

Ballyfeeny Green Energy Project



Environmental Impact Assessment Report Volume II

Chapter 1 – Introduction

September 2025

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NAME OF PROJECT	BALLYFEENY GREEN ENERGY PROJECT	
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Acronyms

Term	Meaning
EIAR	Environmental Impact Assessment Report
RLB	Red Line Boundary
GCR	Grid Connection Route
TDR	Turbine Delivery Route
EIA	Environmental Impact Assessment
AA	Appropriate Assessment
NIS	Natura Impact Statement
CDR	Construction Delivery Route
TDR	Turbine Delivery Route
SE1	Site Entrance 1
SE2	Site Entrance 2
SE3	Site Entrance 3
SE4	Site Entrance 4
SE5	Site Entrance 5
SE6	Site Entrance 6
T01	Turbine 1
T02	Turbine 2
T03	Turbine 3
T04	Turbine 4
T05	Turbine 5
T06	Turbine 6
EcIA	Ecological Impact Assessments
HRA	Habitats Regulations Assessment
AMIOSH	Affiliate Member of the Institute of Safety and Health
MEAGE	Member European Association of Geoscientists and Engineering
FGS	Fellow of the Geological Society of London
IOA	Institute of Acoustics
EPA	Environmental Protection Agency
MILI	Member of the Irish Landscape Institute
SID	Strategic Infrastructure Development
ZTV	Zone of Theoretical Visibility
BESS	Battery Energy Storage Systems
ha	Hectares
LA	Local Authority
WTG	Wind Turbine Generator
MW	Megawatt
kV	Kilovolt
ITM	Irish Transverse Mercator
PDA	Planning and Development Act
LVIA	Landscape and Visual Impact Assessment
PDR	Planning and Development Regulations
EU	European Union
WEI	Wind Energy Ireland
DHPLG	Department of Housing, Planning and Local Government
Draft WEDG 2019	Draft Wind Energy Development Guidelines 2019
PINS	Planning Inspectorate for England
WEDG 2006	Wind Energy Development Guidelines 2006
DCCAE	Department of Communications Climate Action and Energy
IPCC	Intergovernmental Panel on Climate Change
DECC	Department of Energy and Climate Change

Term	Meaning
CDP	County Development Plan
ABP	An Bord Pleanála
CEA	Cumulative Effect Assessments

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1. Introduction

This Environmental Impact Assessment Report (EIAR) has been prepared by Rowan Engineering Consultants Ltd. on behalf of Ballyfeeny Green Energy Limited. This EIAR is in support of a planning application for the development of the proposed Ballyfeeny Green Energy Project in Ballyfeeny and adjacent townlands, County Roscommon.

The proposed wind energy development comprises six wind turbines, (hereafter referred to as WTGs and/or turbines) and all associated infrastructure including Turbine Foundations, Turbine Hardstands, Access Tracks, Wind Farm Internal Cabling, Relay Tower, Onsite Substation and all associated infrastructure. The proposed development also includes the underground grid connection from the Onsite Substation along the public road network, to where the R371 meets the Sliabh Bawn Substation Road (hereafter the proposed 'Development').

For the purposes of this EIAR, the works required within the existing Sliabh Bawn 110kV Substation and works to install the underground grid connection, along the Sliabh Bawn Substation Road to where it meets the R371, have been included as part of the assessment. However, these works will be subject to a separate planning permission and do not form part of this planning application. The underground grid connection works within the planning application Redline Boundary (RLB), the works required within the existing Sliabh Bawn 110kV Substation and along the Sliabh Bawn Substation Road to the R371, are collectively known as the Grid Connection Route (GCR).

The EIAR also presents an assessment of temporary accommodating works required along the public road network from the port of origin in Galway Port, to facilitate the delivery of turbine components to the wind farm Site. Two route options have been assessed in full within the EIAR. These routes collectively are referred to as the Turbine Delivery Route (TDR). These temporary accommodating works are assessed in this EIAR, however, do not form part of this planning application.

For this EIAR the proposed Development, the works for the underground grid connection within the existing Sliabh Bawn 110kV Substation and along the Sliabh Bawn Substation Road to the R371 and the temporary accommodating works along the TDR, are hereafter referred to as the proposed 'Project'. A full and detailed description of the proposed Development for the purposes

of the planning application and the additional elements that form part of the overall Project assessed in this EIAR, is contained in **Chapter 2 – Project Description**.

The Applicant is seeking a 10-year planning permission and 35-year operational life, initiating from the date of full commissioning of the entire wind farm. The development is covered by the provisions of the Renewable Energy Directive III (Directive 2023/2413).

The planning application is subject to section 34D of the Planning and Development Act, 2000, as amended. When a notice issues in accordance with section 34D(b), the provisions of article 26A of the Planning and Development Regulations 2001 to 2025 shall apply.

The EIAR is also accompanied by an Appropriate Assessment (AA) Screening Report and Natura Impact Statement (NIS).

1.1 EIAR Template Terms

Table 1-1 lists the defined terms that are used throughout this EIAR.

Table 1-1: Defined Terms

Terms to be used in EIAR	Meaning
the Project	The Project relates to the construction, operation and decommissioning of a wind energy development consisting of six turbines and all associated infrastructure including Turbine Foundations, Turbine Hardstanding Areas, Site Access Tracks, Wind Farm Internal Cabling, Relay Tower and Onsite Substation. It also includes the GCR from the wind farm Site, along the public road to the Sliabh Bawn 110kV Substation and temporary accommodating works on the TDR from Galway Port to the wind farm Site. The works associated with the Project have been assessed within this EIAR.
the Development	The Development refers to the permanent and temporary works included within the RLB as described in the planning application form and site notices for the Ballyfeeny Green Energy Project and which form part of the planning application submitted to Roscommon County Council.
Redline Boundary (RLB)	Identifies the land that is subject to this planning application and is shown on the planning drawings accompanying this EIAR. Refer to EIAR Figure 1-3 (Volume 4)

Terms to be used in EIAR	Meaning
the Site	Refers to the location of the proposed wind farm, in the townlands of Ballyfeeny and Tully, Co. Roscommon. The location of the Site is displayed in Figure 1-1: Site Location. (Ref: EIAR Figure 1 (Volume 4))
the EIA Study Area	Refers to the areas that were deemed appropriate for the location of wind turbines and associated infrastructure, including the GCR. It is the minimum extent of a Study Area considered in the EIAR for wind farm infrastructure as shown in Figure 1-2: EIA Study Area (Ref: EIAR Figure 2 (Volume 4)) . Each environmental aspect identifies the Study Area used for the Chapter and the guidance on which it is based depending on the requirements of the individual assessments.
Turbine Delivery Route (TDR)	Refers to the proposed delivery routes for the turbine components, some of which are abnormal length loads, within the public road network from the Port of Galway to the wind farm Site. Two TDR options have been assessed in full within the EIAR. These are referred to as TDR 1a and TDR 1b. Refer to EIAR Figure 2-6 (Volume 4). These temporary accommodating works are assessed in this EIAR, however, do not form part of the proposed Development for which planning permission is sought. Further information on the TDR and townlands is provided in Chapter 2 – Project Description, Section 2.2.2 of the EIAR.
Construction Delivery Route (CDR)	Refers to the proposed delivery route from local quarries, concrete suppliers, plant and equipment to the Site.

Terms to be used in EIAR	Meaning
Grid Connection Route (GCR)	The GCR will consist of a 38kV underground cable from the proposed Onsite Substation at the wind farm Site, to the existing Sliabh Bawn 110kV substation. The proposed Development includes the construction of the underground grid connection from the Onsite Substation along the public road network, to where the R371 meets the Sliabh Bawn Substation Road. For the purposes of this EIAR, the works required within the existing Sliabh Bawn 110kV Substation, and works to install the underground grid connection from the existing substation to where the Sliabh Bawn Substation Road meets the R371, have been included as part of the assessment. However, these works will be subject to a separate planning permission and do not form part of the proposed Development for which planning permission is sought. The underground grid connection works within the RLB, the works required within the existing Sliabh Bawn 110kV Substation and along the Sliabh Bawn Substation Road to where it meets the R371, are collectively known as the GCR.
Temporary Construction Compound	2 No. Temporary Construction Compounds will be established on site, initially during the enabling works of the construction phase, with installation then completed at the commencement of the main construction works. • Temporary Construction Compound 1 - will accommodate temporary containers for welfare facilities, site offices, meeting rooms, canteen area, a drying room and sanitary provisions. • Temporary Construction Compound 2 - will be for storage of construction materials and plant.
the Onsite Substation	Refers to the proposed onsite 38kV electrical substation and control building(s) including the compound in which it is located.
Access Tracks	Refers to tracks proposed for access to turbine and wind farm infrastructure on the Site.
Communications Relay Tower	Relay Tower or proposed Communications Relay Tower, refer to the required Relay Tower to be installed on the Site to prevent any disruption to communications from the proposed Project
Wind Farm Internal Cabling	Refers to the underground electrical and communication cabling connecting the turbines to the Onsite Substation.
Turbine Hardstand	Refers to the hardstand next to the turbine location used by cranes for erection of the wind turbine structure, hub, nacelle and rotor blades.
Turbine Foundation	Refers to turbine concrete base located under ground level and used to support the turbine structure.

Terms to be used in EIAR	Meaning
Reinstatement/ Reinstated	Reinstatement means restoring the habitat in the areas of the Site where infrastructure was developed following either the construction and/or decommissioning phases.
Site Entrance 1 (SE1)	Entrance off the R371 servicing the proposed Turbine T01. This is an upgrade to an existing Coillte forest track site entrance.
Site Entrance 2 (SE2)	Entrance off the L6018 servicing the proposed Turbine T01. This is a new site entrance onto the public road.
Site Entrance 3 (SE3)	Entrance off the L6018 servicing the Onsite Substation, Relay Tower, and Turbines T02 to T06. This is a new site entrance onto the public road.
Site Entrance 4 (SE4)	Entrance off the L60498 servicing the proposed Turbine T05. This is an upgrade to an existing field entrance onto an unsealed public road.
Site Entrance 5 (SE5)	Entrance off the L60498 to proposed Turbine T06. This is a new site entrance onto an unsealed public road.
Site Entrance 6 (SE6)	Entrance off the L60498 connecting the main wind farm track to SE5 to accommodate a straight run through with turbine component deliveries to T06, except for abnormal loads. SE6 will be a temporary site entrance for use during the construction phase. SE6 will not be used for construction or operational traffic and a removable barrier will be constructed across the entrance to this road to prevent unauthorized use.

The Site location, EIAR Study Area and RLB are displayed in **Figure 1-1**, **Figure 1-2** and **Figure 1-3**, respectively.

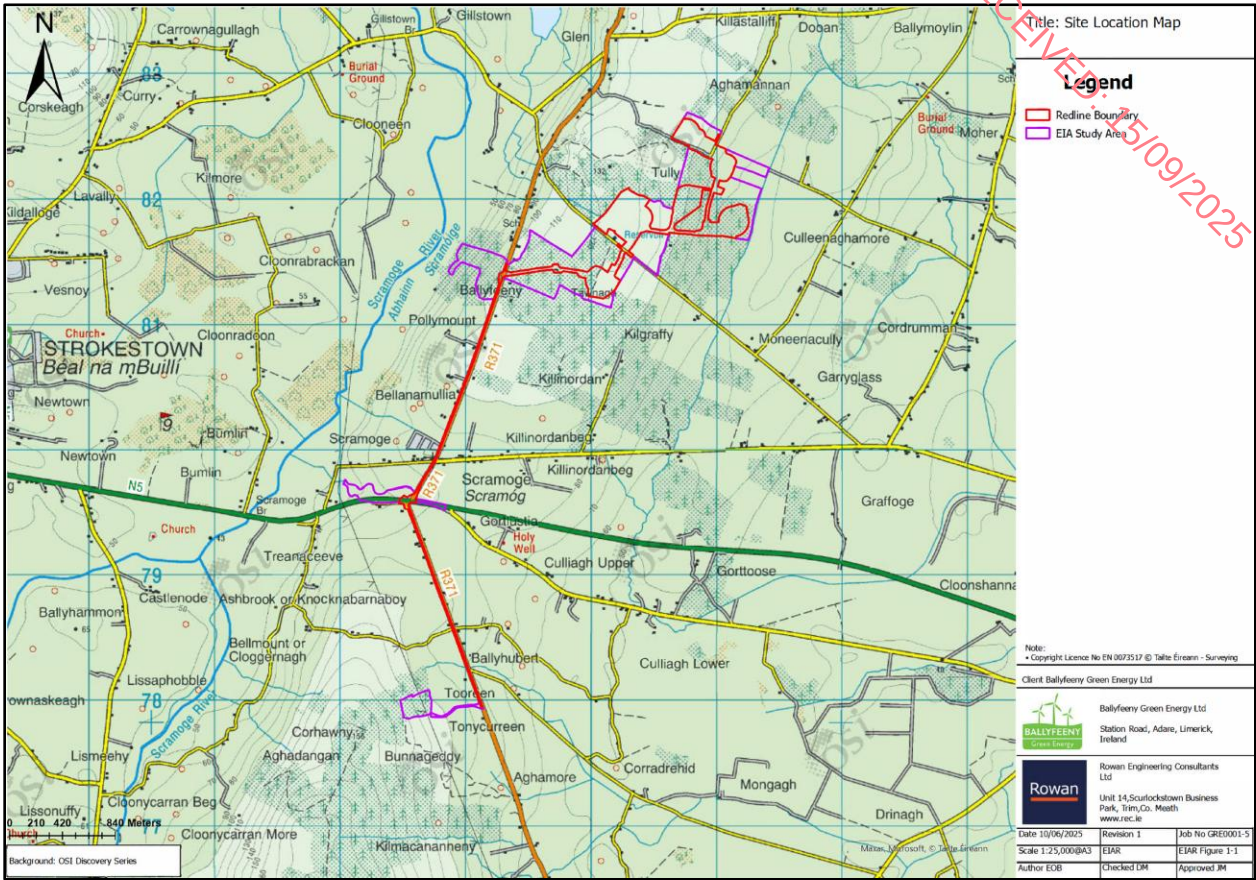


Figure 1-1: Site Location Map (Ref: EIAR Figure 1-1 (Volume 4))

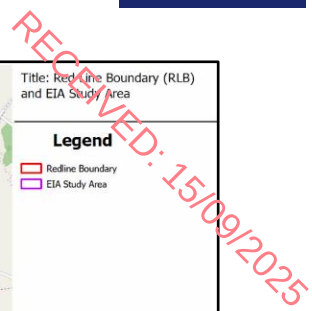


Figure 1-2: EIA Study Area (Ref: EIAR Figure 1-2 (Volume 4))

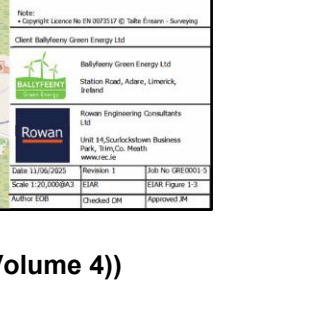


Figure 1-3: Redline Boundary (RLB) (Ref: EIAR Figure 1-3 (Volume 4))

1.2 The Applicant

Ballyfeeny Green Energy Limited (hereafter referred to as 'The Applicant') is a subsidiary of Greensource Sustainable Developments Limited (Greensource). Greensource are an innovative Irish renewable energy company based in Adare, Co. Limerick, that specialises in the development of renewable energy projects, working with communities from pre-planning to operation, and creating long-lasting local partnerships.

Greensource has over ten years development and operational experience, holding a highly skilled and experienced team who are committed to developing projects with successful outcomes for all stakeholders. Working with integrity and care for the local environment, the team has a strong track record, having successfully completed wind energy and other renewable projects in the west of Ireland.

1.3 The Consultants

The Applicant has appointed Rowan Engineering Consultants Ltd. (hereafter referred to as 'Rowan') as the consultant for the proposed Project. Rowan are a wholly owned Irish environmental and forensic engineering company based in Trim, Co. Meath, and Oranmore, Co. Galway, holding expertise in renewable energy projects, sustainability, environmental planning and environmental due diligence. Rowan was founded in 1998 and have successfully completed renewable energy projects in both Ireland and overseas.

1.4 The EIA Project Team

Whilst Rowan were responsible for the compilation of the EIAR, an experienced team of specialist EIA and environmental professionals have contributed to its preparation. **Table 1-2** provides the name of the professionals who were responsible for the development of each chapter of the EIAR. Further details on individual qualifications and experience are provided in **Appendix 1.1 - Project Competencies**.

Table 1-2: EIA Project Team

Chapter/ Assessment	Consultant Name & Chapter Number	Credentials
Project management, EIAR co-ordination, preparation of EIAR figures and the following chapters • Chapter 1: Introduction and Approach to Environmental Impact Assessment • Chapter 2: Project Description • Chapter 3: Consideration of Alternatives • Chapter 4: Planning and Policy • Chapter 5: Population and Human Health • Chapter 9: Air Quality & Climate Factors • Chapter 14: Material Assets • Chapter 16: Cumulative Effects Assessment • Chapter 17: Interrelated Effects • Chapter 18: Schedule of Mitigation	Dr James Massey Rowan (1, 2, 3, 4, 9, 16, 17, 18)	PhD, DSc, BSc, AdvDip in Environmental Management and Assessment James is an environmental consultant and ecologist with over 20 years' experience. James is a Fellow of the Institute of Environmental Sciences and a member of a number of professional organisations. James is a Chartered Environmentalist and Chartered Scientist and hold a PhD Eng, DSc Eng, BSc in Applied Marine Biology and a number of professional and industry qualifications.
	Jessica Boyd (1,2,4,5,9,14,16, 18)	B.S.c, M.S.c Jessica holds a BSc in Environmental Management and MSc in Spatial Planning: Cities, Water & Climate Change and has over 6 years' experience
	Eimear O'Brien (4, 5, 9, 17)	B.S.c Eimear holds a BSc in Agricultural & Environmental Management and has 4 years' experience.
	Denise Meade (1-18)	B.Sc, M.Sc, C.WEM, CEnv, MCIWEM, AdvDip in Planning & Environmental Law Denise has over 20 years' experience working on both public and private sector developments. Her experience lies in the environmental co-ordination of large infrastructure projects across a range of industries including renewable energy, roads, water and wastewater. She has managed all aspects of planning applications, with a focus on the technical review and delivery of Environmental Impact Assessment Reports.
Chapter 6: Biodiversity	Dr Alex Copland, Howard Williams and Andrew Whitefield	B.Sc PhD Alex is an experienced conservation scientist specialising in the conservation of wild birds and biodiversity in the wider countryside, particularly in

Chapter/ Assessment	Consultant Name & Chapter Number	Credentials
	Inis Environmental Consultants	agricultural, upland and peatland landscapes. Alex is proficient in data analysis and has studied bird populations in Ireland for over 18 years. He has managed several large-scale, multi-disciplinary conservation projects including research and conservation work for species of conservation concern. Alex has also worked with NGOs at EU-level and EU institutions (European Commission and European Parliament). Alex was the lead author during the production of this EIAR chapter. Howard is a Chartered Environmentalist and Chartered Biologist who has authored and managed Ecological Impact Assessments (EcIA), Construction Environmental Management Plans and Article 6 Appropriate Assessments (AA) for over 50 wind farm projects. Howard is an expert in the field of avian ecology and has extensive knowledge and experience of prescribing management for a range of terrestrial and aquatic protected species. Howard provided technical support during the production of this EIAR chapter. Andrew has over 30 years of experience in undertaking and co-ordinating ecological and environmental impact assessments across a wide variety of infrastructure projects. These include projects of varying type and scale, ranging from new nuclear power generation facilities and wind farm developments to major road and rail construction schemes. Andrew has undertaken Habitat Regulations Assessments (HRA) of various plans and projects including transport improvement options for the Scottish Government, water supply options for Greater London, and the Heads of the Valleys road improvements in South Wales, where Marsh Fritillary and Lesser Horseshoe Bat were a key concern. Andrew has extensive experience of undertaking Phase 1 habitat surveys, surveys for Otter, Water Vole, Badger and Red Squirrel, amphibian surveys, and butterfly and dragonfly surveys. He has given evidence at approximately 20 planning inquiries/hearings in the UK, Ireland and Africa. Andrew led the technical review of this EIAR chapter.
Chapter 7: Land, Soils and Geology	John Whiteford Whiteford Geoservices Ltd.	B.Sc (Hons), AMIOSH, MEAGE, FGS John Whiteford has more than 25 years of experience in the field of earth sciences, geotechnical engineering and management. His academic qualifications are a B.Sc with Honours in Geophysics from Edinburgh University, an Affiliate Member of The Institute of Safety and Health (AMIOSH),

Chapter/ Assessment	Consultant Name & Chapter Number	Credentials
	Barry McGinn Mable Consulting Engineers Ltd.	Member European Association of Geoscientists and Engineers (MEAGE) and a Fellow of the Geological Society of London (FGS). John has been engaged in full-time consultancy for the past 25 years and since 2000 trading as Whiteford Geoservices Limited. The company and its staff of professional and technical personnel has completed in excess 2000 contracts for clients within the soils and geology assessment discipline, where they have built up a recognised level of specialist experience, particularly in the field of wind energy. Mr. Barry McGinn is a Chartered Engineer with over 28 years' experience in the design, construction and project management of civil and structural engineering projects including; Wind Farms, Solar Farms, Battery Storage, Electrical Substations, Flood Alleviation, and multiple other development types. Barry is a member of Engineers Ireland and holds a BSc (Eng) in Structural Engineering, BEng (Ord) in Civil Engineering and Post Graduate Diplomas Planning and Environmental Law, Construction Law & Contract Administration and Project Management.
Chapter 8: Hydrology (Flood Risk Assessment) & Hydrogeology	Patrick McCabe Hydrec Environmental Consultants Alison Freeley, Conor O'Neill and David Casey JBA Consulting	B.S.c, M.S.c Patrick is an independent wind energy consultant specialising in yield and site assessment, power curve and sound, measurement, project optimisation and problem-solving and a detailed understanding of wind turbine technology. 3 years as an independent wind energy consultant, 15 years at Senvion/REpower – 5 years as head of international Wind and Site Department, 2 years with a project developer (pv and wind). B.A, M.S.c Alison Freeley has 1 years' experience in environmental consultancy. Alison holds a BA in Geography and Geoscience and an MSc in Risk, Resilience, and Sustainability, has undertaken numerous EIA Screenings and has contributed to the preparation of EIARs for large-scale flood relief schemes, along with the development of Construction Environmental Management Plans. B.A, M.S.c Conor O'Neill has 5 years of environmental consultancy experience. He has been involved in all aspects of EIAR, from Screening and Scoping to EIAR co-

Chapter/ Assessment	Consultant Name & Chapter Number	Credentials
		ordination and chapter authoring for numerous projects, along with other developments including transport infrastructure, renewable energy, residential, and commercial. B.S.c, M.S.c, MCIWEM David has 14 years of experience in environmental and flood risk assessment, specialising in Strategic Flood Risk Assessments, Flood Risk Assessments, and Environmental Impact Statements, with a focus on Soils & Geology and Hydrology & Hydrogeology. His work on Environmental Impact Assessments spans large residential, commercial, and port developments, involving significant collaboration with architects, engineers, and planners.
Chapter 10: Noise and Vibration	Gary Duffy, David Courtney and Aishaani Sharma Enfonic	Garry Duffy BEng, Member of Institute of Acoustics (MIOA) (Principal Consultant) is the managing director of Enfonic with over 25 years' experience as an acoustic engineer and consultant. He has extensive knowledge in the field of noise measurement, prediction, and impact assessment. He co-wrote the EPA's original guidance note on noise and represented the IOA on the technical advisory committee of the Department of the Environment's revision of Part E (Sound Insulation) of the Building Regulations. He is a founder member of the Irish branch of the IOA and a sitting member of the current committee. He has considerably expertise in the assessment of wind turbine noise and conducted many similar impact assessments for EIARs. David Courtney, BEng, MIOA (Acoustic Consultant) graduated with a BEng. in Mechatronic Engineering from DCU in 2017 and qualified with IOA Diploma in Acoustics and Noise Control (2019) & Certificate in Environmental Noise Measurements (2017). He undertakes all types of noise and vibration surveys in relation to wind turbines planning and compliance, IPPC & IE compliance, BS4142, BS5228 and BS8233 assessments, traffic noise, construction, building acoustics and occupational assessments. He also manages Enfonic's long-term monitoring sites and provides technical support to equipment hire services. He has considerably expertise in the assessment of wind turbine noise and conducted many similar impact assessments for EIARs. Aishaani Sharma, (Junior Consultant) graduated with an MSc in Environmental Science from Trinity College in 2024 and holds a BSc (Hons.) in Biotechnology. Since starting with Enfonic in May 2024 she has undertaken several noise

Chapter/ Assessment	Consultant Name & Chapter Number	Credentials
		surveys including baseline surveys in relation to wind farms. She provides expertise in relation to impacts on biodiversity and manages quality control in relation to EIARs including for several wind farms.
Chapter 11: Landscape and Visual	Cian Doughan and Richard Barker Macroworks	Cian Doughan (main author) B.Sc Landscape Architecture and Member of the Irish Landscape Institute (MILI)). Associate Director, with eight years of experience in the assessment of a variety of renewable energy, infrastructure and commercial developments. The chapter was reviewed by Richard Barker (M.Sc Landscape Architecture and MILI), Divisional Director at Macro Works Ltd, who has 18 years of experience in the appraisal of effects from a variety of energy, infrastructure and commercial developments.
Chapter 12: Traffic and Transport	Stephen Reid Stephen Reid Consulting Traffic and Transportation Ltd. Barry McGinn, Eoin Roche Mable Consulting Engineers Ltd.	Stephen holds BEng in Civil & Transportation Engineering from Napier University Edinburgh and is a Chartered Member of the Institute of Logistics & Transport with 29 years of professional experience as a traffic planning and design consultant in the UK and Ireland. Stephen has carried out numerous traffic and transportation assessments and been involved in the preparation of Traffic and Transportation Chapters for numerous EIAR projects, both for the private sector and in support of strategic infrastructure development (SID) projects for EirGrid and ESB Networks. Mr. Barry McGinn is a Chartered Engineer with over 28 years' experience in the design, construction and project management of civil and structural engineering projects including; Wind Farms, Solar Farms, Battery Storage, Electrical Substations, Flood Alleviation, and multiple other development types. Barry is a member of Engineers Ireland and holds a BSc (Eng) in Structural Engineering, BEng (Ord) in Civil Engineering and Post Graduate Diplomas Planning and Environmental Law, Construction Law & Contract Administration and Project Management. Mr. Eoin Roche is a Project Engineer with over 5 years of experience in the design and construction of civil and structural engineering works, as well as renewable energy infrastructure projects. His portfolio includes Wind Farms, Solar Farms, Battery Energy Storage Systems (BESS), Synchronous Compensators and Electrical Substations. Eoin holds a Bachelor of

Chapter/ Assessment	Consultant Name & Chapter Number	Credentials
		Engineering (Hons) in Structural Engineering and a Postgraduate Diploma (Distinction) in Sustainable Energy and the Environment.
Chapter 13: Archaeology, Architectural & Cultural Heritage	John Kavanagh, Icon	M.Sc, MA, BA John Kavanagh (Archaeologist). John has been a Project Director with Icon Archaeology Ltd since 2005 with over 28 years of archaeological experience including 20 years as a licenced director managing a wide variety of public and private sector projects. John holds an MA in Archaeology, MSc in Computer Science supported by Post Graduate Diplomas in Business Management and Project Management.
Chapter 15: Shadow Flicker	Peter Connell Macroworks	M.Sc, BA Peter Connell has 5 years' experience and has been working at Macroworks since 2023. Peter is primarily involved in the preparation of LVIA reports, as well as viewpoint selection and capture. Due to his GIS experience, Peter continues to undertake several spatial analyses such as aviation glint and glare assessments, shadow flicker analyses, as well as Zone of Theoretical Visibility (ZTV) and other mapping, along with drafting their associated reports. Peter has experience writing reports and conducting spatial analyses on a wide range of projects in the renewable energy sector such as Wind Farms, Solar Farms, Biogas Plants, as well as electrical infrastructure and housing projects

1.5 Overview of the Proposed Project

The proposed Project includes the construction, operation and decommissioning of a wind energy development including six turbines and all associated infrastructure including Turbine Foundations, Turbine Hardstanding Areas, Site Access Tracks, Wind Farm Internal Cabling, Grid Connection Route (GCR), Relay Tower, Onsite Substation and works required along the public road network for the turbine delivery.

The wind farm Site is proposed on a site in the townlands of Tully and Ballyfeeny (also known as Ballyfeeney). The GCR will be installed underground mainly in the public road and will pass through the townlands of Ballyfeeny, Pollymount, Bellanamullia, Scramoge, Ballyhubert, Toreen, Tonycurneen and Bunnageddy (also known as Runnageddy).

The wind farm Site is located c.4.5km east of Strokestown and 15km northwest of Longford town, positioned at Irish grid reference c. E598813 N782007 ITM. The Site encompasses approximately 49.774 hectares (ha) and is accessed off the R371 road.

The proposed Project will comprise of the following:

The main components of the proposed Project will comprise of:

- The construction and operation of a wind farm consisting of six wind turbines;
- The turbine specification is unconfirmed but will fall within the parameter range outlined by Roscommon County Council and will be one of the following three Options;
 - Technology Option 1: tip height of 160m, rotor diameter of 136m and hub height of 92m; or
 - Technology Option 2: tip height of 156m, rotor diameter of 133m and hub height of 90m; or
 - Technology Option 3: tip height of 159m, rotor diameter of 138m and hub height of 90m;
- Construction of Turbine Hardstands (including crane and assembly areas) and Turbine Foundations;
- Construction of approximately 3.9km of new permanent internal Site Access Tracks and the upgrade of 0.5km of existing internal access tracks;
- Construction of a permanent 38kV Onsite Substation, including one single story substation building with welfare facilities, Lidar, diesel generator and fuel storage tank, all associated

electrical plant and equipment, all associated underground cabling, rainwater harvesting and storage tank, wastewater holding tank, security fencing, gates, signage, and all ancillary structures and works;

- Installation of underground electrical and communications cabling connecting the wind turbines to the proposed 38kV Onsite Substation;
- Construction, of two Temporary Construction Compounds with associated site offices, welfare facilities, car parking, site fencing and lighting;
- Erection of a permanent 30m high Communications Relay Tower;
- Construction access via six site entrances (SE1 – SE6) to include:
 - SE1 on the R371, SE2 and SE3 on the L6018, and SE4, SE5 and SE6 on the L60498;
 - SE1 and SE6 are temporary and will be reinstated following construction. SE1 may be re-established if required for turbine component repair or replacement. SE2 – SE5 will be retained permanently for operational access;
- Tree felling to facilitate the construction and operation of the proposed Project;
- Installation of approximately 5.8km of permanent underground electrical cabling for the Grid Connection Route including cabling within the public road corridor, extending from the proposed onsite 38kV Substation at Ballyfeeny to end at the existing Sliabh Bawn 110kV Substation in the townland of Bunnageddy (also known as Runnageddy);
- All associated site works, including site clearance, landscaping, site drainage, security gates, fencing, permanent and temporary signage and biodiversity mitigation and enhancements, including hedgerow and treeline planting.
- Temporary accommodating works along the TDR, to facilitate turbine delivery from the port of entry at the Port of Galway to the wind farm site entrance (SE1) at Ballyfeeny, via Lough Atalia Road, College Road, R339, R685, N6, M6, M18, M17, N17, N5 (New N5 Ballaghaderreen to Scramoge Realignment Scheme) and the R371

A detailed description of the proposed Project is included in **Chapter 2 - Project Description**

1.5.1 The Proposed Development and Planning Permission

The proposed Development, as defined in **Table 1-1** includes the works within the RLB and as described in the planning application form and public notices for the Ballyfeeny Green Energy Project, which form part of the planning application submitted to Roscommon County Council.

The Applicant is seeking a 10-year planning permission and 35-year operational life, initiating from the date of full commissioning.

1.5.2 Pre-planning Meeting

On the 27th of February 2025, a pre-planning meeting was held between Roscommon County Council together with the Applicant and the Agent. Additional parties present included the Project engineers and planners. Rowan presented necessary background information with regards to the proposed Project. Discussions were also had in relation to the Policy context of the Site and relevant Wind Energy Guidelines. Pre-planning meeting minutes were undertaken by Rowan and are included in further detail within **Part 1 – Planning Pack**.

1.6 Approach to Design Flexibility

The Applicant is applying for design flexibility in accordance with Section 32I and 32H of the Planning and Development Act 2000 (as amended). A design flexibility meeting request was made by the Applicant (**Appendix 1.4 – Design Flexibility Request**) to the Local Authority on the 17th of April 2025. A meeting was held between the Applicant and the Local Authority on the 12th of May 2025. The Local Authority issued a notification of opinion on design flexibility with regard to application for permission on 10th of June 2025 (**Appendix 1.5 - DFR-25-1 - Notification of Opinion by LA**).

As part of the opinion by the Local Authority the following was outlined;

“The Parameters within which the turbine specifications will fall are as follows:

- *Turbine total tip height range of 156m – 160m;*
- *Turbine Rotor diameter range of 136m – 138m; and*
- *Turbine Hub Height range of 90m – 92m.*

The applicant is advised to provide with the application the most robust information in respect to the turbine tip height, turbine rotor diameter and turbine hub height within the EIAR which assesses the effects associated with the design flexibility parameters sought.”

With respect to the notification of opinion by the Local Authority, the Applicant in this EIAR, has assessed three distinct Technology Options within the range outlined by the Local Authority and in accordance with the design flexibility parameters sought. This is on the basis of which the Planning Application may be determined by the Local Authority.

The need for design flexibility arises due to the extensive timeframes associated with the development of WTGs and their associated works. The entire process from planning submission, construction and grid availability etc., can take numerous years to complete. Wind turbine technology is continuously evolving and thus there is often uncertainty with regards to which Technology Option will be available when the time for construction commences.

1.6.1 Assessment of Turbine Parameters

A decision will be made as to which Technology Option is selected at the pre-construction stage. The chosen option will be one of the three Technology Options outlined in the **Table 1-3**. Roscommon County Council as the Competent Authority will be consulted to confirm the Technology Option prior to construction works taking place.

Table 1-3 outlines the options and associated parameters that are used in the EIAR, comprising three potential turbines classified as Technology Option 1, 2 and 3.

Table 1-3: Technology Options and associated Parameters to be assessed

Turbine Parameter	Technology Option 1	Technology Option 2	Technology Option 3
Number of WTGs	6	6	6
Tip Height (m)	160	156	159
Rotor Diameter (m)	136	133	138
Hub Height (m)	92	90	90
MW Rating	4.5	4.8	4.26

**Modern wind turbines currently have a typical generating capacity in the 4 to 7 MW range, with the generating capacity continuing to evolve upwards as technology improvements are achieved by the turbine manufacturers. The exact power rating of the installed turbine will be designed to match the wind regime on the proposed Project and will be determined by the chosen manufacturer. For the purposes of this EIAR, the MW rated output for each Technology Option are shown in this table.*

Although the technology and thus turbine dimensions have not yet been confirmed, the environmental impacts for each Technology Option have been assessed throughout this EIAR, and where necessary to ensure each option has been fully assessed and modelled.

The Technology Option parameters are displayed within the **Planning Drawings – Pack 1 (Planning Drawing 23604-500 to 503)**, in accordance with the requirements of the Planning and

Development Regulations 2001 (as amended). **Table 1-4** details the assessment approach to the turbine parameters, applied within each EIAR specialist chapter.

Table 1-4: Assessment of Design Parameters for each Chapter within this EIAR

EIAR Chapter	Assessment Parameter	Assessment of Range of Turbine Parameters
Chapter 5 - Population & Human Health	Technology Option 1, 2 & 3	Changes in economic and population profiles during the construction, operational and decommissioning phases would not be impacted by the installation of a particular Technology Option i.e. the expected level of employment would not differ across the three Technology Options. On this basis, the assessment conclusions (i.e. the significance of effects) for economic and population aspects will not differ across the three Technology Options. The assigned significance rating is applicable to each of the Technology Options. For some aspects such as land use, tourism, local resources, property values and human health), the impact assessment incorporates the assessment outputs from other environmental aspects i.e. air, noise, visual, shadow flicker and traffic. These individual Chapters have each established a respective approach in terms of assessing the three Technology Options and therefore the identification of an assessment approach is not considered applicable for this Chapter. Refer to the following EIAR chapters for details on the

EIAR Chapter	Assessment Parameter	Assessment of Range of Turbine Parameters
		assessment of the three Technology Options • Chapter 7 - Land, Soils and Geology • Chapter 8 - Hydrology (Flood Risk Assessment) and Hydrogeology • Chapter 9 - Air Quality and Climate • Chapter 10 - Noise and Vibration • Chapter 11 - Landscape and Visual Impact Assessment • Chapter 12 - Traffic & Transport • Chapter 15 - Shadow Flicker
Chapter 6 - Biodiversity	Technology Option 1, 2 & 3	Direct habitat loss or change is inevitable in the development of any wind farm, especially when the establishment of access tracks, turbines, substation buildings, and other associated construction and decommissioning is considered. This can result in reduced habitat heterogeneity and connectivity as well as reduced feeding, nesting, roosting and commuting opportunities for protected and priority bird species including those identified within this Biodiversity chapter. The Chapter assesses each of the technology options for likely significant effects on Biodiversity (avian species, terrestrial mammals, and habitat) in terms of effects associated with the Technology Options.
Chapter 7 – Land, Soils & Geology	All three technology options were considered however; there is no disenable difference in the potential	The differences in the three Technology relates to only minor differences in the wind turbines rotor diameter, hub height and tip height. As such, it is not expected to

EIAR Chapter	Assessment Parameter	Assessment of Range of Turbine Parameters
	effects on this environmental aspect from the difference between the options and therefore the impacts were considered together	influence the significance of effects with respect to soils and geology. The installation of the three Technology Options will be managed by one Turbine Foundation and one Turbine Hardstanding design. On this basis, the assessment conclusions for land, soils and geology will not differ across the three Technology Options. The assigned significance rating is applicable to each of the Technology Options.
Chapter 8 – Water Hydrology (Flood Risk Assessment) & Hydrogeology	All three technology options were considered however; there is no disenable difference in the potential effects on this environmental aspect from the difference between the options and therefore the impacts were considered together	There are minor differences in the wind turbines rotor diameter, hub height and tip height, as such it is not expected to influence the significance of effects with respect to water, hydrology and hydrogeology environments, and on this basis, the identification of a specific assessment scenario was considered not applicable. The installation of the three Technology Options will be managed by one Turbine Foundation and Turbine Hardstand design. Thus, likely significant effects on Hydrology (including Flood Risk) & Hydrogeology will be equal for each Technology Option.
Chapter 9 – Air Quality & Climate	Technology Option 1, 2 & 3	Air Quality The differences in the three Technology Options would not be expected to influence the overall significance of effects with

EIAR Chapter	Assessment Parameter	Assessment of Range of Turbine Parameters
		respect to air quality. The Turbine Hardstand areas requirements for the three Technology Options are nearly identical. Therefore, the hardstand design is shown with a single design that is suitable for all three Technology Options. In essence, each Technology Option will not pose variance of effects in terms of air quality. On this basis, the assessment conclusions (i.e. the significance of effects) for air quality will not differ across the three Technology Options. The assigned significance rating is applicable to each of the Technology Options. Climate In terms of climate effects and particularly the determination of the carbon calculation, all three Technology Options were considered.
Chapter 10 – Noise & Vibration	Technology Option 1, 2 & 3	This chapter assesses potential noise impacts on sensitive receptors from the three Technology Options.
Chapter 11 – Landscape & Visual	Technology Option 1, 2 & 3	This Chapter has taken the approach of using the highest possible tip height and highest hub height combination. This is on the basis that a viewer who can see a hub rising above a skyline ridge is likely to feel they are seeing more of the turbine than when the hub is screened from view (i.e. in the case of a lower hub / longer blade combination). That premise is based on the hub being perceived as the key and central component of a turbine in a figurative sense.

EIAR Chapter	Assessment Parameter	Assessment of Range of Turbine Parameters
		In this instance, the photomontages were prepared using a turbine envelope of 136m rotor diameter, 92m hub height and 160m tip height (Technology Option 1), which represents the most potential for visibility of the hub and tip height combination. As can be seen from the comparative photomontages (included in Volume 5 – Photomontage Book 2 after VP25) there is a relatively subtle difference in the perceived scale of the proposed turbines in all three scenarios which will be difficult to discern from even the nearest visual receptors. Indeed, the visual presence of the turbines in all instances will be the same due to subtle variations in the turbine dimensions, and it is not considered that any of the turbine combinations proposed in the entire range will result in any contrasting landscape or visual effects than those already stated in the assessment above. Furthermore, the subtle variations in the turbine dimensions will be indiscernible beyond c. 2-3km from the proposed wind farm Site. Regardless of whether the difference between the alternative turbine dimensions can be discerned or not, there will be no material difference in the level of visual impact between them, and certainly not a higher impact than the base-case outlined in the visual impact appraisal. Furthermore, the alternative turbine dimensions will result in no material

EIAR Chapter	Assessment Parameter	Assessment of Range of Turbine Parameters
		difference to the residual landscape effect outlined in Section 11.7.2 of Chapter 11 – Landscape & Visual. Thus, the submitted LVIA is deemed to completely assess the range of potential turbine dimension options proposed, and it is not considered necessary to prepare separate photomontages / assessments at all viewpoints for all possible turbine dimensions highlighted above.
Chapter 12 – Traffic & Transport	Technology Option 1, 2 and 3	The installation of the three Technology Options will be managed by one Turbine Foundation and Turbine Hardstanding design. The design has been considered in this assessment in terms of potential effects on the traffic and transport environment. Although the Technology Options are similar in size, they differ slightly with regards to individual component sizes. As set out in detail in the TMP, to ensure all turbine components can be successfully transported to the site and to determine the maximum area requiring works to accommodate deliveries, the largest components from the three Technology Options (Technology Option 3 -Blade length) were used when carrying out the swept path analysis of the TDR.

EIAR Chapter	Assessment Parameter	Assessment of Range of Turbine Parameters
Chapter 13 – Archaeology, Architectural & Cultural Heritage	Technology Option 1	The differences in the three Technology Options are not expected to influence the significance of effects with respect to archaeology, architectural and cultural heritage. On this basis, the identification of a specific assessment scenario was considered not applicable. The installation of the three Technology Options will be managed by one Turbine Foundation and one Turbine Hardstanding design. This hardstanding and foundation design has been considered in terms of likely significant effects on the archaeological, architectural and cultural heritage receptors. During the operational phase, there will be no direct interaction between the turbines with archaeological, architectural and cultural heritage receptors. For indirect visual effects the chapter incorporates the assessment outputs from: • Chapter 11- Landscape and Visual Impact Assessment Chapter 11 has established a respective approach in terms of assessing the visual effects of the three Technology Options.
Chapter 14 – Material Assets	Technology Option 1	This Chapter assesses the largest potential impact that the proposed Project has on material assets pertinent to the site. The differences in the three Technology Options is not expected to influence the

EIAR Chapter	Assessment Parameter	Assessment of Range of Turbine Parameters
		significance of effects with respect to material assets. However, on the basis that the larger turbine (Technology Option 1) may require additional clearance activity, the material assets assessment has been based on this option. Any other turbine option (Technology Option 2 and 3) would not result in new or additional significant effects.
Chapter 15 – Shadow Flicker Assessment	Technology Option 1, 2 & 3	This chapter assesses potential shadow flicker effects on sensitive receptors from the three Technology Options.

1.7 The Approach to the EIA

The proposed Project is subject to an EIA, under Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment as amended by Directive 2014/52/EU (hereafter referred to as the 'EIA Directive'). The EIA Directive was transposed into Irish legislation by the Planning and Development Act (PDA) 2000 (as amended) and the PDR 2001 (as amended) and other regulations.

The EIA Directive requires that public and private projects, likely to have significant effects on the environment shall be made subject to an assessment prior to planning consent being given. This process involves the preparation of an EIAR for the Project by competent experts on behalf of the Applicant, consultations with Stakeholders and the public and examination by the Competent Authority of the information presented in the EIAR and their reasoned conclusion on the likely significant effects of the project on the environment. The following sections detail the:

- Guidance relevant to the EIAR;
- Key stages of the EIAR process;
- Approach used to evaluate the significance of effects;
- The application of mitigation measures; and

- The approach to key aspects including the consideration of reasonable alternatives, the cumulative effects assessment and inter-related effects.

1.8 EIA Guidance

The following key Guidance has been taken into consideration in the preparation of the EIAR.

- Environmental Protection Agency (EPA) (May 2022), Guidelines on the Information to be contained in Environmental Impact Assessment Reports (hereafter referred to as the EPA Guidelines (EPA, 2022);
- Department of Housing, Planning and Local Government (DHPLG) (2018). Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment;
- Draft Revised Wind Energy Development Guidelines (Department of Housing Planning and Local Government (DoHPLG), 2019) (hereafter referred to as Draft WEDG 2019);
- European Commission (2017) Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report;
- Planning Inspectorate for England (PINS) (2019). Advice Note 17: Cumulative Effects Assessment;
- Wind Energy Development Guidelines (Department of the Environment, Heritage and Local Government, 2006); (hereafter referred to as WEDG 2006);
- Wind Energy Ireland (WEI) (2012) Best Practice Guidelines for the Irish Wind Energy Industry;
- Wind Energy Ireland (2013) Best Practice Principles in Community Engagement and Community Commitment; and
- Department of Communications Climate Action and Energy (DCCAE) (2016) Code of Practice for Wind Energy Development Ireland- Guidelines for Community Engagement.

The above is not an exhaustive list, relevant topic-specific guidance is identified and relied upon within the relevant EIAR chapters.

1.9 The EIA Process

The main elements of the EIA process, as informed by the EPA Guidelines are summarised as follows:

- **Screening:** determines whether or not an EIA is required for the proposed Project;
- **Scoping:** taking into account the characteristics of the proposed Project, the EIA Project Team identifies the content and extent of the information to be submitted to the Local Authority under the EIA process;
- **Baseline data collection:** collating and presenting a baseline of the existing environment, which includes a desktop review and undertaking any field surveys, as identified during the scoping stage;
- **Assessment of likely significant effects:** an assessment of the likely environmental impacts is undertaken and the significance of effects is determined;
- **Mitigation and monitoring:** description of mitigation measures to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects and details of any monitoring proposals;
- **Consultation and consent:** the competent authority will undertake the EIA and decide if the proposed Project can be consented. Consultation will be undertaken with statutory authorities, stakeholders and the public; and
- **Enforcement and monitoring:** if planning consent is granted, the competent authority will prescribe the mitigation measures required for the Project. Monitoring of the effectiveness of the implemented mitigation measures may also be required during the construction and operational phases.

1.9.1 Screening and Legislative Requirement for EIA

The Planning and Development Act 2001 (as amended) requires projects of a class specified in Part 2 of Schedule 5 to be subject to an EIA where:

“(I) Such development would equal or exceed, as the case may be, any relevant quantity, area or other limit specified in that Part”.

Part 2 of Schedule 5 also outlines classes and scales of development which mandate an EIA.

The pertinent class of an EIA development in which the proposed Project relates to is as follows:

Class 3(i) “Installations for the harnessing of wind power for energy production (wind farms) with more than 5 turbines or having a total output greater than 5 megawatts.”

Owing to the fact that the proposed Project encompasses the construction of six wind turbines and exceed an output of 5 MW, the proposed Project triggers the requirement for an EIA.

1.9.2 Scope of the EIAR

The scope of the EIAR was developed having regard to the characteristics of the proposed Project and the likely significant effects which could arise during the construction, operation and decommissioning phases. In addition, an EIA Scoping Report was issued for consultation with statutory and non-statutory stakeholders. This report provided detail on the proposed Project and the approach to the EIAR.

Further details on the comments received during this phase are provided in **Section 1.11, Scoping and Consultation.**

1.9.3 Contents and Structure of the EIAR

As per Article 5 of the EIA Directive, the Applicant is required to prepare and submit an EIAR, and should include at least:

- ‘(a) a description of the project comprising information on the site, design, size and other relevant features of the project*
- (b) a description of the likely significant effects of the project on the environment*
- (c) a description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment*
- (d) a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment*
- (e) a non-technical summary of the information referred to in points (a) to (d) and*
- (f) any additional information specified in Annex IV relevant to the specific characteristics of a particular project or type of project and to the environmental features likely to be affected.’*

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Structure of the EIAR

The EIAR comprises five volumes, as follows:

- **Volume 1:** Non-Technical Summary;
- **Volume 2:** The main EIAR;
- **Volume 3:** Appendices;
- **Volume 4:** EIAR Figures;
- **Volume 5:** Photomontages; and
- **Volume 6:** Natura Impact statement (NIS).

The EIAR structure is presented in more detail in **Table 1-5**. The Planning application will include the submission of **Part 1**, which is the planning application forms, fees and all related documents including the Planning Drawings and Planning Statement and **Part 2** which includes the volumes of the EIAR as shown in **Table 1-5**.

Table 1-5: EIAR Structure

Volume 1	
Non-Technical Summary	Presents a summary of the EIAR in non-technical language
Volume 2	
Chapter 1-4: Introduction, Project Description, Consideration of Reasonable Alternatives and Planning and Policy	Provides detail on: • Background to the proposed Project; • Need for the proposed Project; • Approach to and structure of the EIAR; • Consideration of reasonable alternatives; and • Consideration of planning policy.
Chapter 5 to 15:	The following environmental aspects are assessed: • Population and Human Health; • Biodiversity (including Birds); • Land, Soils and Geology; • Water and Hydrology, Hydrogeology (including Flood Risk); • Air Quality and Climate; • Noise and Vibration; • Landscape and Visual; • Traffic and Transport; • Archaeological, Architectural and Cultural Heritage • Material Assets and Waste Management; and • Shadow Flicker.

	The broad structure of the EIAR chapters in Volume 2 includes the following headings: • Introduction; • Policy and Guidance; • Consultation; • Methodology; • Assumptions and Limitations; • Baseline Environment; • Embedded Mitigation; • Do Nothing Scenario; • Assessment of Effects; • Mitigation Measures; • Residual Effects; • Unplanned Events; • Cumulative Effects; • Inter-Related Effects; and • Summary of Effects.
Chapters 16 and 17: Cumulative Effects Assessment & Interaction of the Foregoing	Presents the interactions with different environmental aspects and potential cumulative effects assessment associated with the Project.
Chapter 18: Schedule of Mitigation and Monitoring	Presents a summary of all mitigation and monitoring to be deployed during the construction, operational and decommissioning of the Project.
Volume 3	
Appendices	Supporting information that includes maps, drawings, third party technical reports, reference documents etc.
Volume 4	
EIAR Figures	Primary EIAR figures noted throughout the EIAR are included in a separate Volume and at a larger scale to improve readability.
Volume 5	
Photomontages	Photomontages prepared by Macroworks
Volume 6	
Natura Impact Statement	NIS prepared by Inis Environmental Consultants

1.9.4 Description of Likely Significant Effects

As per the EPA Guidelines (EPA, 2022), the main objective of the EIAR is to present an assessment of the likely significant effects of a development on the environment. This section sets out an overarching methodology for the assessment, with each specialist chapter in Volume 2, also then providing specific details of how the methodology has been applied for that topic, taking into account any topic specific guidance and/or best practice. The assessment considers the construction, operational and decommissioning phases.

The EPA Guidelines outline that effects can be described with reference to the extent, magnitude, complexity, probability, duration, frequency, reversibility and trans frontier nature (if applicable).

Table 1-6 presents the assessment criteria and associated descriptions as published in the EPA Guidelines and which have been used throughout this EIAR.

Table 1-6: Description of Effects (Referenced from the EPA Guidelines)

Impact Characteristic	Term	Description
Quality of Effects	Positive Effect	A change which improves the quality of the environment (for example, by increasing species diversity, or improving the reproductive capacity of an ecosystem, or by removing nuisances or improving amenities).
	Neutral Effect	No effects or effects that are imperceptible, within normal bounds of variation or within the margin of forecasting error.
	Negative/Adverse Effect	A change which reduces the quality of the environment (for example, lessening species diversity or diminishing the reproductive capacity of an ecosystem, or damaging health or property or by causing nuisance).
Describing the Significance of Effects	Imperceptible	An effect capable of measurement but without significant consequences.
	Not Significant	An effect which causes noticeable changes in the character of the environment but without significant consequences.

Impact Characteristic	Term	Description
	Slight Effects	An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
	Moderate Effects	An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends
	Significant Effects	An effect, which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.
	Very Significant Effects	An effect which, by its character, magnitude, duration or intensity, significantly alters most of a sensitive aspect of the environment
	Profound Effects	An effect which obliterates sensitive characteristics
Describing the Extent and Context of Effects	Extent	Describe the size of the area, number of sites and the proportion of a population affected by an effect.
	Context	Describe whether the extent, duration, or frequency will conform or contrast with established (baseline) conditions (is it the biggest, longest effect ever?).
Describing the Probability of Effects	Likely Effects	Effects that can reasonably be expected to occur because of the planned project if all mitigation measures are properly implemented.
	Unlikely Effects	Effects that can reasonably be expected not to occur because of the planned project if all mitigation measures are properly implemented.
Describing the Duration and	Momentary Effects	Effects lasting from seconds to minutes
	Brief Effects	Effects lasting less than a day

Impact Characteristic	Term	Description
Frequency of Effects	Temporary Effects	Effects lasting less than a year.
	Short-term Effects	Effects lasting one to seven years.
	Medium-Term Effects	Effects lasting seven to fifteen years.
	Long-Term Effects	Effects lasting fifteen to sixty years.
	Permanent Effects	Effect lasting over sixty years.
	Reversible Effects	Effects that can be undone, for example through remediation or restoration.
	Frequency of Effects	Describe how often the effect will occur. (once, rarely, occasionally, frequently, constantly or hourly, daily, weekly, monthly, annually).
Describing the Type of Effects	Indirect Effects	Impacts on the environment, which are not a direct result of the project, often produced away from the project site or because of a complex pathway
	Cumulative Effects	The addition of many minor or significant effects, including effects of other projects, to create larger, more significant effects.
	‘Do-Nothing’ Effects	The environment as it would be in the future should the subject project not be carried out.
	Worst Case Effects	The effects arising from a project in the case where mitigation measures substantially fail.

Impact Characteristic	Term	Description
	Indeterminable Effects	When the full consequences of a change in the environment cannot be described
	Irreversible Effects	When the character, distinctiveness, diversity, or reproductive capacity of an environment is permanently lost
	Residual Effects	Degree of environmental change that will occur after the proposed mitigation measures have taken effect
	Synergistic Effects	Where the resultant effect is of greater significance than the sum of its constituents (e.g. combination of SO _x and NO _x to produce smog).

Significance Criteria

The significance of an effect is determined by considering the magnitude of an impact with the sensitivity of the receptor. **Figure 1-3** shows how comparing the magnitude of the predicted impact to the sensitivity of the receiving environment can determine the significance of the effect.

There are seven classifications of significance commonly used in the EPA Guidelines including **Imperceptible**, **Not Significant**, **Slight**, **Moderate**, **Significant**, **Very Significant** and **Profound**. General definitions of these are detailed in **Table 1-6**.

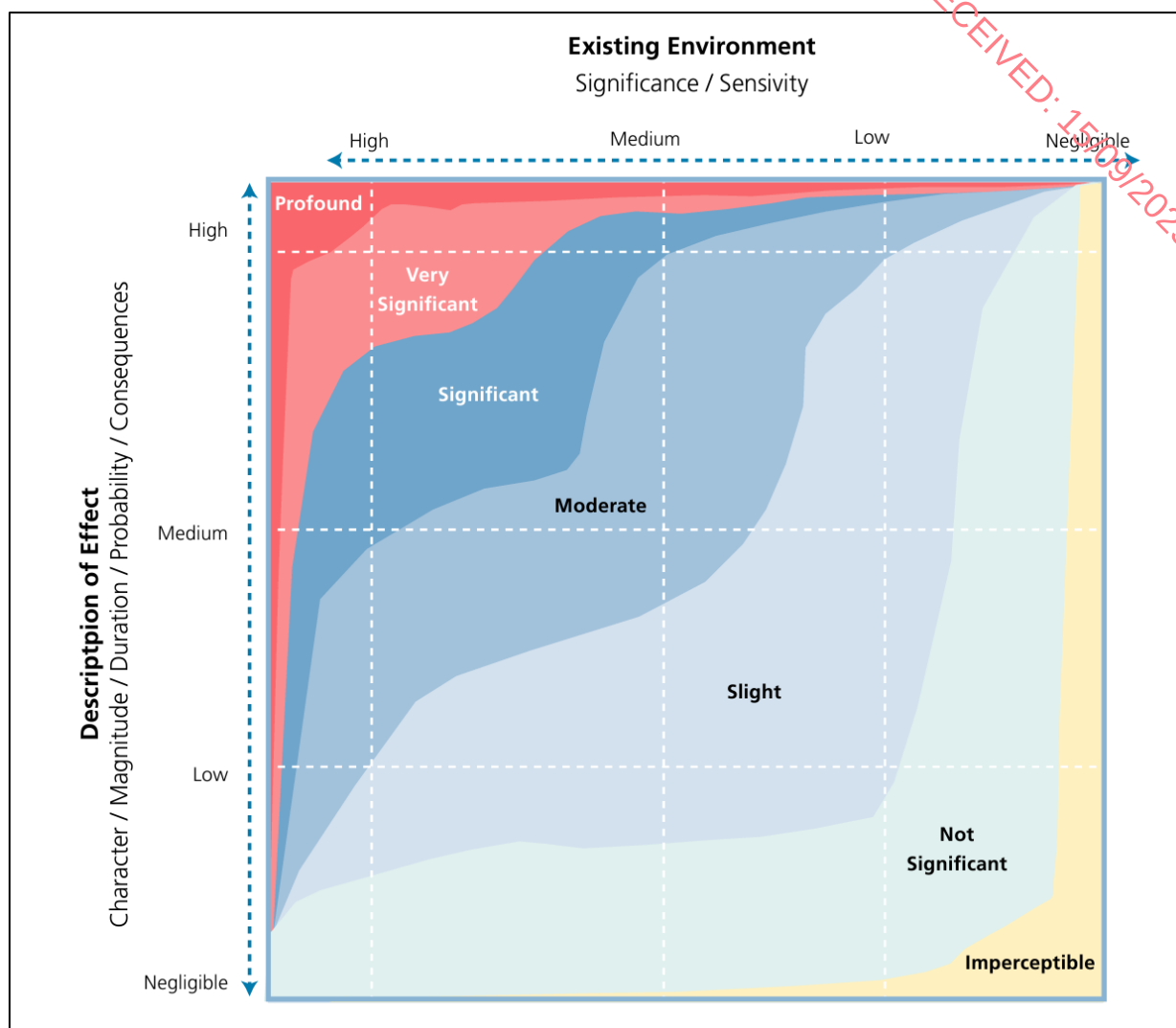


Figure 1-4: Approach to determining the significance of effects (Referenced from the EPA Guidelines).

The statement of significance outlines the conclusion of each technical assessment in order to provide a final overall conclusion as to the significance of the proposed Project under the terms of the EIA Directive. Each Chapter of the EIAR provides a conclusion of significance and the overall assessment includes an evaluation of the residual significance.

In general, throughout this EIAR, effects rated as '**Significant**' or above are considered to be **Significant** in EIA terms. Effects identified as '**Moderate**' significance or below are considered to be **Not Significant** in EIA terms.

1.9.5 Mitigation Measures and Residual Effects

Mitigation measures are developed to avoid, prevent, and/or reduce or, if possible, offset any significant adverse effects. The measures can include those fully incorporated, during early stages into the proposed site selection and design of the project (mitigation by design reflected in within **Chapter 3 - Consideration of Reasonable Alternatives**).

Throughout the design process an iterative approach was employed whereby the developing design was informed by the environmental aspects. Controls were identified and put in place for both the construction and operational phases to help minimise any potential effects. Additional mitigation measures would include measures that are not incorporated into the proposed design and would require further specific actions, which are described in the EIAR specialist chapters.

All relevant mitigation measures and remaining residual effects are clearly identified and described within the EIAR specialist chapters.

Furthermore, the mitigation measures detailed in each of the EIAR chapters are presented in **Chapter 18 – Schedule of Mitigation and Monitoring**.

1.9.6 Cumulative Effects

The EPA Guidelines define cumulative effects as:

“The addition of many minor or significant effects, including effects of other projects, to create larger, more significant effects.”

The list of other projects and plans was established from a desk study of relevant data sources including the National Development Plan, Roscommon County Development Plan (CDP) 2022-2028, Local Authority ePlan websites, the An Bord Pleanála (ABP) planning portal, the EIA Portal and Google Maps.

These sources were searched up to May 2025. Planning applications older than 10 years were excluded from the list. These are likely to have already been built or no longer being progressed.

The Cumulative Effects Assessments (CEAs) are undertaken within the individual EIAR specialist chapters and the assessments address the construction, operational and decommissioning phases of the proposed Project. For full details on the CEA methodology and list of other projects and plans, refer to **Chapter 16 - Cumulative Effects**.

1.9.7 Inter-Related Effects

An inter-related effects assessment is included as part of the EIAR and considers the potential for effects across multiple environmental topics to interact and result in an inter-related effect on particular receptors. More specific details on inter-related effects, including an inter-related effects matrix is provided in **Chapter 17 – Inter-related Effects**.

1.9.8 Consideration of Reasonable Alternatives to the proposed Project

Article 5 (1) of the EIA Directive outlines information to be contained in an EIAR and includes a requirement that an EIAR includes a description of the reasonable alternatives studied by the developer, which are pertinent to the project and its specific characteristics.

“The information provided by the developer shall include at least:

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

Furthermore, the EU Commission Guidance Document (EU, 2017) on the preparation of EIAR highlighted the requirements of the EIA Directive and states that in order to adequately assess reasonable alternatives, the Applicant should provide the following:

- A description of the reasonable alternative studied; and
- An indication of the main reasons for selecting the chosen option with regards to their environmental impacts.

Reasonable alternatives to the proposed Project are discussed in detail in **Chapter 3 – Consideration of Reasonable Alternatives**.

1.10 Scoping and Consultation

Scoping and consultation have been carried out in support of the proposed Project and in line with the EIA Directive, the PDR 2001 (as amended), the European Commission Guidelines on the preparation of EIARs 2017 and the EPA Guidelines.

The consultation provides the opportunity to receive input from a wide range of stakeholders and to ensure that any potential concerns associated with the proposed Project are considered and addressed where feasible, prior to the submission of a planning application.

Statutory and non-statutory stakeholders were identified and contacted via email in September 2024 for the purposed of scoping. Scoping is an important stage that takes place early in the EIA process. Scoping' is a process of deciding what information should be contained in an EIAR and what methods should be used to gather and assess that information. It is defined in the European Commission Guidance as:

'The process of identifying the content and extent of the information to be submitted to the Competent Authority under the EIA process'.

The Scoping Report for the proposed Project was issued to the relevant stakeholders via an email and/or post. A copy of the Scoping Report together with Scoping Consultation Responses is included in **Appendix 1.2 - Scoping Report** and **Appendix 1.3 - Scoping Consultation Responses** respectively. A total of 48 stakeholders were contacted, of which 10 responded. A summary of the responses is provided in **Appendix 1.3 - Scoping Consultation Responses**.

1.10.1 Community Consultation

A dedicated Community Liaison Officer - Nadine Walsh was available via phone and email from the commencement of community engagement. Residents within 2km of the proposed Project received numerous letters and leaflets in relation to the project by post.

One-to-one consultations and community information clinics were organised to provide the community with an overview of the proposed Project, answer questions regarding the proposed Project and to facilitate public participation in decision making. A project website has also been established to share information with the local community (www.ballyfeenygreenenergy.ie) and provide an opportunity for feedback. This website will continue to be updated regularly throughout the development of the proposed Project and will contain the latest information in relation to the project's planning application status.

A parallel local media campaign was also undertaken to publicise this further public engagement in the locality as outlined in the **Appendix 5.1 - Community Report**, along with full details of all public engagement activities.

1.11 Availability of Information

This EIAR can be viewed on the Roscommon County Council planning portal website

The Preplanning Reference No. is as follows: PL/657/25

The Planning application, EIAR and NIS may be inspected or purchased at a fee not exceeding the reasonable cost of making a copy, at the offices of the Planning Authority, Roscommon County Council, Roscommon, County Roscommon, F42 VR98 during its public opening hours.

Additionally, a hard copy of this EIAR can be obtained at Rowan Engineering Consultants Ltd., Office, located in Trim, Co. Meath, C15 H008.

A summary of the project and link to the Planning Application are also provided on the project website <https://ballyfeenygreenenergy.ie/>

1.12 References

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