament to be brought into force or altered.
Strategic Area (Wind Energy)	A location identified in planning policy as suitable for wind energy development due to favourable conditions.
Study Area	The geographical area defined for the purposes of assessment.
Substation	Refers to the onsite substations and their control buildings including the compound in which it is located.
Sunshine Probability	The likelihood of sunshine occurrence at a location over a defined period.
Survey Areas	Refers to areas within which surveys are undertaken. These are specifically defined within each technical section.
t	The suffix "t" represents the time period to which the noise level relates, e.g. (8 h) would represent a period of 8 hours, (15 min) would represent a period of 15 minutes and (2200-0700) would represent a measurement time between 10 pm and 7 am.
Technology envelope	The range of possible specifications for key components (e.g. turbine type, hub height, rotor diameter) considered during EIA to accommodate final design flexibility.
Telecom safeguarding	The consideration of existing telecommunication links (e.g. microwave paths) when siting wind turbines, to avoid disruption to signal transmission.
Temporary Construction Compound	Refers to the compound to be developed and used by the appointed contractor(s) for the purposes of constructing the wind farm which will be reinstated to the current land use following completion of construction.

Term	Definition
The Board	Refers to An Bord Pleanála
The Construction Haul Routes	Refers to the proposed routes from local quarries and suppliers to the Site.
The Council	Refers to Clare County Council.
The Developer	JC Montfort
The Project	The Project refers to the comprehensive initiative encompassing all stages of the Illaunbaun Wind Farm's lifecycle. It includes planning, construction, operation, and decommissioning. This broad scope ensures that the environmental, social, and economic impacts are considered throughout the entire lifecycle of the wind farm.
The Proposed Development	Refers to all components and activities of the Illaunbaun Wind Farm as detailed in the planning application and public notices. This includes the wind turbines, associated site infrastructure, the grid connection route, and all necessary works along the Turbine Delivery Route within the Red Line Boundary. Detailed descriptions of these elements are provided in the Project Description Chapter.
The Red Line Boundary	The defined perimeter that outlines the extent of the Proposed Development. This boundary encompasses all areas where construction, operation, and associated activities will take place, including the physical footprint of infrastructure such as wind turbines, access roads, grid connection routes, and any other project-related installations.
The Replant Lands	Designated offsite forestry areas where replanting activities are conducted to compensate for deforestation or land-use changes resulting from the Proposed Development. This ensures the restoration and maintenance of forestry resources in compliance with environmental regulations.
The Site	The geographical area where the Proposed Development is located. This includes all land parcels, infrastructure, and associated facilities directly related to the project. The site is defined within the Red Line Boundary and encompasses all areas where activities such as construction, operation, and maintenance of the wind farm will take place.
The Turbine Delivery Route	Refers to the proposed turbine delivery route from X to the Site.
Tip Height	The vertical distance from the ground to the highest point of the wind turbine blade when in an upright position.
Top height	The average height of a number of top height trees in a stand, where one top height tree is the tree of largest diameter at breast height (DBH) in a 0.01 ha sample plot.
Topography	The arrangement of natural and artificial physical features of an area.
Turbine Foundation	Refers to the turbine concrete base located under ground level and used to support the turbine.

Term	Definition
Turbine Hardstand	Refers to the hardstand next to the turbine location used by cranes for erection of turbine hub, nacelles and rotor blades.
Turbulence felling	Felling in the vicinity of turbines for the purpose of avoiding air turbulence that can be created by the forest canopy. It is carried out in order to increase the efficiency of the turbines and to reduce stress on the turbine components.
Viewshed Reference Point (VRP)	A specific location used to assess the visual impact of a development.
Visual Impact Assessment (VIA)	Assessment of how a development affects views and visual amenity experienced by people.
Visual Intrusion	When a new element interrupts a view without blocking it.
Visual Obstruction	When a new element blocks a view, either partially or fully.
Vulnerability	The extent to which a project is susceptible to damage from hazards such as natural disasters or industrial accidents.
Water Body	A surface water body as defined under the Water Framework Directive (WFD) i.e., a river/stream, lake, transitional, coastal or groundwater body.
Water Framework Directive (WFD)	EU legislation (2000/60/EC) aimed at protecting and improving the quality of water resources across Europe, ensuring all water bodies achieve "good status."
Wind Farm Internal Cabling	Refers to the electrical cables connecting the turbines to the onsite substation.
Wind turbine generator (WTG)	A device that converts wind energy into electricity, typically comprising rotor blades, a hub, a nacelle (containing the generator), and a supporting tower.
Windblow	The uprooting and overturning of a tree or a number of trees by wind force – often due to restricted rooting or canopy disruption.
Yield Class (YC)	An estimate of the productivity of yield of a forest, expressed as cubic metres per hectare per year (m ³ /ha/year).
Zone of Theoretical Visibility (ZTV)	A map, digitally produced, showing areas of land within which, the Proposed Development is theoretically visible.

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