

Environmental Impact Assessment Report (EIAR)

Cunlaghfadda Green
Energy Project, Co. Mayo

Glossary of Acronyms and Terms
(EIAR)





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GLOSSARY OF ACRONYMS AND TERMS

1

Introduction

GLOSSARY OF TERMS

Term	Definitions
The Guidelines (DoEHLG, 2006)	The 2006 Wind Energy Development Guidelines. The current published wind energy development guidelines which addresses a variety of aspects relating to wind energy developments inclusive of noise, shadow flicker, setback distances and community obligations
Draft Guidelines (DoHPLG, 2019)	The Draft 2019 Wind Energy Development Guidelines. A draft document of the updated Wind Energy Development Guidelines yet to be published.
Natura Impact Statement	A report prepared to assess the potential for a project to impact EU designated sites (i.e. Natura 2000 sites)
Renewable Energy Directive	An EU Directive which aims to accelerate the EU's renewable energy transition and promote energy independence
The Applicant	Cunlaghfadda Green Energy Ltd.

GLOSSARY OF ACRONYMS

Acronym	Definition
AA	Appropriate Assessment
ACP	An Coimisiún Pleanála
AR	Assessment Report
CAP	Climate Action Plan
CAP25	Climate Action Plan 2025
CIEEM	Chartered Institute of Ecology and Environmental Management
CO ₂	Carbon Dioxide
COP	Conference of the Parties
COP21	Paris climate conference
COP30	30 th Conference of the Parties
DCENR	Department of Communications, Energy & Natural Resources
DCEE	Department of Climate, Energy and the Environment
DECC	Department of the Environment, Climate and Communication
DHPLG	Department of Housing, Planning and Local Government
DoEHLG	Department of the Environment, Heritage and Local Government
DPER	Department of Public Expenditure and Reform
EC	European Commission
EEA	European Environment Agency
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESBN	Electricity Supply Board Network
ESR	Effort Sharing Regulation

EU	European Union
GFC	Gross Final Consumption
GW	Gigawatt
GWL	Global Warming Levels
IEA	International Energy Agency
IEMA	Institute of Environmental Management and Assessment
IPC	Integrated Pollution Control License
IPCC	International Panel on Climate Change
kV	Kilovolt
LULUCF	Land Use, Land Use Change and Forestry
m	Metres
MCC	Mayo County Council
MCDP	Mayo County Development Plan
MW	Megawatt
NCQG	New Collective Quantified Goal on Climate Finance
NCQG	New Collective Quantified Goal
NECP	National Energy and Climate Plan
NESF	National Energy Security Framework
NIS	Natura Impact Statement
NO _x	Nitrogen Dioxide
NO ₂	Nitrogen Oxide
NPWS	National Parks and Wildlife Service
NTS	Non-Technical Summary
O ₃	Ozone
OTC	Open to Consideration
PM	Particulate Matter
RED	Renewable Energy Directive
REDIII	Third Revision of the Renewable Energy Directive
RES	Renewable Energy Share
RESE	Renewable Energy Share in Electricity
RESH	Renewable Energy Share in Heat
RESS	Renewable Energy Support Scheme
REST	Renewable Energy Share in Transport Fuels
SEAI	Sustainable Energy Authority of Ireland
SID	Strategic Infrastructure Development
SO ₂	Sulphur Dioxide
SO _x	Sulphur Oxides
TWh	Terawatt Hour
UAE	United Arab Emirates
UAE	United Arab Emirates
UNFCCC	United Nations Framework Convention on Climate Change
WAM	With Additional Measures
WEM	With Existing Measures
WHO	World Health Organization
WMO	World Meteorological Organisation

Background to the Proposed Project

GLOSSARY OF TERMS

Terms	Definition
Carbon Budgets	The maximum cumulative amount of greenhouse gas emissions that can be released into the atmosphere while limiting global warming to a specified level, between 1.5 and 2 degrees
Climate Action and Low Carbon Development (Amendment) Act	Ireland's legally binding framework which aims to achieve a climate-neutral economy by 2050, requiring a 51% reduction in greenhouse gas emissions by 2030
Climate Action Plan	National framework document for measuring, tracking and reducing greenhouse gas emissions and adopting climate adaptation measures.
European Green Deal	An EU policy launched in 2019, aiming to cut emissions by at least 50% by 2030, rising towards 55%, while legally binding the 2050 neutrality goal through the European Climate Law.
Kyoto Protocol	An international treaty adopted in December 1997, requiring industrialised nations to reduce GHG emissions based on principle of common but differentiated responsibilities
National Energy Projections	Predictions of future energy use in Ireland under different scenarios and account for factors such as economic growth
National Energy Security Framework	Policy document produced by Irish government to provide an overarching and comprehensive response to Ireland's energy security needs in the context of the war in Ukraine.
National Planning Framework	A long-term, 20-year strategy for strategic planning and sustainable development of urban and rural areas to 2040, with the core objectives of securing balanced regional development and a sustainable 'compact growth,' approach to the form and pattern of future development.
Paris Agreement	A legally binding international treaty adopted in 2015 to combat climate change, aiming to limit global temperature rise to well below 2 degrees, preferably 1.5 degrees above pre-industrial levels
Planning and Development Act 2024	An Act to consolidate and revise the law relating to planning and development. It precedes the Planning and Development Act 2000 and is acknowledged as a major reform to speed up housing delivery and make the planning system clearer and more efficient.
Renewable Energy Directive	An EU Directive which aims to accelerate the EU's renewable energy transition and promote energy independence
REPowerEU	A European Commission plan launched in May 2022 to rapidly reduce dependence on Russian fossil fuels and to accelerate the green energy transition following Russia's invasion of Ukraine.
Strategic Area	Designated areas deemed most suitable for wind farm development due to high wind speeds, existing grid capacity and low environmental or residential constraints.
The Climate Change Advisory Council	An Independent advisory body providing evidence-based advice and recommendations on policy to support Ireland's just transition to a biodiversity rich, environmentally sustainable, climate neutral and resilient society.

Mayo CAP	Mayo County Council Climate Action Plan, 2024-2029
United Nations Framework Convention on Climate Change	1992 International Treaty aimed at stabilising atmospheric greenhouse gas concentrations to prevent dangerous human-induced climate interference
Wind Shear	The increase of wind speed with height above ground.

GLOSSARY OF ACRONYMS

Acronym	Meaning
AA	Appropriate Assessment
AM	Angle Mast
ACP	An Coimisiún Pleanála
BAI	Broadcasting Authority of Ireland
bcm	Billion Cubic Metres
C	Carbon
CAP	Climate Action Plan
CARO	Climate Action Regional Office
CB1	Carbon Budget 1
CCAC	Climate Change Advisory Council
CEMP	Construction and Environmental Management Plan
CER	Commission for Energy Regulation
CH ₄	Methane
CLO	Community Liaison Officer
CO ₂	Carbon Dioxide
COF	Confirmation of Feasibility
COP	Conference of Parties
CRU	Commission for Regulations of Utilities
CMPs	Construction Management Plans
DCCAE	Department of Communications, Climate Action and Environment
DCENR	Department of Communications, Energy and Natural Resources
DECC	Department of the Environment, Climate and Communications
DOC	Dissolved Organic Carbon
DoECC	Department of Environment, Climate and Communications
DoEHLG	Department of Environment, Heritage and Local Government
DoHPLG	Department of Housing, Planning and Local Government
DPER	Department of Public Expenditure and Reform
EEA	European Environmental Agency
EBS	Electricity Supply Board
ECN/S	Electronic Services Network/Service
EIAR	Environmental Impact Assessment Report
EIS	Environmental Impact Statement
EM	End Mast
EPA	Environmental Protection Agency

ETS	Emissions Trading Scheme
EU	European Union
GHG	Greenhouse Gas
GIS	Geographic Information System
GSACR	Global Shield Against Climate Risk
GST-1	First Global Stocktake
IAA	Irish Aviation Authority
IAC	Irish Air Corps
ICCA	Ireland's Climate Change Assessment
IEA	International Energy Authority
IFI	Inland Fisheries Ireland
IMP	Intermediate Polesets
IPC	Integrated Pollution Control
IPCC	Intergovernmental Panel on Climate Change
IR	Infra-Red
ISEM	Integrated Single Electricity Market
IWEA	Irish Wind Energy Association
LCA	Landscape Character Assessment
LECP	Local Enterprise and Community Plans
LNG	Liquefied Natural Gas
LVIA	Landscape and Visual Effects
MCC	Mayo County Council
MCDP	Mayo County Development Plan
m	Metres
MS	Microsoft Teams
MMaRC	Motorway Maintenance and Renewal Contracts
MW	Megawatts
NCQG	New Collective Quantified Goal on Climate Finance
NDP	National Development Plan
NEHS	National Environmental Health Service
NESC	National Economic and Social Council
NGO	Non-Governmental Organisation
NHA	Natural Heritage Area
NIS	Natura Impact Statement
nm	nanometres
NMS	National Monument Service
NPF	National Planning Framework
NPO	National Policy Objectives
NPWS	National Parks and Wildlife Service
NREAP	National Renewable Energy Action Plan
N2O	Nitrous Oxide
NSO	National Strategy Outcome
OHL	Overhead Line
OTC	Open To Consideration
PAS	Plans to Accelerate Solutions

PCE	Pre-Connection Enquiry
ppb	Parts Per Billion
REC	Renewable Energy Community
RED	Renewable Energy Directive
RESS	Renewable Electricity Support Scheme
RPOs	Regional Policy Objectives
RSES	Regional Spatial and Economic Strategies
SAC	Special Area of Conservation
SEAI	Sustainable Energy Authority Ireland
SEC	Sectoral Emissions Ceiling
SID	Strategic Infrastructure Development
SPA	Special Protection Area
TTA	Traffic and Transport Assessment
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
WAM	With Additional Measures
WEM	With Existing Measures
WEI	Wind Energy Ireland
WES	Wind Energy Strategy
WFD	Water Framework Directive
WHO	World Health Organisation
WMO	World Meteorological Organisation

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Consideration of Reasonable Alternatives

GLOSSARY OF TERMS

Term	Definition
Horizontal Directional Drilling	A trenchless construction method to allow the installation of underground cables using directional drilling machinery
Do Nothing Alternative	The environment of the site and its environs should the Proposed Project not be developed
Natura 2000 site	A designated, protected area for biodiversity within the European Union. These sites are legally protected under the European Union Habitats Directive and Birds Directive .
United Nations Framework Convention on Climate Change	1992 International Treaty aimed at stabilising atmospheric greenhouse gas concentrations to prevent dangerous human-induced climate interference

GLOSSARY OF ACRONYMS

Acronym	Definition
AOD	Above Ordnance Datum
BMEP	Biodiversity Management and Enhancement Plan
BP	Borrow Pit
CAP	Climate Action Plan
CRA	Collision Risk Assessment
GIS	Geographical Information Systems
ha	Hectares
MCDDP	Mayo County Development Plan
MW	Megawatts
NHA	Natural Heritage Area
NOF	National Planning Framework
OHL	Overhead Line
OTC	Open to Consideration
SAC	Special Area of Conservation
pNHA	Proposed Natural Heritage Area
PV	Photovoltaic
SPA	Special Protection Area
TDR	Turbine Delivery Route
ZTV	Zone of Theoretical Visibility

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Description of the Proposed Project

GLOSSARY OF TERMS

Terms	Definition
Anchor cage	The bottom section of the turbine (i.e. the foundation) which is backfilled with concrete
Borrow Pit	A pit resulting from the excavation of material used in construction of the Proposed Wind Farm
Hardstanding	Levelled assembly areas comprising of bare soil surface to support plant and machinery
Nacelle	Housing component of the turbine generator.
Turbine delivery route	A highly specialized, engineered, and permitted route for transporting oversized components—blades, tower sections, and nacelles—from ports to wind farm sites.

GLOSSARY OF ACRONYMS

Acronym	Definition
ABZ	Aquatic Buffer Zone
ACP	An Coimisiún Pleanála
BMEP	Biodiversity Management and Enhancement Plan
CAT	Cable Avoidance Tool
CEMP	Construction and Environmental Management Plan

DP	Decommissioning Plan
ECoW	Ecological Clerk of Works
EIAR	Environmental Impact Assessment Report
EnvCoW	Environmental Clerk of Works
FTC	Fehily Timoney & Company
ha	Hectares
HES	Hydro-Environmental Services
HGV	Heavy Goods Vehicle
IDL	Irish Drilling Limited
IFI	Inland Fisheries Ireland
IPC	Integrated Pollution Control
IPP	Independent Power Provider
kV	Kilovolt
LFL	Limited Felling Licence
MRF	Materials Recovery Facility
MWh	Megawatt Hour
NESC	National Economic and Social Council
OPW	Office of Public Works
PSMP	Peat and Spoil Management Plan
PSRA	Peat Stability Risk Assessment
RAMS	Risk Assessment Method Statement
RESS	Renewable Energy Support Scheme
RWMP	Resource Waste Management Plan
SAC	Special Area of Conservation
SID	Strategic Infrastructure Development
SNH	Scottish Natural Heritage
SOWOR	Schedule of works operation system
SPA	Special Protection Area
TBT	Tool Box Talk
TDR	Turbine Delivery Route
TMP	Traffic Management Plan
TSO	Transmission System Operator
WEI	Wind Energy Ireland
WC	Watercourse
WMP	Waste Management Plan

Population and Human Health

GLOSSARY OF TERMS

Term	Definition
Sensitive Receptor	A component of the receiving environment which will experience an impact from the Proposed Project in some capacity
SEVESO site	Industrial facilities storing potentially dangerous substances in high quantities regulated under the EU SEVESO Directives

Shadow Flicker	A phenomenon when rotating wind turbine blades cast moving shadows over a narrow opening causing a rapidly alternating flickering light intensity
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GLOSSARY OF ACRONYMS

Acronym	Definition
AVEA	Association of Visitor Experiences and Attractions
CAHA	Climate and Health Alliance
CAP	Climate Action Plan
CEBR	Centre for Economics and Business Research
CEMP	Construction Environmental Management Plan
CERIS	Centre for Economic Research on Inclusivity and Sustainable
CSCS	Construction Skills Certification Scheme
CSO	Central Statistics Office
ED	Electoral Division
EHS	Environmental Health Service
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
ELF	Extremely Low Frequency
EMF	Electric Magnetic Fields
GDG	Guideline Development Group
GSI	Geological Survey of Ireland
ha	Hectares
HES	Hydro Environmental Services
HIA	Health Impact Assessment
HGV	Heavy Goods Vehicle
HSE	Health Service Executive
IAA	Irish Aviation Authority
IEA	International Energy Authority
IEC	International Electrotechnical Commission
ICNIRP	International Commission on Non-Ionizing Radiation Protection
IEA	International Energy Agency
IEC	International Electrotechnical Commission
IEMA	Institute for Environmental Management and Assessment
ISEP	Institute of Sustainability and Environmental Professionals
IWEA	Irish Wind Energy Association
LBNL	Lawrence Berkley National Laboratory
LFL	Limited Felling Licence
LGV	Light Goods Vehicle
MRF	Materials Recovery Facility
MW	Megawatts
NIMBY	Not In My Back Yard

OHL	Overhead Line
OPW	Office of Public Works
OSI	Ordnance Survey Ireland
PSCS	Project Supervisor Construction Stage
PSDP	Project Supervisor Design Process
RESS	Renewable Energy Support Scheme
SEAI	Sustainable Energy Authority of Ireland
SCADA	Supervisory Control and Data Acquisition
TIA	Tourism Impact Assessment
TTA	Traffic and Transport Assessment
UE	Uisce Éireann
WEI	Wind Energy Ireland
WHO	World Health Organisation

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Biodiversity

GLOSSARY OF TERMS

Terms	Definition
Avian receptors	bird species or populations within a project's "zone of influence" that may experience significant effects from a development
Barotrauma	in bat ecology refers to fatal internal injuries caused by extreme, rapid air pressure changes, particularly when bats fly near the fast-rotating blades of wind turbines
Baseline Ecological Conditions	the existing state of an ecosystem—including biodiversity, habitat quality, and species abundance—prior to development or human intervention
clustering process	an unsupervised data analysis process that groups sites, species, or environmental variables based on high similarity and low dissimilarity
County importance	a, usually non-statutory, designation for sites, habitats, or species that are considered significant at the county or local regional level, rather than national or international level
Cumulative effects	A cumulative effect is the total, combined impact of multiple, often individually minor, actions or events occurring over time
Delineated by the EIAR Site Boundary	indicated by the exact position of the EIAR site boundary
Designated sites	SACs (Special Areas of Conservation) and SPAs (Special Protection Areas) are internationally important, legally protected sites for nature conservation, forming the EU's Natura 2000 network
Ex-situ	off-site
Fossitt (2000)	A guide which provides a standard scheme for describing habitats in Ireland.

Ground level Static surveys	involve the deployment of automated, unattended monitoring equipment—most commonly bat detectors—left in place for extended, consecutive nights
Habitat mosaics	A combination of different ecological communities or habitat types within a landscape
Hydrogeology	the study of the occurrence, distribution, and movement of groundwater within the Earth's crust, particularly in aquifers
Hydrology	the study of the movement, distribution and quality of water and how it influences ecosystems, habitats and biodiversity
Incidental records	the unplanned or opportunistic sightings of species (fauna or flora) outside of a structured/ targeted survey
Invasive species	non-native organisms (plants, animals, fungi, or bacteria) introduced to a new ecosystem—usually by human activity—that cause, or are likely to cause, significant harm to the environment, economy, or human health
Irish Vegetation Classification	a comprehensive statistically based framework commissioned by the National Biodiversity Data Centre to map and describe all natural and semi- natural vegetation in Ireland
Key ecological receptors	are specific habitats, populations, or species—often those with high conservation value, legal protection, or critical ecosystem roles—that are most vulnerable to, and thus prioritized during, environmental impact assessments
Likely Zone of Influence	The area within which ecological features may be affected by changes resulting from a proposed project.
Local Ecological Importance	the modified nature and low biodiversity value of these habitats
Macrophyte communities	a collection of large aquatic plants—including vascular plants, bryophytes, and macro-algae—visible to the naked eye that grow in or near water bodies
Manual Transects	a fundamental, field-based ecological survey method used to study the distribution, abundance, and diversity of organisms (usually plants or sessile animals) along a specific path or environmental gradient
Multi- disciplinary walkover survey	a comprehensive, on-site survey conducted by a team of specialists to assess the ecological, environmental, and physical characteristics of a specific area
National Vegetation Database	A database which securely stores and manage Irish Vegetation data and serves as the core resource for the Irish vegetation classification.
Natural Heritage Areas (NHAs)	Legally designated, high priority conservation sites in Ireland protected under the Wildlife Amendment Act 2000, NHAs are areas considered important for the habitats present or which holds species of plants and animals whose habitat needs protection
Plant nomenclature	the formal, scientific naming system for plants
Proposed mitigation	the specific, planned actions outlined in a development proposal or Environmental Impact Assessment (EIAR)

	designed to avoid, reduce, or compensate for negative impacts on biodiversity and natural habitats
Proposed Natural Heritage Areas (pNHAs)	Sites containing important habitats, plant and animal species, or geological/geomorphological features, which are not directly protected by the Wildlife Acts but may be protected via local planning, particularly under the Planning and Development Acts.
Qualifying Interests	The specific habitats or species for which Special Areas of Conservation are designated under the EU Habitats Directive
Receptor valuation	the systematic identifying and assessing of the value of the receiving habitats, species or ecosystems which may be adversely affected by the development
Red line boundary	This boundary outlines the general extent of a property, site, or area of interest
Releve assessments	A relevé assessment (or survey) is a standardized, rapid sampling method used in ecology to describe and classify plant communities
Scoping exercise	a preliminary, systematic assessment used to define the boundaries, objectives, and feasibility of a project or research study including the identification of stakeholders and issues
Special Areas of Conservation	Designated for habitats (e.g., active raised bogs, reefs) and non-bird species listed under the EU Habitats Directive 92/43/EEC.
Special Conservation Interests	Specific species or habitats for which a site is designated as a Special Protection Area, primarily focusing on rare, vulnerable, or migratory birds, as well as wetlands
Special Protection Areas	Designated specifically for the protection of wild birds and their habitats under the EU Birds Directive 2009/147/EC.

GLOSSARY OF ACRONYMS

Acronyms	Definition
AA	Appropriate Assessment
AASR	Appropriate Assessment Screening Reports
AM	Angle Masts
BCI	Bat Conservation Ireland
BMEP	Biodiversity Management and Enhancement Plan
bpqh	Bat Passes Per Hour
CEMP	Construction Environmental Management Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
CSZ	Core Sustenance Zone
DAU	Development Applications Unit
EcIA	Ecological Impact Assessment
ECOW	Ecological Clerk of Works
EEC	European Economic Community
EM	End Masts
EnvCoW	Environmental Clerk of Works

ERICA	Engine for Relevés to Irish Communities Assignment
ESB	Electricity Supply Board
FPO	Flora Protection Order
GIS	Geographical Information Systems
HD	Habitats Directive
HDD	Horizontal Directional Drilling
IAS	Invasive Alien Species
IFI	Inland Fisheries Ireland
IMPs	Intermediate Pole Set
ISMP	Invasive Species Management Plan
IVC	Irish Vegetation Classification
KER	Key Ecological Receptor
KSDL	Kerry Slug Derogation Licence
kV	Kilovolt
NBAP	National Biodiversity Action Plan
NBDC	National Biodiversity Data Centre
NHA	Natural Heritage Areas
NIS	Natura Impact Statement
NPWS	National Parks and Wildlife Service
NVD	National Vegetation Database
OHL	Overhead Line
pNHA	Proposed Natural Heritage Areas
PRF	Potential Roost Features
QI	Qualifying Interest
RPO	Regional Policy Objectives
S.I	Statutory Instrument
SAC	Special Area of Conservation
SCI	Special Conservation Interests
SNH	Scottish Natural Heritage
SPA	Special Protection Area
TDR	Turbine Delivery Route
TII	Transport Infrastructure Ireland
TRP	Threat Response Plan
WA	Wildlife Act
WFD	Water Framework Directive
WWDA	Waste Water Discharge Authorisation
ZOI	Zone of Influence

Birds

GLOSSARY OF TERMS

Term	Meaning
Breeding Season	April to September
Collision Risk Model	a mathematical model to predict the number of birds that may be killed by collision with moving wind turbine rotor blades
Key Ornithological Receptor	a bird species upon which potential impacts are anticipated and assessed
Potential Collision Height	The rotor-swept area of the proposed turbines
Winter Season	October to March

GLOSSARY OF ACRONYMS

Acronym	Meaning
BoCCI	Birds of Conservation Concern in Ireland
BTO	British Trust for Ornithology
CRA	Collision Risk Assessment
DTM	Digital Terrain Model
EPA	Environmental Protection Agency
EU	European Union
I-WeBS	Irish Wetland Bird Survey
KOR	Key Ornithological Receptor
NBDC	National Biodiversity Data Centre
NBE	No Breeding Evidence
NIS	Natura Impact Statement
NPWS	National Parks and Wildlife Service
NRA	National Road Scheme
PCH	Potential Collision Height
SCI	Special Conservation Interests
SNH	Scottish Natural Heritage
SPA	Special Protection Area
VP	Vantage Point

Land, Soils and Geology

GLOSSARY OF TERMS

Terms	Definition
Aquifer	a body of porous rock or sediment saturated with groundwater
Floodplain	a generally flat area of land next to a river or stream.
Geoheritage	Refers to the part of the natural heritage of a certain area constituted by geodiversity elements with particular geological value and hence worthy of safeguard for the benefit of present and future generations. Geoheritage can include both in situ elements (geosites) or ex situ

	elements (collections of geological specimens) with paleontological, geomorphological, mineralogical, petrological or stratigraphical significance, among others.
Geology	The science that deals with the earth's physical structure and substance, its history and the processes that act on it
Hardstanding	Levelled assembly areas comprising of bare soil surface to support plant and machinery
Morphology	Geological Form or Structure
Peat Probing	A method used to measure the depth of peat deposits by pushing specialised, narrow and lightweight rods into the ground until resistance is met.

GLOSSARY OF ACRONYMS

Acronym	Definition
BMEP	Biodiversity Management and Enhancement Plan
CGS	County Geological Site
CO ₂	Carbon Dioxide
cSAC	Candidate Special Areas of Conservation
EIAR	Environmental Impact Assessment Report
FoS	Factor of Safety
FTC	Fehily Timoney and Company
GPSAR	Geotechnical and Peat Stability Assessment Report
GSI	Geological Society of Ireland
ha	hectares
HES	Hydro-Environmental Services
HSE	Health Service Executive
IDL	Investigation Drilling
IEL	Industrial Emissions Licensing
ITM	Irish Transverse Mercator
LFL	Limited Felling Licence
IPC	Integrated Pollution Control
MCDP	Mayo County Development Plan
NHA	Natural Heritage Area
Nox	Oxides of Nitrogen
NRA	National Road Scheme
PLHRAG	Peat Landslide Hazard and Risk Assessments: Best Practice Guide for Proposed Electricity Generation Developments
pNHA	Proposed Natural Heritage Area
PSMP	Peat and Spoil Management Plan
PSRA	Peat Stability Assessment Report
SAC	Special Area of Conservation
SCR	Solid Core Recovery
SNH	Scottish Natural Heritage
SO ₂	Sulphur Dioxide

SPA	Special Protection Areas
TCR	Total Core Recovery
TDR	Turbine delivery route

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Hydrology and Hydrogeology

GLOSSARY OF TERMS

Terms	Definition
Borrow Pit	A pit resulting from the excavation of material used in construction of the Proposed Project
Hardstanding	Levelled assembly areas comprising of bare soil surface to support plant and machinery
Sub-catchments	defined as logical, smaller, and more manageable subdivisions of larger river catchments

GLOSSARY OF ACRONYMS

Acronym	Definition
AAR	Average Annual Rainfall
AE	Actual Evaporation
AER	Annual Environmental Reports
BOD	Biological Oxygen Demand
BMEP	Biodiversity Management and Enhancement Plan
BP	Borrow Pit
CEMP	Construction and Environmental Management Plan
CFRAM	Catchment Flood Risk Assessment and Management Programme
CO ₂	Carbon Dioxide
COD	Chemical Oxygen Demand
DO	Dissolved Oxygen
DWPA	Drinking Water Protected Area
EIAR	Environmental Impact Assessment Report
EQSs	Environmental Quality Standards
ER	Effective Rainfall
FI	Fissured Bedrock
FRA	Flood Risk Assessment
FTC	Fehily Timoney and Company
GSI	Geological Survey of Ireland
GWBs	Groundwater Bodies
GWS	Group Water Schemes
ha	Hectares
HDD	Horizontal Directional Drilling
HES	Hydro- Environmental Services
IDL	Irish Drilling Limited

IFI	Inland Fisheries Ireland
IPC	Integrated Pollution Control
IRBD	Irish River Basin District
MADs	Major Accidents and Disasters
mbgl	Metres Below Ground Level
NHA	National Heritage Area
NIFM	National Indicative Fluvial Mapping
NO _x	Nitrogen Oxides
NSA	Nutrient Sensitive Area
NTU	Turbidity
OD	Ordnance Datum
OHL	Overhead Lines
OPW	Office of Public Works
ORS	Old Red Sandstones
OTE	Over the edge
PAC	Poly Aluminium Chloride
PCAS	Peatland Climate Action Scheme
PE	Potential Evapotranspiration
pNHA	Proposed National Heritage Area
pp	Poorly productive bedrock
PWS	Public Water Supplies
R	Rainfall
RAL	Remedial Action List
RBMP	River Basin Management Plan
rEIAR	Remedial Environmental Impact Assessment Report
rNIS	Remedial Natura Impact Statement
SAC	Special Area of Conservation
SCADA	Supervisory Control and Data Acquisition
SNH	Scottish Natural Heritage
SO ₂	Sulphur Dioxide
SPA	Special Protected Area
SPC	Specific electrical conductivity
SWB	Surface Water Bodies
TDR	Turbine Delivery Route
WFD	Water Framework Directive

Air Quality

GLOSSARY OF TERMS

Term	Definition
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CAFE Directive	The Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive is a key European Union regulation designed to define, establish, and manage ambient air quality standards to protect human health and the environment. It sets legally binding limits for pollutants and dictates how Member States should monitor and improve air quality
IAQM 2024 Guidance	The IAQM 2024 guidance, "Guidance on the Assessment of Dust from Demolition and Construction," provides a standardized methodology for assessing construction dust impacts, covering demolition, earthworks, construction, and trackout.
Trackout	The transport of dust and dirt from the construction/ demolition site onto the public road network, where it may be deposited and then re-suspended by vehicles using the network.

GLOSSARY OF ACRONYMS

Acronym	Definition
NH ₃	Ammonia
AER	Annual Environmental Report
C ₆ H ₆	Benzene
CO ₂	Carbon Dioxide
CO	Carbon Monoxide
CAFE	Clean Air for Europe
CEMP	Construction and Environmental Management Plan
DEFRA	Department of Environment, Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges
EEA	European Environmental Agency
ESB	Electricity Supply Board
HGVs	Heavy Goods Vehicles
HDV	Heavy-duty vehicle
IAQM	Institute of Air Quality Management
Km	Kilometres
Pb	Lead
ppb	Parts per Billion
LGVs	Light Good's Vehicles
LAQM	Local Air Quality Management
MRF	Materials Recovery Facility
m	metres
NIS	Natura Impact Statement
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
NM VOC	Non-Methane Volatile Organic Compounds
OHL	Overhead Lines
O ₃	Ozone
PM	Particulate Matter
ppb	parts per billion

PCAS	Peatland Climate Action Scheme
PAHs	Polyaromatic Hydrocarbons
SO ₂	Sulphur Dioxide
SO _x	Sulphur Oxide
UKHA	UK Highways Agency
WHO	World Health Organisation

Climate

GLOSSARY OF TERMS

Term	Definition
Carbon Budget	The total amount of greenhouse gas emissions that may be released during an agreed period. In Ireland, this is measured on an economy-wide basis, excluding aviation and maritime, in megatonnes of carbon dioxide equivalent over a five-year period. Carbon budgets are used in climate policy and act as a benchmark to help ensure sustained emissions reductions over a period of time.
Conference of the Parties	Every year since 1995, the Conference of the Parties (COP) has gathered the 196 Parties (195 countries and the European Union) that have ratified the Convention in a different country, to evaluate its implementation and negotiate new commitments, and is the supreme decision-making body of the UNFCCC.
Embodied Carbon	The emissions associated with procuring, mining and harvesting raw materials, the transformation of those materials into construction products, transporting them to site, installation of these materials during a construction phase, and the subsequent replacement, removal, and disposal of these materials upon decommissioning
The Climate Change Advisory Council	An Independent advisory body providing evidence-based advice and recommendations on policy to support Ireland's just transition to a biodiversity rich, environmentally sustainable, climate neutral and resilient society.

GLOSSARY OF ACRONYMS

Acronym	Definition
AMOC	Atlantic Meridional Overturning Circulation
BMEP	Biodiversity Management and Enhancement Plan
CAP	Climate Action Plan
CCAC	Climate Change Advisory Council
CCPI	Climate Change Performance Index
CEMP	Construction and Environmental Management Plan
CFRAM	National Catchment Flood Risk Management
CH ₄	Methane
CO ₂	Carbon Dioxide
COP	Conference of the Parties
EEA	European Environment Agency
EPA	Environmental Protection Agency
ESR	Effort Sharing Regulation

ETS	Emissions Trading System
FRA	Flood Risk Assessment
ICCA	Ireland's Climate Change Assessment
IPCC	Intergovernmental Panel on Climate Change
ktCO ₂ e	Kilotonnes of Carbon Dioxide Equivalent
kWh	Kilowatt hour
LACAP	Local Area Climate Action Plan
LULUCF	Land Use, Land Use Change, and Forestry
MCDP	Mayo County Development Plan
MRF	Materials Recovery Facility
MtCO ₂ e	Million Metric tonnes of Carbon Dioxide Equivalent
NCQG	New Collective Quantified Goal on Climate Finance
NDCs	Nationally Determined Contribution
NECP	National Energy Climate Plan
NIFM	National Indicative Fluvial Flood Mapping
NIR	National Inventory Report
RED	Renewable Energy Directive
RCP	Representative Concentration Pathways
SAC	Special Area of Conservation
SPA	Special Protection Area
tCO ₂ e	Tonnes of Carbon Dioxide Equivalent
TII	Transport Infrastructure Ireland
UAE	United Arab Emirates
UNFCCC	Nations Framework Convention on Climate Change
WAM	With Additional Measures
WEM	With Existing Measures

Noise and Vibration

GLOSSARY OF TERMS

Term	Definition
10 Minute Average Wind Speed (m/s)	The wind speed measured by an anemometer at a specified height above ground level, averaged over a 10-minute period
A – Weighting	The “A” suffix denotes the fact that the sound levels have been “A-weighted” in order to account for the non-linear nature of human hearing.
Background Noise	The noise level rarely fallen below in any given location over any given time period, often classed according to daytime, evening or nighttime periods. The $L_{A90,10min}$ is the parameter that is used to define the background noise level in this instance. L_{A90} is the sound level that is exceeded for 90% of the sample period. It is typically used as a descriptor for background noise.
dB (decibel)	The unit normally employed to measure the magnitude of sound. It is defined as 20 times the logarithm of the ratio between the RMS pressure of the sound field and the reference pressure of 20 micro-pascals (20 μ pa)
dB(A)	An ‘A-weighted decibel’ – a measure of the overall noise level of sound across the audible frequency range (20 Hz – 20 kHz) with A-frequency weighting (i.e. A – Weighting) to compensate for the varying sensitivity of the human ear to sound at different frequencies
Hertz (Hz)	The unit of sound frequency in cycles per second
Hub Height Wind Speed	The wind speed at the centre of the turbine rotor
$L_{Aeq,T}$	This is the equivalent continuous sound level. It is a type of average and is used to describe a fluctuating noise in terms of a single noise level over the sample period (T). The closer the L_{Aeq} value is to either the L_{AF10} or L_{AF90} value indicates the relative impact of the intermittent sources and their contribution. The relative spread between the values determines the impact of intermittent sources such as traffic on the background
L_{AF90}	Refers to those A-weighted noise levels in the lower 90 percentile of the sampling interval; it is the level which is exceeded for 90% of the measurement period. It will therefore exclude the intermittent features of traffic and is used to estimate a background level. Measured using the “Fast” time weighting
L_{den}	Refers to the L_{Aeq} noise levels over a whole day, but with a penalty of 10 dB(A) for night-time noise (23:00-07:00) and 5 dB(A) for evening noise (19:00-23:00), also known as the day evening night noise indicator

Low Frequency Noise	LFN - noise which is dominated by frequency components towards the lower end of the frequency spectrum
Noise	Sound that evokes a feeling of displeasure in the environment in which it is heard, and is therefore unwelcomed by the receiver
Noise Sensitive Location (NSL)	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or other area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels
Octave band	A frequency interval, the upper limit of which is twice that of the lower limit. For example, the 1,000Hz octave band contains acoustical energy between 707Hz and 1,414Hz. The centre frequencies used for the designation of octave bands are defined in ISO and ANSI standards
Pascal (Pa)	Pascal is a unit of pressure and so sound pressures are measured in Pascals
Sound Power Level (L_W)	The sound power level radiated by a source is defined as: $L_W = 10 \log_{10} \left(\frac{W}{W_0} \right) \text{ dB}$ where W is the acoustic power of the source in Watts (W) and W_0 is a reference sound power chosen in air to be 10^{-12} W
Sound Pressure Level (L_p)	The sound pressure level at a point is defined: $L_p = 20 \log_{10} \left(\frac{P}{P_0} \right) \text{ dB}$ where P is the sound pressure and P_0 is a reference pressure for propagation of sound in air and has a value of 2×10^{-5} Pa
Tonal	Sounds which cover a range of only a few Hz which contains a clearly audible tone i.e. distinguishable, discrete or continuous noise (whine, hiss, screech, or hum etc.) are referred to as being 'tonal'
Wind Shear	The increase of wind speed with height above ground

GLOSSARY OF ACRONYMS

Acronym	Definition
AM	Amplitude Modulation
AMWG	Amplitude Modulation Working Group
BERR	UK Department of Business, Enterprise and Regulatory Reform
BMEP	Biodiversity Management and Enhancement Plan
BPF	Blade Passing Frequency
CLG	UK Department of Communities and Local Government
CNT	Construction noise threshold

dB	decibels
DECC	UK Government Department of Energy and Climate Change
DEFRA	UK Department of Environment Food and Rural Affairs
DMRB	Design Manual for Roads and Bridges
EHP	Environmental Health Perspective
EPA	Environmental Protection Agency
ETSU	Energy Technical Support Unit
GDG	WHO Guideline Development Group
Hz	Hertz
IEC	International Electrotechnical Commission
IOA	Institute of Acoustics
MIET	Institution of Engineering and Technology
NCMP	Noise Compliance Monitoring Programme
NG3	Guidance Note for Noise Assessment of Wind Turbine Operations
NHMRC	National Health and Medical Research Council
NPF	National Planning Framework
NRA	National Roads Authority
NML	Noise Monitoring Location
NRA	National Roads Authority
NSL	Noise-sensitive location
PCU	Passenger Car Unit
PPV	Peak Particle Velocity
SEA	Strategic Environmental Assessment
SGN	Supplementary Guidance Note
SPL	Sound Pressure Levels
TII	Transport Infrastructure Ireland
WHO	World Health Organisation

Landscape and Visual

GLOSSARY OF TERMS

Term	Meaning
The Guidelines DoEHLG 2006	The 2006 Wind Energy Development Guidelines. The current published wind energy development guidelines which addresses a variety of aspects relating to wind energy developments inclusive of noise, shadow flicker, setback distances and community obligations
Draft Guidelines DoHPLG 2019	The 2019 Draft Wind Energy Guidelines. The draft document of the updated Wind Energy Development Guidelines yet to be published.
Landscape Character Area	Units of the landscape that are geographically specific and have their own character and sense of place. Each LCA has its own distinctive character, based upon patterns of geology, landform, land use, cultural, historical and ecological features
Photomontage	These are visualisations that superimpose an image of a proposed project upon a photograph or series of photographs from a specific location, termed the 'viewpoint'.
Route Screen Analysis	An exercise where transport routes were driven in real-time and the level of roadside visual screening, in the direction of the proposed turbines, was recorded to inform actual on the ground visibility.
Topography	The study, mapping, and description of the physical features and shape of the Earth's surface
Viewpoint	This is typically in reference to a select location where a photomontage has been captured, which is represented in the Photomontage Booklet
Zone of Theoretical Visibility	A map (digitally produced showing areas of land in which the proposed development is theoretically visible (based on topography rather than screening) to show a worst-case scenario

GLOSSARY OF ACRONYMS

Acronym	Meaning
ACP	An Coimisún Pleanála
AHA	Areas of High Amenity
BMEP	Biodiversity Management and Enhancement Plan
DoAHG	Department of Arts, Heritage and the Gaeltacht
DoEHLG	Department of the Environment, Heritage, and Local Government
DoHPLG	Department of Housing, Planning and Local Government
EIAR	Environmental Impact Assessment Report

EPA	Environmental Protection Agency
GLVIA3	Landscape Institute & IEMA, 2013
HVL	High Value Landscape
IEMA	Institute of Environmental Management and Assessment
L	Local
LCA	Landscape Character Area
LCACM	Landscape Character Assessment of County Mayo
LCT	Landscape Character Type
LCU	Landscape Character Unit
LI	Landscape Institute
LI TGN	Landscape Institute Technical Guidance Note
LVIA	Landscape and Visual Impact Assessment
MCC	Mayo County Council
MCDP	Mayo Development Plan
MCDP	Mayo County Development Plan 2022-2028
N	National
NHA	Natural Heritage Area
NMS	National Monument Service
OHL	Overhead Line
OSi	Ordnance Survey of Ireland
OUV	Outstanding Universal Value
PWVP	Photowire Viewpoint Locations
R	Regional
RSA	Route Screening Analysis
SPA	Special Protection Area
TDR	Turbine Delivery Route
UNESCO	United Nations, Educational, Scientific and Cultural Organisation
VP	Viewpoint
WAW	Wild Atlantic Way
WES	Wind Energy Strategy
ZTV	Zone of Theoretical Visibility

Cultural Heritage

GLOSSARY OF TERMS

Term	Definition
Borrow Pits	A pit resulting from the excavation of material used in construction on the proposed wind farm
National Inventory of Architectural Heritage	An Irish state initiative under the Department of Housing, Local Government and Heritage that identifies, records, and evaluates ¹ post-1700, non-archaeological buildings and structures of significance.
National Monuments Acts 1930 to 2004	Primary Irish Legislation protecting archaeological heritage, covering monuments, sites and objects.
Photomontage	These are visualisations that superimpose an image of a proposed project upon a photograph or series of photographs or series of photographs from a specific location, termed the 'viewpoint'.
Register of Historic Monuments (1997 act)	A statutory list maintained by the Minister for the Arts, Heritage, Gaeltacht and the Islands
Test Trenching	A shallow, excavated trench to examine soil, rock and groundwater conditions, or to identify archaeological features prior to construction.
The Granada Convention	A legally binding Council of Europe treaty defining and protecting Europe's architectural heritage. It emphasises the importance of inventories in underpinning conservation policies.
Trial Pit	A shallow, excavated hole used in geotechnical investigations to inspect soil, rock and groundwater conditions prior to construction.
Viewpoint	This is typically in reference to a select location where a photomontage has been captured, which is represented in the Photomontage Booklet.
Zone of Theoretical Visibility	A map (digitally produced) showing areas of land in which the proposed development is theoretically visible (based on topography rather than vegetation screening)

GLOSSARY OF ACRONYMS

Acronym	Definition
AAP	Area of Archaeological Potential
AH	Archaeological heritage
BH	Built heritage
CH	Cultural heritage
DL	Designed landscapes
EX	Excavations
IAM	Impact Assessment Methodology

NIAH	National Inventory of Architectural Heritage
NM	National Monument
PO	Preservation Order
RMP	Record of Monuments and Places
RPS	Record of Protected Structures
SMR	Sites and Monuments Record
TB	Townland Boundary
ZTV	Zone of Theoretical Visibility

Material Assets

GLOSSARY OF TERMS

Terms	Definition
Degree of Saturation or Ratio of Flow to Capacity	This offers a measure of the amount of available capacity being utilised for each movement. Ideally each movement should operate at a level of no greater than 85% of capacity
Delay	Output in minutes, this gives an indication of the forecast average delay during the time period modelled for each movement.
Electromagnetic Interference	The disruption of an electronic device's operation caused by unwanted electromagnetic radiation or signals from an external source
Material Assets	<i>Built services and infrastructure. Traffic is included because in effect traffic consumes transport infrastructure</i>
Queue	This is the average queue forecast for each movement and is useful to ensure that queues will not interfere with adjacent junctions.
Traffic Volume	traffic volumes are discussed in terms of vehicles and passenger car units, or PCUs, where each vehicle is expressed in terms of its demand on the network relative to the equivalent number of cars or light goods vehicles

GLOSSARY OF ACRONYMS

Acronym	Definition
% Sat	Degree of Saturation
AC	Alternating Current
BMEP	Biodiversity Management and Enhancement Plan
CEMP	Construction and Environmental Management Plan
ComReg	Commission for Communications Regulation
DC	Direct Current
DoD	Department of Defence
DoT now DoTT&S	Department of Transport
DTT	Digital Terrestrial Television
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EMF	Electric and Magnetic Fields
GNI	Gas Networks Ireland
HDD	Horizontal Directional Drilling
HES	Hydro Environmental Services
HGV	Heavy Goods Vehicles
IAA	Irish Aviation Authority
IAC	Irish Air Corp
IR	InfraRed
LGV	Light Goods Vehicles

MMaRC	Motorway Maintenance and Renewal Contractors
MOA	Military Operation Areas
MRF	Materials Recovery Facility
NCN	National Cycle Network
OHL	Overhead Lines
PCU	Passenger Car Units
PPP	Public-Private Partnerships
PWS	Public Water Supply
RDO	National Roads Design Office
RFC	Ratio of Flow to Capacity
ROL	Road Opening License
RWMP	Resource Waste Management Plan
RWS	Regional Water Supply
SID	Strategic Infrastructure Development
SNH	Scottish Natural Heritage
TDR	Turbine Delivery Route
TIA	Telecommunications Impact Assessment
TII	Transport Infrastructure Ireland
TMP	Traffic Management Plan
TTA	Traffic and Transport Assessment
UE	Uisce Éireann
UGC	Underground Cable
WMP	Waste Management Plan

Major Accidents and Natural Disasters

GLOSSARY OF TERMS

Term	Definition
Catchment Flood Risk Assessment Management	The Catchment Flood Risk Assessment and Management Programme is Ireland's largest-ever national flood study, commissioned by the Office of Public Works to assess 80% of the country's primary flood risk, develop detailed flood management Plans with tailored strategies for 300 communities to meet EU Directive requirements
SEVESO Site	Industrial facilities storing potentially dangerous substances in high quantities under the EU SEVESO Directives
Major Emergency Plans	outlines potential site/event specific emergency plans which have been considered or ruled out as part of the baseline, prepared by Mayo County Council (2021).

GLOSSARY OF ACRONYMS

Acronym	Definition
AEP	Annual Exceedance Probability
AER	Annual Environmental Reports
CEMP	Construction and Environmental Management Plan
CFRAM	Catchment Flood Risk Assessment and Management
EIAR	Environmental Impact Assessment Report
EPA	Environmental Protection Agency
ERP	Emergency Response Plan
FoS	Factor of Safety
HGV	Heavy Goods Vehicles
INSN	Irish National Seismic Network
LACAP	Local Authority Climate Action Plan
LGV	Light Goods Vehicles
MCC	Mayo County Council
MCDP	Mayo County Development Plan
MEM	Major Emergency Management
NCCs	National Control Centres
NIFM	National Indicative Fluvial Flood Mapping
OHL	Overhead lines
OPW	Office of Public Works
RMP	Risk Management Plan
RSES	Regional Spatial and Economic Strategy
RWCS	Reasonable Worst Case Scenario
TMP	Traffic Management Plan

Interaction of the Foregoing

GLOSSARY OF TERMS

Term	Definition
Interaction of Effects	The combined, indirect, or secondary impacts that arise from the interaction between different environmental factors.

GLOSSARY OF ACRONYMS

Acronym	Definition
BMEP	Biodiversity Management and Enhancement Plan
C	Construction
CEMP	Construction and Environmental Management Plan
CFRAM	Catchment Flood Risk Assessment and Management
CO ₂	Carbon Dioxide
DoEHLG	Department of the Environment, Heritage and Local Government
EIAR	Environmental Impact Assessment Report
FRA	Flood Risk Assessment
GWBs	Groundwater Bodies
HVL	High Value Landscape
IAQM	Institute of Air Quality Management
IRBD	Irish River Basin District
KOR	Key Ornithological Receptors
LGV	Light Goods Vehicles
NIFM	National Indicative Flood Maps
Nox	Oxides of Nitrogen
O	Operational
OHL	Overhead Line
OPW	Office of Public Works
SO ₂	Sulphur Dioxide
TMP	Traffic Management Plan
VP	Viewpoint
WHS	World Heritage Sites
ZTV	Zone of Theoretical Visibility



APPENDIX 1

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APPENDIX 2

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