1 INTRODUCTION

Shronowen Wind Farm Ltd. (the Applicant) is seeking planning consent from An Bord Pleanála (ABP) for a proposed wind energy development in the townlands of Tullamore, Coolkeragh, Ballyline West and Dromalivaun, Co. Kerry on a site approximately 4 kilometres south of Ballylongford and 6km north of Listowel (ITM Co-ordinates 561970, 677375).

The proposed development comprises twelve (12) wind turbines, associated infrastructure and a grid connection with a potential output of 50 to 55MW of electricity. The application for the proposed development is being made directly to ABP as the project is deemed a Strategic Infrastructure Development (SID) in accordance with the Planning and Development (Strategic Infrastructure) Act 2006, for developments listed in the Seventh Schedule to the Act (Ref. ABP-306727-20). ABP is also the Competent Authority for the purposes of the Environmental Impact Assessment (EIA). The Applicant is seeking a 10-year permission to construct the development, which, when commissioned, would have an operational life of 30 years.

Malachy Walsh and Partners (MWP) have been engaged by the Applicant to prepare an Environmental Impact Assessment Report (EIAR) to accompany the planning application. This Chapter sets out the purpose and scope of the EIAR, the report structure, assessment topics, assessment authors and contributors, and assumptions which underlie the EIAR. It introduces the project and outlines the site location and key elements of the project. It sets out the planning policy and legislative background to the project and details the consultation undertaken with relevant stakeholders.

1.1 THE APPLICANT

The applicant is Shronowen Wind Farm Ltd., a wholly owned subsidiary of EMP Energy Limited (trading as EMPower). EMPower is an international renewable energy company with locations in Ireland, Tanzania, Ghana and Iceland. The company was established in 2015 with the goal of contributing toward the global transition from traditional, carbon-heavy energy sources to clean, renewable, indigenous power generation with focus in Ireland on the 2030 renewable energy targets. EMPower's primary objective is the development of greenfield wind assets, with a current portfolio of 700MW in development. EMPower presently employs nine (9) staff, with offices in Ireland, Iceland, Ghana and Tanzania.

1.2 PROJECT SUMMARY

The proposed development will consist of the following elements:

- Twelve (12 no.) wind turbines, with a tip height of up to 150 metres, and all associated foundations and crane hardstand areas;
- Approximately 6.85km of new internal access roads;
- Upgrade of approximately 4.43km of existing roads/tracks;
- Six (6 no.) spoil/peat deposition areas with a total volume of approximately 225,456m³;
- An on-site 110kV electrical substation;
- Underground 33kV electrical and communications cabling connecting the turbines to the site substation;
- 225m underground cable connection from the 110kV wind farm substation to the existing 110kV transmission line due east of the wind farm site;
- One (1 no.) permanent anemometry (meteorological) mast with a height of 90 metres;

- Two (2 no.) new site entrances; one permanent (to the northeast off the L6021) and one temporary (to the west off the L1009);
- Two (2 no.) temporary on-site construction compounds, (95m x 50m and 55m x 25m in size);
- Associated surface water management system;
- Felling of 3.15ha of site forestry to facilitate site development;
- Replanting of felled forestry in an adjacent site;
- Temporary works on sections of the public road network along the turbine delivery route (including hedge or tree cutting, relocation of powerlines/poles, lampposts, signage and local road widening) to facilitate turbine component delivery.

An alternative grid connection route option is also being considered as part of this EIAR. The alternative route would extend from the proposed wind farm substation in a westerly direction along the L6021 local road to the previously granted Tullamore Solar Farm (Planning Ref. PL08.302681). The connection would consist of a 110kV underground cable approximately 5.5km in length.

A full description of the proposed development, development lands and all associated project elements is provided in Chapter 2 of this EIAR.

1.3 APPLICATION AREA AND LAND OWNERSHIP

The proposed development is on a site extending across the townlands of Tullamore, Coolkeragh, Ballyline West and Dromalivaun, Co. Kerry approximately 4 kilometres south of Ballylongford and 6km north of Listowel (ITM Co-ordinates 561970, 677375). The location of the site is shown in **Figure 1-1**. The site can be accessed from the northeast via the L6021 Local Road, and from the west via the L1009. The site is currently primarily used for turf cutting.

The planning application area, as outlined in red in **Figure 1-2**, spans a total of 364 hectares (ha), which contains the development footprint of the wind farm and associated infrastructure for which development consent is being sought (27.54 ha). Included within the red line boundary is the proposed underground cable grid connection to the Kilpaddoge to Tralee 110kV overhead line running to the east of the site. This area represents the planning application area or red line planning boundary as presented in the planning application drawings (refer to Drawing No. 19876-MWP-00-00-DR-C-5001). **Figure 1-3** shows the layout of the wind turbines within the site.

The proposed development described above spans a number of property folios owned by private landowners and will be developed under separate agreements with the relevant landowners. Landowner letters of consent are included with the planning application. The site has some areas of active peat cutting mainly located on its western extent and the Applicant has engaged with turbary rights owners.





Figure 1-1 Site Location Map





Figure 1-2 Planning Application Boundary

m



Figure 1-3 Proposed Site Layout



1.4 OVERVIEW OF THE EIAR

Malachy Walsh and Partners (MWP) have been engaged to prepare an Environmental Impact Assessment Report (EIAR), on behalf of the Applicant, to accompany the planning application.

The EIAR consists of a systematic analysis and assessment of the potential effects of the entire proposed project on the receiving environment. The intended purpose of the EIAR is to:

- identify the baseline environmental context of the proposed development;
- inform the consenting authority, other regulatory bodies and the public of the possible environmental effects and impacts associated with implementation of the proposed development;
- determine whether the identified impacts could be significant;
- propose preventative or mitigation measures for potential impacts, as required, where feasible.

In preparing the EIAR, the following regulations and guidelines were considered:

- The requirements of EC Directives and Irish Regulations regarding Environmental Impact Assessment;
- Guidelines on the Information to be Contained in Environmental Impact Statements (Draft) (Environmental Protection Agency [EPA], August 2017);
- Advice Notes on Current Practice in the Preparation of Environmental Impact Statements (EPA, 2003);
- Advice Notes for Preparing Environmental Impact Statements Draft (EPA, September 2015);
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (Department of the Environment, Community and Local Government [DoECLG], 2013); and
- In addition, specialist disciplines have had regard to other relevant guidelines, as noted in the specific chapters of the EIAR.

The methodology recommended in the aforementioned 2017 EPA Draft Guidelines has been followed. The Report is based on the data gathered during the assessment process. It applies accepted methodologies in determining if impacts will be significant and recommends mitigation measures to avoid or reduce impacts where possible.

Each of the chapters contains a description of the existing environment, an assessment of the likelihood and extent of any potential environmental impacts and proposes mitigation measures, where necessary.

1.5 STRUCTURE OF THE EIAR

The EIAR is divided into 4 Volumes as follows:

- Volume 1: Non-Technical Summary
- Volume 2: Main Environmental Impact Assessment Report
- Volume 3: Appendices to the Main Environmental Impact Assessment Report
- Volume 4: Photomontages

The detail of the four volumes of the EIAR is presented in the following sections.

1.5.1 Volume 1: Non-Technical Summary

The Non-Technical Summary provides an overview of the project and the EIAR in non-technical terms. It is presented in a similar way to Volume 2 – Main EIAR, in the use of a 'Grouped Format Structure', which discusses each environmental topic separately.

1.5.2 *Volume 2* - MAIN EIAR

The Main EIAR provides a detailed description of the proposed project and contains specialist reports on each of the selected assessment topics. This document is prepared in the 'Grouped Format Structure' which examines each environmental topic area within an individual Chapter. This structure was selected for the Main EIAR as it facilitates straightforward investigation of individual topics. The Main EIAR is therefore organised as follows:

- Chapter 1 Introduction
- Chapter 2 Description of the Proposed Development
- Chapter 3 Civil Engineering
- Chapter 4 Alternatives
- Chapter 5 Population and Human Health
- Chapter 6 Biodiversity
- Chapter 7 Ornithology
- Chapter 8 Water
- Chapter 9 Land and Soil
- Chapter 10 Air and Climate
- Chapter 11 Noise and Vibration
- Chapter 12 Shadow Flicker
- Chapter 13 Landscape and Visuals
- Chapter 14 Cultural Heritage
- Chapter 15 Material Assets
- Chapter 16 Interaction of the Foregoing
- Chapter 17 Schedule of Environmental Mitigation

1.5.3 Volume 3: Appendices to the EIAR

The Appendices volume contains supporting information and reference documents to Chapters of the Main EIAR Volume 2.

1.5.4 Volume 4: Photomontages

This volume contains the Photomontages and Zones of Theoretical Visibility maps in support of **Chapter 13**, the Landscape and Visual Impact Assessment. **Chapter 13** should therefore be read in conjunction with **Volume 4** Photomontages.



1.6 PLANNING CONTEXT

This Section lists the main EU and national policies relevant to the project and outlines the local policy relating to development in Co. Kerry. Please refer to the separate report, outlining the Policy and Planning Context for the project, which is submitted in support of the application.

1.6.1 EU and National Policy and Guidance

In recognition of fossil fuels as a finite resource, Ireland's dependence on others to meet our energy requirement and the cost of importing this energy, National Policy encourages the development of local renewable energy. A host of relevant legislation and policy exists at an International and European level, which supports the development of renewable energy. Irish renewable energy policy is framed in the context of these European and other International policy initiatives. The following is a broad review of selected legislation, policies and guidance which are relevant to wind energy developments:

- Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (Renewable Energy Directive – Recast)
- New Green Deal 2019
- European Climate Law 2020
- White Paper Irelands Transition to a Low Carbon Energy Future 2015-2030
- Climate Action Plan 2019
- Draft Climate Action and Low Carbon (Amendment) Bill 2020
- Planning Guidelines for Wind Energy, DEHLG 2006
- Best Practice Guidelines for the Wind Energy Industry, IWEA 2012
- Code of Practice for Wind Energy Development in Ireland, DCCAE 2016

1.6.2 Local Planning Policy

The proposed development is located in north Co. Kerry and therefore within the functional area of Kerry County Council.

The current County Development Plan (CDP) as at the date of this application is the Kerry CDP 2015-2021. The Kerry CDP is currently under review and the proposed new CDP 2022-2028 is at pre-draft stage. The current Kerry CDP outlines the overall strategy for the proper planning and sustainable development of County Kerry over the period 2015-2021, and sets out local policy for wind energy development.

Chapter 7 of the CDP contains the policy and objectives relating to Infrastructure, specifically Section 7.6 Energy/Power Provision, which includes a number of policies and objectives of relevance to renewable energy developments. Designated Wind Deployment Zones are illustrated on Map 7.6.

Aim: To support and provide for the sustainable development of indigenous energy resources, with an emphasis on renewable energy supplies, in the interests of economic progress and the proper planning and sustainable development of the county.

EP-1: Support and facilitate the sustainable provision of a reliable energy supply in the County, with emphasis on increasing energy supplies derived from renewable resources whilst seeking to protect and maintain biodiversity, archaeological and built heritage, the landscape and residential amenity.

EP-3: Facilitate sustainable energy infrastructure provision, so as to provide for the further physical and economic development of the County.

EP-7: Facilitate the sustainable development of additional electricity generation capacity throughout the region/county and to support the sustainable expansion of the network. National grid expansion is important in terms of ensuring adequacy of regional connectivity as well as facilitating the development and connectivity of sustainable renewable energy resources.

EP-11: Implement the Renewable Energy Strategy for County Kerry (KCC 2012)

EP-12: Not to permit the development of windfarms in areas designated "open to consideration" in the Tralee and Listowel Municipal Districts until 80% of the turbines with permissions in those areas, on the date of adoption of the Plan, have either been erected or the relevant permission has expired or a combination of both and the cumulative effect of all permitted turbines in the vicinity of the proposal has been fully assessed and monitored.

1.6.3 Kerry Renewable Energy Strategy 2012

The County's existing Renewable Energy Strategy (RES) is set out in the Kerry County Development Plan and was prepared as part of the 2009-2015 Plan (as varied). The policies and objectives for renewable energy are contained in Chapter 7 Section 7.4 and include specific objectives for wind, hydro, solar and biomass energy. The RES was adopted in November 2012. It is the current policy and zoning document that relates to wind energy development in the County and was prepared having regard to the 2006 Wind Energy Development Guidelines. As part of the review of the current CDP, the current RES is also set to be reviewed. The RES identifies 'Wind Deployment Zones', i.e. appropriate locations for wind energy developments, Two categories of Wind Deployment Zones were identified and mapped – 'Strategic Site Search Areas' (red shading) and 'Areas Open to Consideration' (blue shading) (Refer to Map 7.6 of the CDP). Areas considered 'Unsuitable' were also identified and mapped. An excerpt from Map 7.6 showing the location of the proposed development site in an 'Area Open to Consideration' (blue shading) is shown in **Figure 1-4**.





Figure 1-4 Extract from Kerry RES 2012 - Map 7.6 - Wind Deployment Zones

Assessment of Compliance

- It is considered that the proposed wind farm will meet many of the policy objectives for renewable energy developments set out in the current Kerry CDP.
- The proposed wind farm is located within an area 'Open for Consideration' for wind energy developments as designated in the Kerry CDP and the Kerry RES.
- With regard to EP12, a review of the construction status of permitted wind farm developments in the Listowel and Tralee municipal districts was completed in Q1 2019 and submitted to Kerry County Council. The review concluded that over 80% have been installed or permission expired (of 63 permitted turbines, 54 are now built, which constitutes 85.71%). Kerry County Council agreed with the conclusion. The cumulative impact assessments in this EIAR have been completed taking account of all installed and permitted wind farms in the vicinity.

1.7 EIAR ASSESSMENT METHODOLOGY

1.7.1 Legislative Context

The Environmental Impact Assessment (EIA) Directive (European Union Directive 2011/92/EU and the amending Directive 2014/52/EU) on the assessment of the effects of certain public and private projects on the environment, requires Member States to ensure that a competent authority carries out an assessment of the likely significant effects of certain types of projects, as listed in the Directive, prior to development consent being given for the project.

EIA provisions in Irish Law in relation to planning consents are currently contained in the Planning and Development Act, 2000, (Part X) as amended, and in Part 10 of the Planning and Development Regulations, 2001, as amended. Both the Act and Regulations have recently been amended by the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) (EIA Regulations).

The EIA Directive and the Planning and Development Regulations 2001, as amended, provide that in respect of an application for development consent where EIA is required, the developer (applicant) is required to prepare and submit an EIAR to the competent authority.

Strategic Infrastructure Development (SID) can generally be described as development which is of strategic economic or social importance to the State or a region. Such developments are covered by the Planning and Development (Strategic Infrastructure) Act 2006. Where the Board has issued notice to a prospective applicant that a proposed development is deemed to be strategic infrastructure development, an application for permission in writing for that proposed development may only be made to the Board and must be accompanied by an EIAR. The Board is also the competent authority for the purposes of EIAR.

This EIAR is compliant with the requirements set out in the Planning and Development Regulations 2001, as amended, and as set out in the EIA Directive in terms of the structure and content of the information required to be provided by the Applicant.

This EIAR has been prepared having regard to this legislation and national guidance, including European Commission's Guidance on the preparation of the EIA Report (Directive 2011/92/EU as amended by 2014/52/EU) (2017), 'Guidelines on information to be contained in an Environmental Impact Statement, 2002' and most recent 'Guidelines for Planning Authorities and An Bord Pleanála on carrying out EIA (August 2018)'. Regard was also had to the published EPA draft 'Draft Guidelines on the information to be contained in Environmental Impact Assessment Report, 2017'.

Due regard was also given to the Department of Environment, Heritage and Local Government Wind Energy Planning Guidelines published in 2006 and the Draft Revised Guidelines published in 2019 which will contain changes to the guidelines for noise, setback distances, shadow flicker and community consultation/dividend provision. However, whilst these proposed revisions are acknowledged in this Report, as they have not yet been finalised and published, the proposed development is assessed against the current Guidelines in place.



The EIA process begins with Screening to determine whether EIA is required followed by Scoping and Consultation to identify the specialist studies required in the EIA. Where effects are considered to be unacceptable, they can be avoided or mitigated against at the design stage.

1.7.2 Screening

This proposed development falls within the class of development types requiring EIA under Schedule 5 to the Planning and Development Regulations 2001, as amended. Part 2 lists the Energy Industry projects for which EIA is required including *"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 MW"*. The proposed development is for twelve (12) turbines with an output of greater than 50MW, thus the project will exceed the mandatory threshold for EIA, therefore EIA is required.

1.7.3 Scoping

1.7.3.1 Scoping of Likely Significant Environmental Effects

To identify important issues to be addressed in the EIAR, a scoping checklist set out in the European Commission's guidance document on EIA Scoping (2017) was used. The Scoping Checklist is included as **Appendix 1-3 in Volume 3 of the EIAR.**

The legislation and guidelines identify a range of prescribed environmental factors or topics. The potential significant effects of the proposed development have been described in this EIAR by reference to these topics. These include population and human health, biodiversity, land and soil, water, air and climate, landscape, cultural heritage and material assets as well as the inter-relationship between the above topics.

Scoping of the areas identified for assessment and inclusion in the EIAR were determined through consultation and by the competent experts for each environmental factor who have the appropriate expertise and relevant prior experience of the environmental topics (see Section 1.7 for a list of the project study team). Some members of the study team have also been involved in the adjacent Leanamore Wind Farm, Tullahennel Wind farm and Curraderrig Wind Farm projects, located to the north and north west of the site, and have knowledge of the surrounding environment and the sensitivities likely to be present in the existing environment. The scoping process determined the content and extent of matters which should be covered in the environmental information to be submitted in the EIAR.

1.7.3.2 Scoping for Cumulative Effects with other Existing and/or Approved projects

The requirement to consider cumulative effects is outlined in EU and national legislation. The EU Directive on the assessment of the effects of certain public and private projects on the environment (EIA Directive) (2011/92/EU as amended by Directive 2014/52/EU) states:

'the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources',

and,

'The description of the likely significant effects on the factors specified in Article 3(1) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the project. This description

should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project.'

A desk study was undertaken to identify other existing and proposed projects with which significant cumulative effects could plausibly occur with the proposed project. For each of the environmental topics included in the EIAR, publicly available information on existing developments and approved developments (collated from planning applications and relevant development plans) were considered, to identify whether there was any potential for cumulative/in combination effects with the proposed development. The key criteria for this scoping exercise included consideration of: the types of potential impacts associated with the proposed development, common resources affected, receptors impacted, project timeframes (where available) and scale of development.

Table 1-1 sets out the types of projects identified and considered and the extent of the zone of influence taken into account as part of the cumulative appraisal for each of the specific environmental topics assessment included in the EIAR.

Environmental Topic	Project Type	Zone Of Influence
Population and Human Health	Projects identified and considered to potentially result in 0km to 30km significant cumulative impacts relate to those included for other environmental factors below.	
Biodiversity and Appropriate Assessment	 Projects identified and considered to potentially result in 0km to 15km cumulative impacts include: agriculture, sand and gravel extraction, commercial forestry, commercial and recreational fishing, industry, water abstraction, sewage treatment, diffuse and point source pollution, urban sprawl, flood defences and wind farm developments. 	
Ornithology	Projects identified and considered to potentially result in 0km to 15km cumulative impacts include: interactions between land- use change, continued growth in wind energy development, afforestation, agricultural intensification and climate change.	
Air and Climate	Projects identified and considered to potentially result in cumulative impacts would include: nearby developments (generally 0-2km) with associated construction works. The potential cumulative impact with other renewable energy projects would be a potential long term positive effect on air quality and climate and human health. Therefore cumulative/in combination effects with regional wind energy development were included for assessment.	Local effects on air quality at receptors within 0–2km of proposed wind farm were assessed. National, EU and Global effects on air quality and climate also considered.
Land and Soil	Projects identified and considered to potentially result in cumulative impacts would include: land-use change, continued growth in wind energy development, afforestation, deforestation and agricultural intensification.	0-2km
Water	Projects identified and considered to potentially result in cumulative impacts would include: potential cumulative hydrological effects, forestry operations, access tracks	0-15km

Table 1-1 Scope and Extent of other Existing/Approved Developments considered in the EIAR



Environmental Topic	Project Type	Zone Of Influence
	and drainage, neighbouring wind farms and peat cutting activities.	
Noise and Vibration	 Projects identified and considered to potentially result in cumulative impacts would include: All operational and future permitted wind turbines within 2km of the proposed Shronowen wind farm scheme. Any effects/impacts associated with nearby developments due to construction works would be temporary, short-term and unlikely to result in long term significant impacts. 	Permitted, proposed and operational wind farms within 6km. All receptors within 3km of proposed wind farm.
Landscape	Projects identified and considered to potentially result in cumulative impacts would include: any potential cumulative landscape or visual impacts from other existing or permitted wind energy developments.	30km which is the outer extent considered to be the zone of theoretical visibility (ZTV) of the proposed development.
Cultural Heritage	Projects identified and considered to potentially result in cumulative impacts would include: any potential cumulative landscape or visual impacts from other existing or permitted wind energy developments.	30km which is the outer extent considered to be the zone of theoretical visibility (ZTV) of the proposed development.
Shadow Flicker	Projects identified and considered to potentially result in cumulative impacts would include: any potential cumulative shadow flicker effect from other existing or permitted wind energy developments.	1.36km which is 10 rotor diameters from a proposed wind turbine.
Material Assets	There is the potential for cumulative traffic impacts to arise from simultaneous construction works with other concurrent projects in the vicinity	0-10km

1.7.4 Consultation

From the outset of the project, the Applicant engaged in consultation with the key stakeholders. Consultation was maintained throughout the environmental assessment period and comments from identified stakeholders and interested parties were solicited and highly encouraged. Consultation through meetings, public information events, letters, email and telephone calls with various statutory and non-statutory consultees occurred throughout the EIA process. Consultation was initiated during the project design stage with the first public consultation event being held in September 2019. Subsequent scheduled public consultation events in April 2020 and August 2020 had to be postponed due to government restrictions during the COVID-19 pandemic. Letter mailing, two live online public consultation webinars and a virtual public consultation room (https://www.innovision.ie/shronowen) have been used to continue the consultation process while adhering to public health advice.

The following outlines the consultation process and summarises comments, feedback, and input received during the EIA consultation period.

1.7.4.1 Written

Written notifications setting out an overview of the development proposal were circulated to a number of identified stakeholders (both statutory and non-statutory consultees). The notifications invited feedback from the consultee on any key issues and concerns which they consider should be

addressed and expressed that their input at this stage would be welcomed. Consultees were informed that participation at this stage of the project would not affect participation at a later stage in the planning process. A list of the organisations/groups consulted and a summary of the responses and feedback received is provided in **Table 1-2**. The issues raised were subsequently taken into account in the EIA process. A copy of the consultation document provided is included in **Volume 3 Appendix 1-1** of this EIAR.

1.7.4.2 Meetings:

Consultation through meetings took place with the following stakeholders:

- An Bord Pleanála (ABP)
- Kerry County Council Planning Department

An Bord Pleanála (ABP)

Two meetings were held with ABP. The first meeting was held on the 30th April 2020. The meeting began by introducing the Applicant, planning consultants and an overview of the proposed development. ABP gave a brief run through of the procedural aspects of the SID process and the protocol for meetings and minutes.

The Applicant then gave a presentation on the proposed project describing its location in North Kerry and the components of the development. They explained that the project would potentially have 12 turbines, on-site 110kV substation and a connection to the nearby Kilpaddoge to Tralee 110kV overhead line and that the proposed output will be 50.4MW.

The following topics were addressed in the presentation to ABP:

- Site location and layout
- Environmental aspects
- Public consultation
- Community Benefit fund
- Connection to the National Grid Network
- Compliance with the Draft Wind Energy Guidelines
- Overall benefit of the project

A discussion then followed and then ABP advised on a number of key items to be addressed in the planning application:

- Peat stability
- Strategic Infrastructure statutory parameters
- Preliminary view that the project would constitute Strategic Infrastructure
- ABP advised that both grid route options should be assessed in the EIAR
- ABP advised if the output was to fall below 50MW then the application would be submitted to the Local Authority, and where a 110kV grid connection is proposed then the application would be made to ABP under section 182A of the Planning and Development Act 2000.
- ABP advised if the output of the project exceeded 50MW for the wind farm and then a 110kV grid connection is proposed, then the application would constitute SID but under two different sections of the Act. However, they said they would advise further at the next meeting.

A second meeting was held on the 7th July 2020. The meeting topics were as follows:

- ABP gave a brief run through of the procedural aspects of the SID process and the protocol for meetings and minutes.
- The Applicant then gave a brief re-cap on the project components and the progress made since the last meeting.
- A discussion then followed on the following main topic areas:
 - Submission of proposed application as a single application; ABP indicated that it would accept a single application subject to the applicant putting forward a justification for same.
 - Noise in the context of the existing wind farm guidelines
 - Peat management
 - Discussion on a number of wind farms in the area and the need to map them all in the documentation
 - Discussion on the number of copies of the application documents to be submitted to ABP.

Copies of the meeting minutes, correspondence from ABP to the Applicant and copies of the Inspectors Report and Board Direction are included in **Appendix 1-2**.

Kerry County Council Planning Department

A meeting was held with Kerry County Council (KCC) Planning Department on the 2nd February 2019. The main items discussed are as follows:

- Project with 10 turbines with a max tip height of 150m
- Zoning is Rural General and within an Area Open to Consideration for wind energy
- Landscape and visual impact and cumulative effects should be assessed.
- RES 2012 and CDP 2015 2021
- EIAR required.
- CDP Policy Objective EP-12 still applies and this has to be addressed
- DCC Roads Engineers to be consulted.

Kerry County Council Roads Department

Site access considerations were discussed with the Kerry County Council (KCC) Roads Department and a consultation letter was sent as part of the statutory and non-statutory consultation process. A meeting with the Area Roads Engineer in Kerry County Council was held in November 2020 to discuss the proposed project, traffic management and what impacts the project may have during construction stage. The Area Engineer confirmed that they would make their submission directly to ABP as part of the consultation process associated with Strategic Infrastructure cases. The key discussion points are detailed in **Section 2.5.8** in **Chapter 2 – Project Description**.

1.7.4.3 Community Engagement and Public Consultation

The Applicant developed an approach to public consultation in the early stages of the project and where necessary, adapted this approach in order to provide interactive information and consultation to the local community, while adhering to all public health guidance.

The Applicant held its first public consultation event on the 25th September 2019 at the Ballydonoghue GAA club in Coolard, Listowel, Co. Kerry. This event was advertised in the Kerry's Eye Newspaper on the 19th September 2019 and was organised to introduce the project to the local community. Information regarding the environmental impact assessment activities being undertaken, as well as

the scale and layout of the project, was displayed through presentation materials enclosed in **Appendix 1-4.** Public consultation brochures, summarising the project were provided to all attendees. It was estimated to have been attended by approximately 40 local residents.

In September 2019, a dedicated project website was also established in order to share information with the local community (https://www.shronowenwindfarm.ie/). This website will continue to be updated regularly by the applicant throughout the development of the proposed project.

A second event was scheduled for April 2020, but this had to be postponed due to COVID-19 restrictions. The Applicant attempted to reschedule and host another public consultation event on 26th August 2020, which was advertised in the Kerry's Eye Newspaper on 13th August 2020. This too had to be postponed due to COVID-19 restrictions.

Furthermore, while the applicant had scheduled to perform door-to-door visits to all local residents situated within 2 kilometres of the project in May and again in August of 2020, this was not possible as it would contradict the public health guidance at the time.

In order to ensure the health and safety of staff and local residents during public consultation, the Applicant sent a letter to each household within 2 kilometres of the project on 9th September 2020. This letter outlined the proposed project and invited the recipient to a live online public consultation webinar, hosted by the applicant on 17th September 2020. This event was advertised in the Kerry's Eye Newspaper on the 10th September 2020. During the webinar, information on the ongoing environmental impact assessment, project design and the community fund allocation was presented. There was also an interactive Q&A session during which the Applicant answered questions submitted by local residents. The materials presented at this webinar are included in **Appendix 1-5.** The Webinar event was attended by 14 people.

Additionally, the applicant established a virtual consultation room for the proposed Shronowen Wind Farm. This online space allows residents to access information such as videos, project literature, maps and photomontages in an interactive way.

Attendees of the physical public consultation event, the online public consultation webinar and the virtual consultation room were encouraged to submit feedback to the applicant by email, telephone or post.

Some of the primary issues raised by attendees were in relation to potential landscape and visual impact, Community Benefits, construction traffic and noise. These issues are addressed in Chapter 9 "Landscape and Visual Impact", Chapter 5 "Population and Human Health", Chapter 13 "Noise and Vibration" and **Appendix 15-1** "Traffic and Transportation Assessment".

It is the Applicant's view that local communities, as well as being engaged in the development of the project, should also benefit from its success. In line with this, the Applicant proposes to develop a Community Benefit Fund to ensure the project provides tangible long-term benefits to the community throughout the lifetime of the project as per the terms and conditions of the Renewable Electricity Support Scheme (RESS). The total fund will be calculated as $\leq 2/MWh$ of electricity produced by the project, and as such, may vary depending on the final permitted capacity and generation performance

of the project. Given the Applicant's latest wind energy estimates, this fund is predicted to amount to an average of €301,958 per annum.

RESS Coummunity Fund	EURO	Shronowen Community Fund
Total Payment to Households <1km distance	€45,000	€42,175, 14% €45,000, 15%
Total Payment to Households >1km, <2km distance	€74,000	€20,000, 7% €301,958
Total Payments to not-for-profit community enterprises	€120,783	Community Fund €74,000, 24%
Total Payments for fund administration	€20,000	40% Total Payment to Households <1km distance
Total Payments to clubs and societies	€42,175	 Total Payment to Households >1km, <2km distance Total Payments to not-for-profit community enterprises Total Payments for fund administration
Total Community Fund	€301,958	 Total Payments to clubs and societies

Figure 1-5 Breakdown of Proposed Community Benefit Fund

Given compliance with the terms and conditions of the future RESS auctions this project may enter, the applicant proposes that there will be three main allocations of this fund:

- (i) a near neighbour scheme,
- (ii) a fund for not-for-profit enterprises and initiatives, and
- (iii) a fund for local clubs and societies.

Near Neighbour Scheme

An annual payment of €1,000 will be provided to each household within 1km of the project. An annual payment of €500 will be provided to each household located between 1km and 2km of the project. These payments will run for the duration of the RESS programme.

Not-for-profit Enterprise and Initiative Fund

As per the terms and conditions of the first RESS auction, 40% of the community benefit fund will be allocated to not-for-profit local enterprises and initiatives, with an emphasis placed on those addressing climate change. This allocation is estimated to amount to a total of €120,783 per annum.

Local Clubs and Societies

The remainder of the fund will be allocated to local clubs and societies, approved by the community appointed committee. This is estimated to amount to an average of €42,175 per year for the duration of the RESS programme.

Table 1-2 List of Consultees and Summary	v of Responses to Consultation Letter
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Organisation	Summary of Response / Comments	Addressed In	
An Taisce	No response received		
Bat Conservation	No response received		
Bird Watch Ireland	No response received		
Department of Agriculture, Food and	Email received with letter attached outlining forestry felling requirements and	Charter 15 Material Accests	
Marine	general requirements to be considered in an EIA.	Chapter 15 Material Assets	
Department of Business, Enterprise	No response received		
and Innovation			
Department of Communications,	No response received		
Climate Change and Environment			
Department of Culture, Heritage and	Response received stating Development Applications Unit (DAU) may make	Chapter 14 Cultural Heritage	
the Gaeltacht	observations. No response received at the date of submission.	Chapter 14 Cultural Heritage	
Eir	Response received confirming no issues	Chapter 15 Material Assets	
Fáilte Ireland	No response received		
Forest Service	No response received		
Geological Survey of Ireland	Response received outlining information relevant to GSI	Chapter 9 Land and Soil	
Health Service Executive	No response received		
Heritage Council	No response received		
Inland Fisheries Ireland	No response received		
Irich Aviation Authority	Response stating no issues. Requested that in the event that planning is granted to	Chapter 15 Material Assets	
Instraviation Authority	engage on final constructed turbine locations and agree lighting requirements.		
Irish Wildlife Trust	No response received		
	Acknowledgement of receipt of information. Referred to G. Riordan, SE. Site	Chapter 2 Project Description	
Kerry County Council - Roads	meeting held with Area Roads Engineer in Nov 2020. Refer to Section 1.7.4.2 and	Chapter 2 Project Description, Chapter 3 Civil Engineering, Appendix 15-1 Traffic & Transportation Assessment, Appendix 15-3 Traffic Management Plan	
	Section 2.5.8 (Chapter 2 of EIAR). The Engineer confirmed that they would make		
	their submission directly to ABP as part of the consultation process associated with		
	Strategic Infrastructure cases.		
Kerry County Council - Environment	Acknowledgement of receipt of information and would respond in due course		
National Monuments Service	See response from Department of Culture, Heritage and the Gaeltacht		
Office of Public Works	Automated email response. No further response received.		



SHRONOWEN WIND FARM

Organisation	Summary of Response / Comments	Addressed In
	Response received on 9 th Nov 2020. Risk that turbine 2 may be encroaching on 20m	
Netshare/Vodafone	Vodafone mast corridor. Upon further examination found that there is adequate	Chapter 15 Material Assets
	clearance from top of blade to start of link corridor.	
NPWS	Standard acknowledgement letter received. No specific observations.	
Transport Infrastructure Ireland (TII)	No response received	

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1.8 STUDY TEAM AND CONTRIBUTORS TO THE EIAR

Malachy Walsh and Partners were the lead Environmental and Engineering Consultants on this project and the final EIAR has been compiled by Malachy Walsh and Partners on behalf of the Applicant. The project team included a combination of competent engineering and environmental experts. Contributing authors to the EIAR are presented in **Table 1-3**. Qualifications and competencies of the contributing authors to the EIAR are presented in **Table 1-4**.

Subject Area	Author/Contributor	Company
Introduction	Ken Fitzgerald– Environmental Scientist/Project Manager	Malachy Walsh and Partners
Description of Development	Ken Fitzgerald – Environmental Scientist/Project Manager Paddy Curran – Geotechnical Engineer	Malachy Walsh and Partners
Civil Engineering	Paddy Curran - Geotechnical Engineer Eoin Doyle - Engineer	Malachy Walsh and Partners
Alternatives	Ken Fitzgerald – Environmental Scientist/Project Manager	Malachy Walsh and Partners
	Alexander Kelly - Project Manager	EMPower
Population and Human Health	Caitriona Fox – Environmental Scientist/Project Manager	Malachy Walsh and Partners
Biodiversity	Pat Ryan – Senior Ecologist	Malachy Walsh and Partners
Ornithology	Fiona McKenna – Ecologist Deirdre O Brien – Ecologist Monica Kane – Snr Ecologist	Malachy Walsh and Partners
Lands and Soils	Paddy Curran – Geotechnical Engineer	Malachy Walsh and Partners
Air & Climate	Peter Barry – Environmental Consultant	Malachy Walsh and Partners
Water	Sean Doyle – Senior Engineer	Malachy Walsh and Partners
Noise	Peter Barry – Environmental Consultant	Enovi and Malachy Walsh and Partners
	Jeremy King – AutoCAD and GIS Technician	Malachy Walsh and Partners
Shadow Flicker	Peter Barry – Environmental Consultant	Malachy Walsh and Partners
Landscape	Evelyn Sikora – Landscape Architect	Cunnane Straton Reynolds (CSR)
	John Flanagan – Visualisation Expert	Innovision
Cultural Heritage	Laurence Dunne – Archaeologist	Laurence Dunne Archaeology
Material Assets	Valerie Heffernan – Environmental Scientist	Malachy Walsh and Partners
Interaction of the Foregoing	Ken Fitzgerald – Environmental Scientist	Malachy Walsh and Partners
Schedule of Environmental Mitigation	Schedule of vironmental Mitigation	
CEMP	Paul Nealon – Civil Engineer	Malachy Walsh and Partners
Traffic and Transportation	Seamus Quigley – Traffic Engineer	Malachy Walsh and Partners
Traffic Management Plan	Paul Nealon – Civil Engineer	Malachy Walsh and Partners
Natura Impact Statement Pat Ryan– Senior Ecologist		Malachy Walsh and Partners

Table 1-3 EIAR Authors and Specialist Contributors

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Contributors	Qualifications & Memberships	Competencies
Ken Fitzgerald	Diploma in EIA Diploma in Planning Diploma in Coastal Zone Management Degree in Surveying Diploma in Construction Economics Associate/Project Director	Ken Fitzgerald has worked in the area of civil engineering, construction management, EIA and planning over the last 35 years. During last 18years he has focused on renewable energy and marine projects. He has managed the design, planning and preparation of EIA's on a number of large-scale wind energy projects. He has acted as planning lead on wind farm development projects that availed of both Local Authority and Strategic Infrastructure Development planning routes. He has expertise in planning appeals, public consultation, community engagement, Oral Hearings and in Judicial Review proceedings.
Caitriona Fox	BA, MSc Environmental Consultant	Caitriona is a Senior Environmental Consultant with 20 years environmental consultancy experience. She is an environmental impact assessment practitioner and has taken on the role of EIA Project Manager for a variety of large scale EIA projects including wind farms such as Knockranny/Cnoc Raithní Wind Farm and Leanamore Wind Farm. She has extensive experience in the management and compilation of environmental reports and has authored numerous specialist reports including: air and climate impact assessments, human beings impact assessment landscape impacts assessment, and material assets assessment for project EIAs.
Cormac Murphy	<i>BE MIEI Civil and Project Engineer</i>	Cormac is a senior engineer with wide ranging experience in Civil Engineering, from site assessment through to design, tendering, site supervision and inspection. Cormac has specialised in wind farm design and construction with particular emphasis on Peat Stability Assessment and constructability of infrastructure in the peat environment. He has been responsible for the assessment and design of infrastructure on a number of wind farm projects in difficult peat conditions. These have included Tullahennel Wind farm, Co. Kerry, Tievenameenta Wind Farm, Co. Tyrone; Booltiagh Wind Farm Co Clare, Hollyford Wind Farm, Co Tipperary; Ugool and Knockranny, Co Galway; Letteragh, Co Clare. Cormac's extensive experience in construction resulted in his engagement as the Technical Advisor on the construction of several large Wind Farms including Coomacheo and Curragh Wind Farms, Co. Cork, Athea and Dromada Wind Farms, Co. Limerick.
Sean Doyle	BE CEng MIEI Civil Engineer	Sean Doyle is an Associate Director with Malachy Walsh and Partners with particular responsibility for road design and infrastructural projects. He has worked on many civil engineering projects for Malachy Walsh and Partners including road schemes, bridges, drainage schemes and hydrological assessments. He has also worked on the civil engineering aspects of a number of wind farms and in particular the access road design, drainage and environmental mitigation measures. Sean has experience in traffic analysis.

Table 1-4 Qualifications and Competencies of EIAR Authors and Specialist Contributors



Contributors	Qualifications &	Competencies
	Memberships	Competencies
Eoin Doyle	BE, MSc, DIC MIEI Civil	Eoin is a Civil Engineer with over 4 years consultancy experience.
	& Environmental	Eoin has specialised in wind farm design and construction. He has
	Engineer	been responsible for the assessment and design of infrastructure
		on a number of wind farm projects in upland sites. These have
		included Meenadreen Wind Farm, Cluddaun Wind Farm, Cordal
		Wind Farm and Tievenameeta Wind Farm.
Paul Nealon	BE (Hons) (Eng MIEL	Paul is a Civil and Project Engineer with over 8 years of wide
	DE (HOHS) CENY MIET	ranging experience in designing wind farm projects at planning
	Civil and Project	and construction stage. He has been responsible for the design of
	Fnaineer	infrastructure on a number of wind farm projects such as
		Cluddaun WF, Kilathmoy WF, Sliabh Bawn WF and Tullahennel WF
Jeremy King	Cert IA, Cert CAD, HDip	Jeremy is the lead GIS technician in MWP and assists the
		environmental team in completing EIAR's, EIS's, wind farm
	AutoCAD & GIS	feasibility studies and planning applications. He also works
	Technician	alongside the wind farm civil design team, particularly in
		constraint mapping and collating and generating GIS baseline data
		that ultimately influences design and layout. Jeremy works with
		the EIA team specialists. He has expertise in WINDFARM design
		software that includes modules on wind farm layout,
		Photomontages, ZVI and Shadow Flicker. He has generated
		shadow flicker models on numerous wind farm projects.
		Pat has been working as a staff ecologist with Malachy Walsh and
		Partners since 2010 During that time he has acquired extensive
		experience in the completion of Appropriate Assessment Stages 1
	RCo	and 2. Projects assessed have covered a broad range in terms of
Dat Byan	BSC	size and complexity and nave included a diverse range of sensitive
Pat Ryan	Feelegist	survey methodologies including these for hirds, ground mammals
	ECOIOBIST	bats and invertebrates. He has conducted a significant number of
		preliminary bat roost and bat activity surveys He is also widely
		experienced in babitat surveys and manning techniques at both
		broad and fine scales across the range of habitat types
Monica Kane		Monica has over 15 years' experience working in environmental
Wollieu Rulle		consultancy. She is experienced in ecological impact assessment
	MSc BSc	and the appropriate assessment process. She has completed
		numerous EIAR chapters and Natura Impact Statements, as well as
	Senior Ecologist	other forms of ecological assessments, for a variety of projects.
		She was the principal author of the guidance "Development of Bulk
		Energy Storage and Natura 2000" for the EU stoRE Project.
John Murphy	Lead Ornithologist	John Murphy is an ornithologist, wildlife expert and wildlife
		documentary maker. He has been working in the field of
		ornithology and ecology since 1982. He has extensive knowledge
		of the landscape and in particularly bird populations in this
		country. He collaborates regularly with NPWS on different
		projects throughout the country. John has been working as part of
		the MWP Environmental and ecology team on a variety of upland
		wind farm projects in the west and south west of the country since
		2010. John is one of the country's foremost ornithologists and is a
		licensed bird ringer. He has always had an interest in wildlife



Contributors	Qualifications &	Competencies
Contributors	Memberships	Competencies
		photography and his work has been published in many magazines and books. As a 'Heritage in the Schools Specialist', he has travelled the country lecturing in schools and colleges, and to various clubs and organizations. He was the Biodiversity Officer with Clare County Council. He spends as much time in the field as possible, observing the wide range of biodiversity that Ireland has to offer.
Deirdre O'Brien	BSc (Hons) Wildlife	Deirdre has been working periodically with Malachy Walsh and
	<i>Biology</i> Ecologist	Partners since 2018 and on a full-time basis since 2019. During that time she has carried out field work which included invasive species survey's, bird surveys, freshwater macroinvertebrate sampling and identification, (sensu Q' value assessment), collection of water samples and assistance with freshwater pearl
		mussel survey. She has also gained experience in standard field survey methodologies including, mammal surveying and habitat mapping. She has acquired experience in the completion of
		Appropriate Assessment Stage 1 and Ecological Impact Assessment (EcIA). She has experience with general ecological report writing and has helped complete numerous reports for bird survey work and is experienced in the collation of data and in field ecology survey techniques.
Paddy Curran	BE, MSc, DipPM, CEng,	Paddy is a Senior Engineer and has over 9 years experience in
	MICE, RoGEP	civil engineering, particularly in the area of Geotechnical
		Engineering. Project experience includes delivering the
	Geotechnical Engineer	geotechnical investigation/interpretation, design and
		Wind farm EIS
Peter Barry	BSC MSC AIFMA	Peter is an Environmental Scientist with 20 years' experience as an
i eter burry	AIOA	Environmental Assessment Practitioner. He has expertise in the
		measurement, assessment, prediction and control of environmental noise and is a member of the Institute of Acoustics and the Institute of Environmental Management and Assessment.
	Noise Consultant	Peter has prepared numerous technical chapters for wind farm developments including Noise and Vibration, Shadow Flicker and Air Quality and Climate. Peter has presented evidence on all three topics as expert witness at Oral Hearing.
Seamus Quigley	BE, CEng, MIEI, CIHT	Seamus has extensive experience in transport planning and traffic
		engineering projects, including Traffic Impact Assessments, Traffic Management Studies, Mobility Management Plans Traffic
	Transportation	Modelling Studies, Feasibility Studies and Road Safety Audits. He
	Engineer	is a Chartered Engineer and also a chartered member of the
		Institution of Highways and Transportation. He joined Malachy
		Waish and Partners in 2007, having spent sixteen years with WS
Lina Williams	RSc Environmental	ALKIIIS.
	Science MSc Animal	and has a wide variety of ecological experience. During her
	Behaviour & Welfare	postgraduate research she spent 3 months in a cloud forest in
		Costa Rica studying bird behaviour. She also spent 3 months
		working in Seville as part of a research group examining the



Contributors	Qualifications & Memberships	Competencies
	Ecologist	ecological effects of a 1998 mine-tailings burst at the Doñana National Park in Andalucía. In 2019, she worked in the Stack's Mountains, Co. Kerry as part of the Curlew Conservation Programme for the National Parks and Wildlife Service (NPWS). She is experienced in bird and mammal survey methodologies and techniques, invasive species identification and habitat surveying. She has written Stages 1 and 2 Appropriate Assessments, Ecological Impact Assessments, and Environmental Impact Statements. Her skills also include data-processing and Collision Risk Modelling for wind farms.
Valerie Heffernan	<i>B.Sc., M.Sc.</i> Environmental Scientist	Valerie has worked as an environmental professional since graduating in 2015 and has been employed as an Environmental Scientist with Malachy Walsh and Partners since 2018. She has considerable experience in Wind Farm and Solar Farm development and has had input in a variety of projects including wind energy developments, marine and solar energy developments. She has managed and been a contributing author on a number of EIA projects including wind farms such as Galway Wind Park Phase 3.
Evelyn Sikora	BA Landscape Architecture, MA Planning and Sustainable Development, MILI Landscape Architect	Evelyn Sikora, BA MA, MILI. She has over five years' experience in Landscape and Visual Assessment (LVIA), and has worked on the Landscape and Visual assessment for a range of wind energy developments through Ireland, from single turbine developments to Strategic Infrastructure Developments. She also has experience in a range of other LVIA projects including solar energy, infrastructure, flood relief, and recreation projects. Oversight was provided by Declan O' Leary, CMLI, MILI, Managing Director of Cunnane Stratton Reynolds
John Flanagan	<i>BSc</i> Visualisation Consultant	John is a visualisation consultant with over 12 years' experience providing photomontage and mapping services to the planning industry. Throughout his career, John has worked on many different projects including wind farms, solar farms, road schemes, bridges, power-lines and numerous other engineering and architectural developments.
Laurence Dunne	Level 8 Advanced Cert Archaeology Archaeologist	Laur is an archaeologist with 23 years as a practicing archaeologist. He has worked on numerous wind farm project EIA's since 1999 across the county in various environments.



1.9 TECHNICAL DIFFICULTIES AND AVAILABILITY OF DATA

No difficulties arising from either deficiencies or limitations in technology, data availability or expertise were encountered in the preparation of the EIAR. As is standard practice, best available predictive modelling techniques used were relevant to inform the assessment.

1.10 NOTE ON QUOTATION

EIARs contain statements describing the positive and negative aspects of a proposed development. Selective quotation out of context is not advisable as a misinterpretation of the overall findings of the study may arise. Where possible, quotations should be taken from the conclusions of specialist reports.

1.11 NOTE ON DRAWINGS AND GRAPHICS

Details of the proposed development are supported by the planning application drawings prepared by Malachy Walsh and Partners in compliance with our internal Quality Management System (accredited to ISO: 9001). These drawings accompany the planning application and are referenced as relevant throughout the EIAR. The 1:50,000 and 1:25,000 mapping that was used to generate many of the figures in the EIAR are the copyright of Ordnance Survey Ireland (OSI licence number EN0015720).



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