
1.0 INTRODUCTION

1.1 BACKGROUND TO ENVIRONMENT IMPACT ASSESSMENT (EIA)

Environmental Impact Assessment (EIA) is the process that examines the potential environmental effects of a proposed development. Where potential significant effects are identified, appropriate measures for the prevention and/or mitigation of impacts are prescribed. The EIA process consists of the preparation of an Environmental Impact Assessment Report, the carrying out of consultations, the examination by the competent authority of the information presented in the environmental impact assessment report and any supplementary information provided, followed by the reasoned conclusion by the competent authority on the significant effects of the project on the environment arising from the examination of the information presented. An Environmental Impact Assessment Report (EIAR) is a statement of the effects, if any, that the proposed development would have on the environment and is used to inform the EIA process. This EIAR has been prepared by TOBIN Consulting Engineers on behalf of Bord na Móna Powergen Ltd.

The proposed Oweninny Wind Farm Phase 3 development is subject to the EIA process as it falls under Category 3 (i) of the Fifth Schedule Part II of the Planning and Development Regulations, 2001 (SI No 600 of 2001) (the “**Regulations**”). The Fifth Schedule of the Regulations sets out a comprehensive list of project types and development thresholds where relevant, which are subject to EIA for the purposes of the Regulations. The proposed development is subject to the EIA process as the Regulations stipulate that ‘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’, requires an EIAR.

An Bord Pleanála have confirmed that the proposed Oweninny Wind Farm Phase 3 meets the criteria of Strategic Infrastructure Development, and consequently a planning application can be made to An Bord Pleanála under Section 37E of the Planning and Development Act 2000, as amended (Case Ref ABP- 309375-21).

1.2 PLANNING APPLICATION

Bord na Móna Powergen Ltd. intends to apply for planning permission to construct a wind farm development and associated infrastructure at the substantially cutaway Oweninny Bog near Bellacorick in County Mayo and has commenced the process of Environmental Impact Assessment. The proposed development will be referred to as Oweninny Wind Farm Phase 3. TOBIN Consulting Engineers (hereafter referred to as TOBIN) are the Lead Planning and Environmental Consultants for the proposed development.

The lands associated with the Oweninny Bog are owned by Bord na Móna Energy Ltd. Oweninny Bog is located in north County Mayo and encompasses a total of 5,140 hectares, all of which comprised primarily of rehabilitated cutaway bog, partly developed bog, yards, railway lines and areas of upland and undeveloped bog.

Oweninny Bog is situated approximately 12km west of Crossmolina, 8km east of Bangor Erris, and just north of the N59 National Road. The closest settlement to the site is Bellacorick village which is located at the southwestern extents of the bog. The area around the Oweninny Bog is a relatively sparsely populated area. There are a number of sensitive receptors located within 2km of the bog boundary including residential and commercial properties, Special Protected Areas (SPA), Special Areas of Conservation (SAC), Natural Heritage Areas (pNHA) and recorded architectural heritage sites.

Figure 1.1 below shows the Oweninny Bog and the location of the Phase 3 wind farm within that setting.

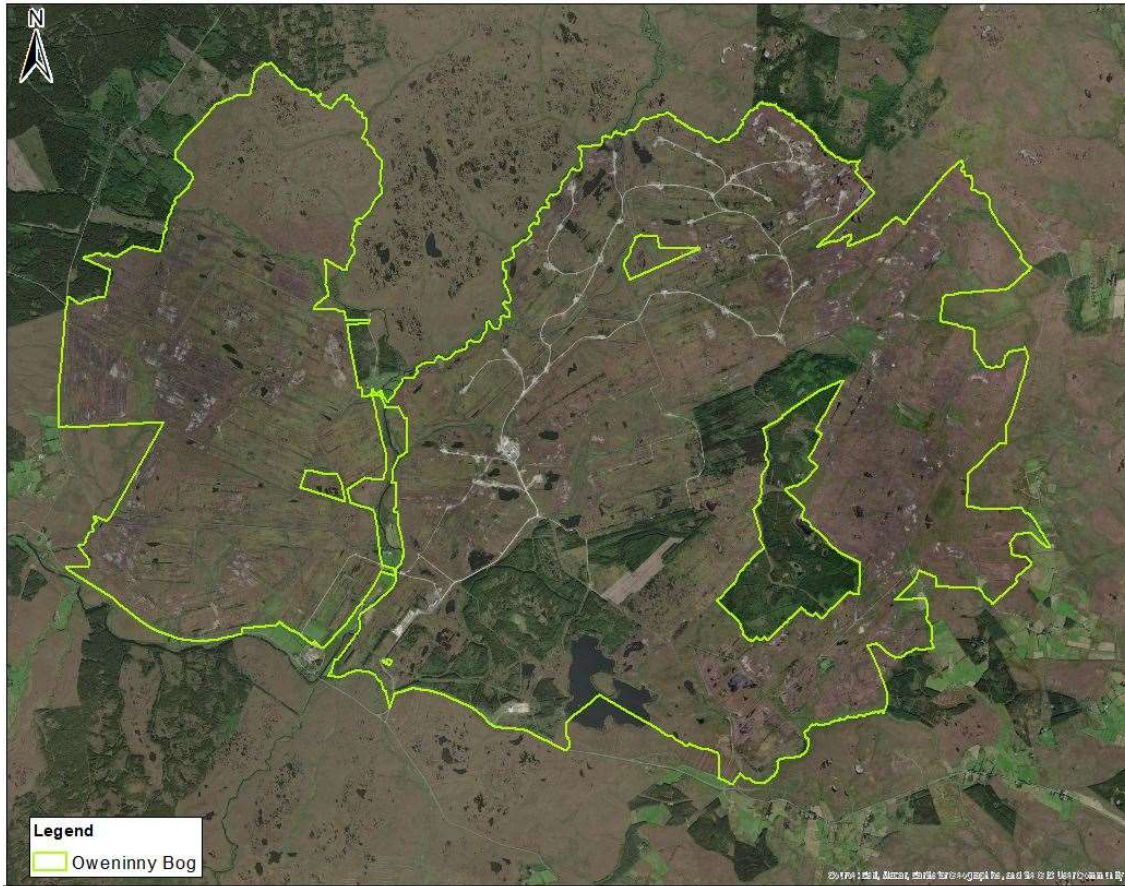


Figure 1.1: Oweninny Bog

Lough Dahybaun, an SAC, protected under the EU Habitats Directive, is located on the southern boundary of the site; Bellacorick Iron Flush SAC is also encompassed within the Oweninny Bog boundary, but is outside the proposed development site.

The proposed development site is located on the eastern side of Oweninny bog, within the townlands of Laghtanvack, Croaghaun (also known as Croaghaun West), Moneynieran, Corvoderry, Shanvolahan, Dooleeg More, Shranakilly, Bellacorick and Shanvodinnaun. The application site surrounds but does not include a forestry plantation at Corvoderry on 3rd party lands.

1.3 THE APPLICANT

Bord na Móna Powergen Ltd. is a subsidiary of Bord na Móna Plc, a publicly owned commercial semi-state company. Bord na Móna was originally established in 1946 to develop and manage some of Ireland's extensive peat resources on an industrial scale, in accordance with government policy at the time. Bord na Móna's lands extend to approximately 80,000 hectares in total and are located mainly in the Irish midlands. Bord na Móna Powergen Ltd. currently manage and operate a portfolio of thermal and renewable assets that supply energy to the National Grid including Edenderry Power Plant, a peat/biomass co-fired generating unit, Cushaling peaking plant, the Drehid landfill gas facility, Bellacorick Wind Farm and Oweninny Wind Farm Phase 1 (a joint venture with ESB) in County Mayo, Mountlucas and Cloncreen Wind Farms in County Offaly and Bruckana Wind Farm, situated on the borders of counties Tipperary, Kilkenny and Laois. Bord na Móna Powergen Ltd. is also in the final stages of the construction phase of Oweninny Wind Farm (Phase 2) and the initial stages of Derrinlough Wind Farm project, in counties Mayo and Offaly respectively. In addition, Timahoe North solar farm located in Co. Kildare has commenced construction.

1.4 THE NEED FOR THE PROPOSED DEVELOPMENT

The development of wind energy as an after use for cutaway peatlands is specifically identified in the Bord na Móna, 'Strategic Framework for The Future Use of Peatlands, May 2011'.

When considering the need for this wind farm development, and wind energy as an energy source in general, it is important to place its development in an international, national, regional and local policy context from the perspectives of environment, energy and planning. Chapter 5, Planning and Development Policy Context outlines the legislative mechanisms and requirements from a global to local level in detail, which have been formulated to support the

generation of energy from renewable sources, reduce the dependency on fossil fuels and increase security of energy supply.

In Section 5.5 of this EIAR, the national policy that drives the need for the type of development is set out. Of particular relevance is the *Energy White Paper – Ireland’s Transition to a Low Carbon Energy Future*, as well as the targets outlined by the *Climate Action Plan 2023*. Ireland faces significant challenges to meet its EU targets for renewable energy by 2030 and its commitment to transition to a low carbon economy by 2050.

A key target of the *Climate Action Plan 2023* is to increase the share of electricity demand generated from renewable sources to 75% where achievable and cost effective, without compromising security of electricity supply. A key element of this ambition is a target of 9GW of installed onshore wind energy by 2030.

The proposed development is critical to helping Ireland address these challenges as well as addressing the country’s over-dependence on imported fossil fuels.

The assessment in Chapter 5 of this EIAR (“Policy, Planning and Development Context”) demonstrates that the proposed wind farm development is consistent with the current energy and planning policy context, which seeks to increase the share of electricity generation from renewable sources and locate wind energy developments in suitable locations, thereby minimising any environmental impacts.

1.5 SUMMARY OF THE PROJECT DESCRIPTION

A detailed description of the proposed development is provided in Chapter 3. In summary, the proposed development comprises the construction of 18 no. wind turbines and ancillary works.

Permission is sought for wind turbines with a top of foundation to blade tip height of 200m. The proposed blade rotor diameter will be 158m with a corresponding hub height of 121m.

The proposed development will comprise:

- 18 no. wind turbines (including tower sections, nacelle, hub, and rotor blades) and all associated foundations and hard-standing areas in respect of each turbine;
- Decommissioning and removal of 21 no. existing Bellacorick Wind Farm wind turbines (including tower sections, nacelle, hub, and rotor blades);
- New internal site access roads, approximately 29,000m in length (permanent and temporary), passing bays, car parking and associated drainage;

- An amenity route through the site to the existing Visitors Centre with access from a local road off the N59 near Dooleeg;
- 2 no. borrow pits;
- 5 no. peat deposition areas;
- 1 No. permanent Meteorological Mast 120m high, and the decommissioning and removal of an existing 100m Meteorological Mast on site;
- 4 no. temporary construction compounds, including material storage, site welfare facilities, and site offices;
- 1 no. 110kV electrical substation compound. The electrical substation will have 2 No. control buildings, a 36 m high telecommunications tower, associated electrical plant and equipment and a wastewater holding tank.
- All associated underground electrical and communications cabling connecting the wind turbines to the proposed substation;
- All works associated with the connection of the proposed wind farm to the national electricity grid, including a 110kV underground electrical cable from the proposed on-site electrical sub-station to the existing sub-station at Bellacorick;
- All related site works and ancillary development including (but not limited to):
 - Earthworks;
 - Peat management works;
 - Site security;
 - Groundwater and surface water management;
 - Overburden (soils/peat) storage and management; and
 - Site reinstatement, landscaping and erosion control.
- A 10-year planning permission and 30-year operational life from the date of commissioning of the entire wind farm.

In addition, there will be a requirement for improvements and temporary modifications to public road infrastructure to facilitate the delivery of abnormal loads.

1.6 LEGISLATIVE CONTEXT

1.6.1 Environmental Impact Assessment

The Environmental Impact Assessment (EIA) of Projects is a key instrument of European Union environmental policy. It is currently governed by the terms of European Union Directive 2011/92/EU, as amended by Directive 2014/52/EU on the assessment of the effects of certain public and private Projects on the environment (together, the EIA Directive). Since the adoption

of the first EIA Directive in 1985 (Directive 85/337/EEC), both the law and EIA practices have evolved. The EIA Directive was amended by Directives 97/11/EC, 2003/35/EC, and 2009/31/EC. The Directive and its three amendments were codified in 2011 by Directive 2011/92/EU. The codified Directive was subsequently amended by Directive 2014/52/EU.

These Directives have been transposed into Irish law in part through Section 176 of the Planning and Development Act 2000, as amended, and Article 93 and Schedule 5 of the Planning and Development Regulations 2001, as amended. The proposed wind farm falls under the following classes of development under Schedule 5:

- 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
- Class 10 (dd) All private roads which would exceed 2,000m in length. The length of internal site access roads proposed under this development is 29,000m.

1.6.2 Strategic Infrastructure Development

The Strategic Infrastructure Development (SID) thresholds for wind energy set out in the 7th Schedule of the Planning and Development Act 2000, as amended, is a wind farm with more than 25 turbines or having a total output greater than 50 megawatts. The application meets the Strategic Infrastructure Development (SID) threshold for wind energy set out in the Seventh Schedule (Class 1) of the Planning and Development Act 2000, as amended i.e. the project will consist of a wind farm with an expected total output greater than 50 Megawatts (an output of 90 Megawatts is anticipated). Therefore, the Planning Application and this EIAR is being submitted directly to An Bord Pleanála as an SID project in accordance with Section 37E of the Planning and Development Act 2000, as amended. The applicant entered into pre-application consultation with An Bord Pleanála to determine the Strategic Infrastructure Development (SID) status of the proposed wind farm development. Two meetings were held with ABP on the 28th of April and 11th of November 2021. Following consultation, An Bord Pleanála confirmed that the project met the criteria of Strategic Infrastructure Development, and that the application should be made under Section 37B of the Planning and Development Act 2000, as amended. This was detailed in a direction dated 5th April 2022, included in Appendix 1.1 (Case Ref ABP- 309375-21).

1.7 STANDARDS AND GUIDANCE DOCUMENTS

The following documents and guidance were reviewed in the preparation of this EIAR:

- Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA, 2022);
- Environmental Impact Assessment of Projects - Guidance on the Preparation of the Environmental Impact Assessment Report (European Union, 2017);
- Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems (DoHPCLG, 2017);
- Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment; and
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (Department of Housing, Planning and Local Government, 2018).

Consideration was also given to the following as part of the literature review:

- Draft Advice Notes for Preparing Environmental Impact Statements (EPA, 2015);
- Draft Guidelines on the information to be contained in Environmental Impact Reports (EPA, 2017);
- Draft Revised Guidelines on the information to be contained in Environmental Impact Statements (EPA, 2015)
- Advice Notes on Current Practice (in the preparation of Environmental Impact Statements) (EPA, 2003); and
- Guidelines on the information to be contained in Environmental Impact Statements (EPA, 2002).

In addition to the above list of documents and guidance, which apply to the overall preparation of the EIAR, other topic specific documents and guidance was reviewed by those that prepared specific impact assessments and those documents are referenced separately in each chapter of the EIAR.

1.8 OVERVIEW OF THE EIAR

The EIAR is presented in three volumes as follows:

- Volume A: Non-Technical Summary
- Volume B: Main Report
- Volume C: Appendices

Each volume is described in more detail in the following sub-sections.

1.8.1 Non-Technical Summary

Volume A of the EIAR is the Non-Technical Summary. This document gives an overview of the main EIAR using non-technical language. It is a standalone document which presents a clear and concise summary of the existing environment, characteristics of the proposed development, a clear outline of the potential significant impacts which could result from the proposed development and mitigation measures adopted into the design of the development to minimise impacts on the surrounding environment.

1.8.2 Main EIAR Main Report

Volume B (this volume) comprises the main EIAR Report. The information contained in an EIAR is specified in Schedule 6 of the Regulations and in the EIA Directive. The structure of the main EIAR Report is based on the *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports* (EPA, 2022). The EIAR uses the grouped structure method to describe the existing environment, the likely significant effects of the proposed development and the proposed mitigation measures. The EIAR comprises the following chapters:

- Chapter 1: Introduction
- Chapter 2: Background to the Proposed Development
- Chapter 3: Description of the Proposed Development
- Chapter 4: Consideration of Reasonable Alternatives
- Chapter 5: Policy, Planning and Development Context
- Chapter 6: Population and Human Health
- Chapter 7: Biodiversity – Flora and Fauna
- Chapter 8: Biodiversity – Ornithology
- Chapter 9: Soils and Geology, Geotechnics and Ground Stability
- Chapter 10: Hydrogeology
- Chapter 11: Hydrology and Water Quality
- Chapter 12: Air Quality and Climate
- Chapter 13: Noise and Vibration
- Chapter 14: Shadow Flicker
- Chapter 15: Landscape and Visual Impact
- Chapter 16 Material Assets: Aviation and Telecommunications
- Chapter 17: Traffic and Transportation
- Chapter 18: Archaeological, Architectural and Cultural Heritage
- Chapter 19: Interaction of Effects

- Chapter 20: Schedule of Mitigation and Monitoring Measures.

Background information relating to the applicant, the proposed development site, scoping and consultation undertaken and a description of the proposed development, including both the construction and operational phases, is presented in in Chapters 1 to 3 inclusive of the EIAR.

In accordance with the *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports, (EPA 2022)* the impact assessments presented in each chapter include the following sub-sections:

- Introduction;
- Methodology;
- Existing Environment;
- Potential Impacts;
- Mitigation Measures, and Residual Impacts;

As set out in *Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA 2022)* the EIAR should focus on *likely* and *significant* effects. The guidelines state that, to ensure that EIA adds value to the consent process it is necessary to focus on those effects that are probable or likely to occur. However, taking a precautionary approach, the EIAR also attempts to identify a reasonably foreseeable worst-case scenario as a context for ‘likely significant effects’.

1.8.3 Appendices

Volume C of the EIAR contains the various appendices that are referred to in the individual chapters of the main EIAR Report. These include graphics and tabular data that if they were included in the main EIAR Report, would make that report difficult to read. Photomontages are also contained in Volume C of the EIAR.

1.9 STUDY TEAM AND CONTRIBUTORS TO THE EIAR

TOBIN have been engaged by Bord na Móna Powergen Ltd. to coordinate the Environmental Impact Assessment and prepare the EIAR for the proposed development. TOBIN staff managed project direction, EIAR production and were the main authors of a number of chapters in the EIAR. The Study Team also includes other specialists who are both experienced and competent in their areas of expertise, as listed in the table below.

Table 1.1: List of Contributors

| Chapter | Element | Main Author |
|---------|---------------------------------------------------------------|-----------------------------|
| 1 | Introduction | Brian Gallagher - TOBIN |
| 2 | Background to the Proposed Development | Brian Gallagher - TOBIN |
| 3 | Description of the Proposed Development | Brian Gallagher - TOBIN |
| 4 | Consideration of Reasonable Alternatives | Brian Downes - TOBIN |
| 5 | Policy, Planning and Development Context | Louise Byrne - TOBIN |
| 6 | Population and Human Health | Louise Byrne - TOBIN |
| 7 | Biodiversity – Flora and Fauna | John Sherry - TOBIN |
| 8 | Biodiversity – Ornithology | Laura Kennedy - TOBIN |
| 9 | Soils and Geology, Geotechnics and Ground Stability | John Dillon - TOBIN |
| 10 | Hydrogeology | John Dillon - TOBIN |
| 11 | Hydrology and Water Quality | John Dillon - TOBIN |
| 12 | Air Quality and Climate | Dr. Avril Challoner - AWN |
| 13 | Noise and Vibration | Dermot Blunnie - AWN |
| 14 | Shadow Flicker | Michael Nolan - TOBIN |
| 15 | Landscape and Visual Impact | Richard Barker - Macroworks |
| 16 | Aviation, Telecommunications and Electromagnetic Interference | John Staunton - TOBIN |
| 17 | Traffic and Transportation | Laura Gaffney - TOBIN |
| 18 | Archaeological, Architectural and Cultural Heritage | Faith Bailey - IAC |
| 19 | Interaction of Effects | Brian Gallagher - TOBIN |
| 20 | Schedule of Mitigation and Monitoring Measures | Brian Gallagher - TOBIN |

The qualifications of the competent experts who have contributed to the preparation of this EIA are listed in the table below.

Table 1.2: Qualifications and Experience of Contributors

| Competent Expert | Expert Subject | Author's Qualifications | Reference Projects | Years' Experience |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Brian Gallagher (TOBIN Consulting Engineers) | Introduction (Chapter 1) Background to the Proposed Development (Chapter 2) Description of the Proposed Development (Chapter 3) Interaction of Effects (Chapter 19) Schedule of Mitigation and Monitoring Measures (Chapter 20) | B.E. (Civil), University College Galway, 1993 M.Eng.Sc., University College Galway, 1995 Postgraduate Diploma in Management, Irish Management Institute (IMI), 2017. Chartered Engineer, Fellow of Engineers Ireland (2022) | Project Manager: Carrick on Shannon Wastewater Treatment Plant Upgrade EIS (2004) Project Manager: Clifden Regional Water Supply Scheme EIS (2008) Project Manager: Costelloe Regional Water Supply Scheme EIS (2010) Project Manager: Drinking Water Incident Management Project Manager: National Review of the Rural Water Sector Project Manager: Best Practice in Operation & Maintenance of Assets in the Water Utility Sector | 27 |
| Brian Downes (TOBIN Consulting Engineers) | Peer Reviews Consideration of Reasonable Alternatives (Chapter 4) | BE, Civil Engineering NUI Galway, 1985 MProj. Man. University of Limerick, 1996 CEng. Chartered Engineer | Project Manager: National Indoor Arena Project Manager: Water Supply Project (Eastern and Midland Region) Project Manager: Drehid Waste Management Facility Clifden Regional Water Supply Scheme EIS (2008) Costelloe Regional Water Supply Scheme EIS (2010) | 38 |
| Louise Byrne (TOBIN Consulting Engineers) | Peer Reviews Policy, Planning and Development Context (Chapter 5) Population & Human Health (Chapter 6) | BA (International) Geography & German, UCD (2000- 2004), MA Regional & Urban Planning, UCD (2004-2006), Post Grad. Certificate in Geographical Information Systems, University of Leeds (2014-2016) Chartered Member of the Royal Town Planning Institute (2010) | Senior Planner, Derryadd Wind Farm Senior Planner, Cloghercor Wind Farm Senior Planner, Castlebanny Wind Farm Planner, Dublin Airport Authority | 16 |
| John Sherry (TOBIN Consulting Engineers) | Flora & Fauna (Chapter 7) | BSc. (Hon) in Field Biology, Institute of Technology, 2019 | Winter and breeding bird surveys for numerous proposed wind farms and other infrastructure developments Ecologist, Cloghercor Wind Farm Ecological Studies: Water Supply Project (Eastern and Midland Region) Technical Field Assistant with the Raptor LIFE project | 4 |
| Dr. Tina Aughney (Bat Eco Services) | Bats, Flora & Fauna (Chapter 7) | PhD in Environmental Science Bachelor of Science 2.1 honours degree in Environmental Science | Bat monitoring Derryadd Wind Farm Project Monitoring co-ordinator and trainer for Bat Conservation Ireland. Co-author of the 2014 publication <i>Irish Bats in the 21st Century</i> Contributing author for the <i>Atlas of Mammals in Ireland 2010-2015</i> | 23 |
| Laura Kennedy (TOBIN Consulting Engineers) | Ornithology (Chapter 8) | BSc. in Zoology, University College Cork (UCC) MSc. in Environmental Science Trinity College Dublin (TCD) | Senior Ecologist, Derryadd Wind Farm Project Senior Ecologist for the Water Supply Project (Eastern and Midland Region) Project Manager, Ballyragget Solar Farm Project and Mountmellick Solar Farm Project | 14 |
| John Dillon (TOBIN Consulting Engineers) | Soils & Geology (Chapter 9) Hydrogeology (Chapter 10) Hydrology & Water Quality (Chapter 11) | BSc. in Environmental Science (2001), NUIG MSc. and Diploma in Environmental Engineering (2003), Imperial College London Professional Geologist (PGeo) | Senior Scientist, Derryadd Wind Farm Project Senior Scientist, Curragh Wind Farm Project Senior Scientist, Drehid Waste Management Facility Project Manager, Enabling Works at East Galway Landfill Senior Scientist, North South 400kV interconnector | 18 |

| Competent Expert | Expert Subject | Author's Qualifications | Reference Projects | Years' Experience |
|-----------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Michael Nolan (TOBIN Consulting Engineers) | Shadow Flicker (Chapter 14) | City & Guilds in Computer Aided Design (2001), Griffith College Dublin | Shadow flicker analysis for: Derryadd Wind Farm Project Ummeras Wind Farm Project Lisheen Wind Farm Project Bruckana Wind Farm Project | 16 |
| John Staunton (TOBIN Consulting Engineers) | Aviation, Telecommunications and Electromagnetic Interference (Chapter 16) | PhD. Environmental Science - NUI Galway B.Sc. (1st class hon) Environmental Science - NUI Galway | Project Manager and aviation and telecoms impact assessment for: Cloghercor Wind Farm Project Castlebanny Wind Farm, Co. Kilkenny Ummeras Wind Farm, Co. Kildare Lettergull Wind Farm, Co. Donegal Carrigdangan 110kV Substation and Grid Connection, Co. Cork | 14 |
| Laura Gaffney (TOBIN Consulting Engineers) | Traffic & Transportation (Chapter 17) | BEng (Ord) in Civil Engineering (2005), Galway-Mayo Institute of Technology (GMIT); BEng (Hons) in Civil Engineering (2007), Queens University Belfast (QUB); Masters' Degree in Environmental Engineering (2011), QUB Chartered Engineer | Traffic & Transport assessment for: Derryadd Wind Farm Project Ummeras Wind Farm Project Cloghercor Wind Farm Project | 9 |
| Dr. Avril Challoner (AWN) | Air Quality & Climate (Chapter 12) | BE Environmental Engineering, National University of Ireland Galway (2009) Diploma Statistics, Trinity College Dublin (2010) PhD Trinity College, Dublin (2012) | Over 7 years' experience in the modelling, assessment and reporting of air quality impacts associated with major industrial and infrastructural projects | 11 |
| Dermot Blunnie (AWN) | Noise & Vibration (Chapter 13) | BEng (Hons) in Sound Engineering (2007), University of South Wales PG Diploma in Acoustics and Noise Control (2010) Institute of Acoustics MSc. in Applied Acoustics (2013) University of Derby | Over 8 years' experience in the field of acoustics, specializing in wind farm developments, including Garracummer Wind Farm, Co. Tipperary, Arderroo Wind Farm, Co Galway, Lisheen Wind Farm, Co. Tipperary, Knockalough Wind Farm, Co. Galway, Carrickaduff Wind Farm, Co. Donegal | 11 |
| Richard Barker (Macroworks) | Landscape and Visual Impact (Chapter 15) | PG Diploma in Forestry (1996) BA in Environmental Studies (1995) Master's Degree in Landscape Architecture (2003) Corporate Member of the Irish Landscape Institute | Landscape and visual impacts assessments for: Derryadd Wind Farm Cluddaun Wind Farm Mount Lucas Wind Farm Bruckana Wind Farm Emlagh Wind Farm Maignhe Wind Farm | 21 |
| Faith Bailey (IAC) | Archaeological, Architectural and Cultural Heritage (Chapter 18) | MA, Cultural Landscape Management, 2003 BA (Hons) Archaeology, 2001 MIAI, MCIfA | Archaeological impact assessment for: Derreenacrinig Wind Farm Evisagarren Wind Farm Derrysallagh Wind Farm Robertstown Wind Farm | 19 |

1.10 SCOPING AND CONSULTATION

1.10.1 Scoping

A Scoping Document was circulated in February 2021 to all statutory and key stakeholders (see list below), who were invited to respond with any comments or observations that should be considered as part of the assessment process and in the preparation the EIAR.

| Ref. | Consultee |
|------|-----------------------------------------------------------------------------------|
| 1 | Airspeed |
| 2 | An Garda Síochána |
| 3 | An Taisce - The National Trust for Ireland |
| 4 | Bat Conservation Ireland |
| 5 | BirdWatch Ireland |
| 6 | Broadcasting Authority of Ireland |
| 7 | Commission for Regulation of Utilities |
| 8 | Community Radio Castlebar |
| 9 | ComReg |
| 10 | Coras Iompair Eireann (CIE) |
| 11 | Department of Agriculture, Food and Marine |
| 12 | Department of Communications, Climate Action and Environment |
| 13 | Department of Culture, Heritage and the Gaeltacht (Development Applications Unit) |
| 14 | Department of Defence |
| 15 | Department of Housing, Planning and Local Government |
| 16 | Department of Transport, Tourism & Sport |
| 17 | EIR |
| 18 | Eirgrid |

| Ref. | Consultee |
|------|----------------------------------------------|
| 19 | Enet Telecommunications |
| 20 | Environmental Protection Agency |
| 21 | ESB Telecom Services |
| 22 | Europasat |
| 23 | Fáilte Ireland |
| 24 | Fast com |
| 25 | Geological Survey of Ireland |
| 26 | Health Service Executive |
| 27 | Host Ireland |
| 28 | Imagine Networks Services |
| 29 | Inland Fisheries Ireland |
| 30 | Irish Aviation Authority |
| 31 | Irish Parachute Club |
| 32 | Irish Peatland Conservation Council |
| 33 | Irish Raptor Study Group |
| 34 | Irish Red Grouse Association |
| 35 | Irish Water |
| 36 | Irish Wildlife Trust |
| 37 | Knock Airport |
| 38 | Magnet Networks |
| 39 | Mayo County Council Environmental Department |
| 40 | Mayo County Council Heritage Office |

| Ref. | Consultee |
|------|-----------------------------------------|
| 41 | Mayo County Council Planning Department |
| 42 | Mayo Energy Agency |
| 43 | Mayo National Road Design Office |
| 44 | Midwest Radio |
| 45 | National Parks and Wildlife Service |
| 46 | Netshare Ireland / Vodafone |
| 47 | North Western Regional Assembly |
| 48 | Office of Public Works |
| 49 | OpenEir |
| 50 | Pure Telecom |
| 51 | RTE NL / 2RN |
| 52 | Sport Ireland |
| 53 | Sustainable Energy Authority of Ireland |
| 54 | TG4 |
| 55 | The Arts Council |
| 56 | The Heritage Council |
| 57 | Three Ireland (Hutchison) |
| 58 | Towercom Ltd. |
| 59 | Transport Infrastructure Ireland |
| 60 | Viatel |
| 61 | Virgin Media |
| 62 | Waterways Ireland |

| Ref. | Consultee |
|------|------------------------------|
| 63 | Western River Basin District |

The purpose of informal scoping for the Environmental Impact Assessment is to provide a framework for the approach to be taken for the individual specialists evaluations, to identify environmental topics for which potential significant environmental impacts may arise, to provide a framework for the consultation process to take place with prescribed Statutory Bodies as part of the environmental assessment work, and as such, a structure for the preparation of the EIAR to be prepared and the information required to be included therein.

A summary of the main points raised during the scoping consultation is provided below, while a full schedule of responses is provided in Appendix 1.2.

| Consultee | Summary of Comments |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Broadcasting Authority of Ireland | The proposed windfarms are not located close to any existing or planned FM transmission sites |
| Department of Agriculture, Food and Marine | Response outlines the statutory requirements in respect of tree felling |
| Department of Communications, Climate Action and Environment | The applicant is directed to the IFI response |
| Department of Culture, Heritage and the Gaeltacht (Development Applications Unit) | Invasive species (Rhododendron and Japanese Knotweed), bats, ornithology and other issues |
| EIR | Exact turbine location details in Irish Grid format to be provided when they are available |
| Environmental Protection Agency | Response outlines the detail to be provided in the EIAR |
| Fáilte Ireland | Response includes as an attachment a copy of Fáilte Ireland's Guidelines for the Treatment of Tourism in an EIA |
| Geological Survey of Ireland | Comprehensive response related to geoheritage, geohazards etc. |
| Health Service Executive | Detailed but standard response, outlining the need to assess the impact of the development on public health |
| Inland Fisheries Ireland | The proposed site crosses three catchments; the Oweninny River, the Shanvolahan River and the Cloonaghmore River. All three rivers provide valuable salmon and trout habitat |
| Irish Aviation Authority | The Irish Aviation Authority (IAA) Safety Regulation Division (SRD) does not get involved in the planning process. The IAA SRD is to be notified as detailed hereafter. |

| Consultee | Summary of Comments |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Irish Water | The impacts of all developments on water services require a Confirmation of Feasibility (COF) to be submitted at the appropriate time. |
| Knock Airport | General response directing future communications to the relevant department |
| RTE NL / 2RN | SHP or KML/KMZ file requested with the extents of the new site and hub and tip heights |
| Towercom Ltd. | The development needs to take account of telecom links in the area |
| Virgin Media | This company do not have microwave links that would be affected by the proposed development |

1.10.2 Public Consultation

The project team engaged with the public through a number of different initiatives, as set out below and as described in Appendix 1.3 Community Engagement Report.

1.10.2.1 Project Website and Email

A dedicated project website and e-mail address were set up in June 2020 as follows.

- oweninnywindfarmphase3@bnm.ie
- www.oweninnywindfarmphasethree.ie

1.10.2.2 Dedicated Community Liaison Officer

In June 2020, Bord na Móna Powergen Ltd. appointed a dedicated Community Liaison Officer (CLO). The CLO is the main point of contact for the local community, and their role is to represent, communicate, consult and inform residents through regular updates via formal and informal meetings such as house calls, one to one meetings and clinics.

The frequency of these updates was somewhat impeded by the Covid-19 restrictions implemented across the country during 2020 and 2021. However, the CLO endeavoured to provide updates when available and in line with Government Guidance on Covid 19 and house visits. The Community Liaison Officer has visited circa 80 homes in the locality of the proposed development on a number of occasions to ensure they are kept informed about the project.

1.10.2.3 Direct Correspondence and Meetings

Bord na Móna Powergen Ltd. also engaged with the local community on an ongoing basis throughout the pre-planning stage through Community Information Sessions, written communication with households and meetings with local representatives.

In addition to this, at the request of individuals, Bord na Móna Powergen Ltd. also facilitated eight meetings with individual residents to discuss the proposed project and ideas/issues/concerns they had in relation to the proposed development via the clinics by appointment held in August 2021

Public / Other Meetings

A number of additional meetings were held with stakeholders during the preparation of this EIAR, as follows:

- Consultation meeting with An Bord Pleanála, 28th April 2021 (pre-application SID consultation)
- Consultation meeting with An Bord Pleanála, 11th November 2021 (pre-application SID consultation)
- Consultation with Mayo County Council, 30th June 2021

1.11 ASSUMPTIONS AND LIMITATIONS

Assumptions specific to certain environmental aspects are discussed in the relevant chapters of the EIAR. General assumptions that have been made during preparation of the EIAR are set out below:

- The principal land uses in the vicinity of the Oweninny Wind Farm Phase 3 remain as they were at the time of this EIAR preparation. In undertaking cumulative assessments, cases where planning permissions have been granted by the Local Authorities or An Bord Pleanála, (e.g. Oweninny Wind Farm Phase 1 and 2 Wind Farms) are in place in line with the duration specified in the grant of permission for each development.
- Information provided by third parties, including publicly available information and databases, is correct at the time of publication.

Limitations specific to certain environmental aspects are discussed in the relevant chapters of the EIAR. None of the individual specialists have highlighted any limitations that are considered significant.

1.12 LIST OF PLANNING DRAWINGS

The following planning drawings accompany this application.

| Drawing Number | Drawing Title |
|----------------|----------------------------------------------------------------------|
| 10889-2000 | Regional Site Location map |
| 10889-2001 | Site Location Map - Sheet 1 of 2 |
| 10889-2002 | Site Location Map - Sheet 2 of 2 |
| 10889-2003 | Site Master Plan |
| 10889-2004 | Site Layout Plan - Sheet 1 of 6 |
| 10889-2005 | Site Layout Plan - Sheet 2 of 6 |
| 10889-2006 | Site Layout Plan - Sheet 3 of 6 |
| 10889-2007 | Site Layout Plan - Sheet 4 of 6 |
| 10889-2008 | Site Layout Plan - Sheet 5 of 6 |
| 10889-2009 | Site Layout Plan - Sheet 6 of 6 |
| 10889-2015 | Proposed TSO and IPP Substation Layout Plan |
| 10889-2016 | Proposed TSO and IPP Substation - Elevations |
| 10889-2017 | Proposed IPP Customer Control Building - Plans, Elevations & Section |
| 10889-2018 | Proposed TSO Eirgrid Control Building - Plans, Elevations & Section |
| 10889-2020 | Turbine Foundation - Gravity |
| 10889-2021 | Turbine Foundation - Bored |
| 10889-2022 | Turbine Foundation - Piled |
| 10889-2025 | Proposed Temporary Site Compound 1 Plan & Elevations |
| 10889-2026 | Proposed Temporary Site Compound 2 Plan & Elevations |
| 10889-2027 | Proposed Temporary Site Compound 3 Plan & Elevations |
| 10889-2028 | Proposed Temporary Site Compound 4 Plan & Elevations |
| 10889-2029 | Proposed Contractor's Storage Area |
| 10889-2031 | Turbine Hardstand Layout |
| 10889-2032 | Turbine Details |
| 10889-2033 | Borrow Pit A Plan & Section |
| 10889-2034 | Borrow Pit B Plan & Section |
| 10889-2036 | Surface Water Settlement Pond |
| 10889-2037 | Clear Span Bridge and Culvert Details |
| 10889-2039 | Drainage Layout - Sheet 1 of 9 |
| 10889-2040 | Drainage Layout - Sheet 2 of 9 |
| 10889-2041 | Drainage Layout - Sheet 3 of 9 |

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| 10889-2042 | Drainage Layout - Sheet 4 of 9 |
| 10889-2043 | Drainage Layout - Sheet 5 of 9 |
| 10889-2044 | Drainage Layout - Sheet 6 of 9 |
| 10889-2045 | Drainage Layout - Sheet 7 of 9 |
| 10889-2046 | Drainage Layout - Sheet 8 of 9 |
| 10889-2047 | Drainage Layout - Sheet 9 of 9 |
| 10889-2050 | Cable Route Connection Plan - Master Plan |
| 10889-2051 | Cable Route Connection Plan - Sheet 1 of 3 |
| 10889-2052 | Cable Route Connection Plan - Sheet 2 of 3 |
| 10889-2053 | Cable Route Connection Plan - Sheet 3 of 3 |
| 10889-2058 | 38kV Cable Trench Bedding Details |
| 10889-2059 | Cable Joint Bay Details |
| 10889-2060 | Met Mast Details |
| 10889-2061 | Fencing Details |
| 10889-2062 | Wheelwash Details |
| 10889-2063 | Road Construction Details |
| 10889-2064 | Amenity Track Layout |
| 10889-2065 | Proposed Telecoms Mast Details |
| 10889-2066 | Temporary Security Cabin |
| 10889-2070 | 110kV Cable Trench Details - Sheet 1 of 2 |
| 10889-2071 | 110kV Cable Trench Details - Sheet 2 of 2 |