



Proposed Ballivor Wind Farm



Proposed Ballivor Wind Farm

The proposed development will be located on bogs within the Ballivor Bog Group in counties Meath & Westmeath, namely Ballivor, Bracklin, Carranstown, Lisclogher and Lisclogher West bogs. The closest large settlements to the site are Ballivor which is located approximately 2 km to the east, Delvin which is located approximately 2.5 km to the northwest and Raharney which is located 3 km to the west.

As the project is at an early stage the number and location of turbines has not been determined. However, it is estimated that the proposed development will be similar in scale to Bord na Móna's proposed Derrinlough Wind Farm in west Offaly.

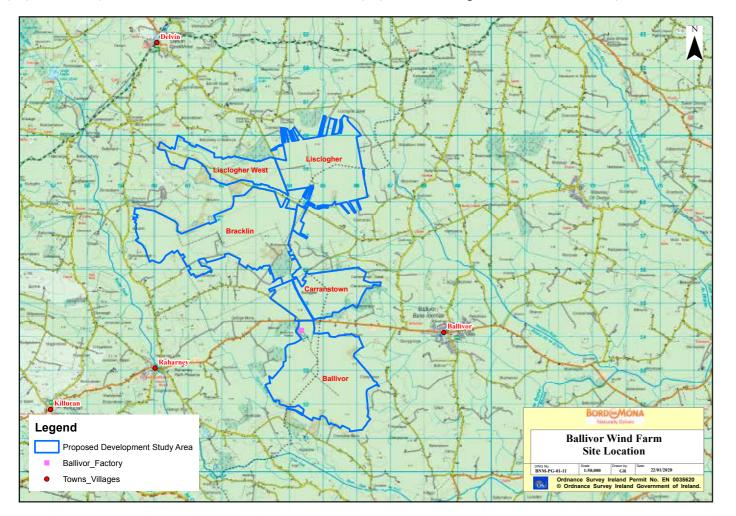


Figure 1 - Site Location Map

Need for Wind Energy

Government policy has set a target for 40% of the electricity consumed in 2020 to be generated from renewable resources, within an overall renewable energy target of 16%. It is acknowledged that wind energy will provide the main component of Ireland's renewable electricity at that time. Furthermore, In March 2019, the Government announced a renewable electricity target of 70% by 2030. The proposed development is likely to be operational before 2030 and would therefore contribute to this 2030 target.

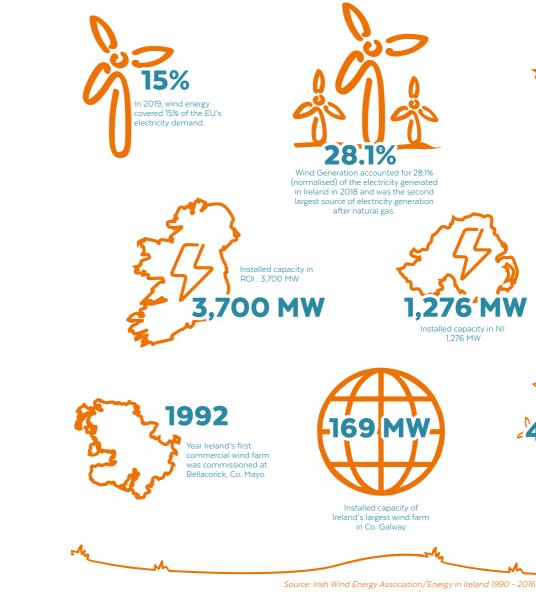
The Climate Action Plan 2019 (CAP) was published on the 1st of August 2019 by the Department of Communications, Climate Action and Environment. The CAP sets out an ambitious course of action over the coming years to address the impacts which climate may have on Ireland's environment, society, economic and natural resources. This Plan clearly recognises that Ireland must significantly

step up its commitments to tackle climate disruption. The CAP identifies a need for 8.2GW of onshore wind generation. The CAP presents clear and unequivocal support for the provision of additional renewable energy generation and presents yet further policy support for increased wind energy.

For the last eight decades Bord na Móna has underpinned Ireland's energy security by supplying peat from Irish bogs to power stations. Ireland's urgent need to support positive climate action measures means the company is now managing its land in a very different way. As part of its Brown to Green Strategy, Bord na Móna is implementing an extensive peatland rehabilitation programme and expanding its new low carbon operations. A key objective of this strategy involves using the land to continue to underpin Ireland's energy independence by developing green, sustainable energy sources to assist with Ireland's commitment to achieve 70% renewable electricity by 2030.

Wind farms produce renewable electricity and assist in the offset of carbon emissions including those arising from other sectors, such as agriculture. The proposed project will contribute to both Ireland's and the European Union's renewable energy targets. It will also contribute to increasing the security of Ireland's energy supply and will facilitate a higher level of energy generation and self-sufficiency.

Wind Stats - Did you know?





the second highest shar of wind in its electricity demand in 2019 - 33%. nmark had the highes share at 48%.



At the end of 2019. Europe had 205,000 MW of wind energy capacity installed



New All Ireland Wind Record was set on 21st February 2020 at 18:21. Up from the ous record of 4,137 MW

lled capacity in N

1.276 MW

Suitability of Bord na Móna Peatlands for Wind Farms

Bord na Móna has been harvesting sod turf and milled peat from its peatlands in the Midlands region since the 1950s. As part of its Brown to Green Strategy, the company is now implementing an extensive peatland rehabilitation programme and expanding its new low carbon operations. The development of wind farms on these peatlands would continue the long tradition of energy production in a new increasingly sustainable form. Advantages offered by these peatlands for the development of onshore wind farms, include:

- · Significant scale, and are present in large blocks
- Industrial, brown-field sites, suitable for redevelopment
- Open, unenclosed landscapes with good wind characteristics
- · Close proximity to the national grid and have good road access
- Linked by rail or road passageways, suitable for cable connections
- · Uninhabited, with an absence of residential or commercial premises
- · Generally flat and well drained, with minimal dangers of land slippage
- Proven delivery of this type of development, as demonstrated by Bruckana, Mountlucas and Oweninny Wind Farms.

Site Selection

In selecting a site for a wind farm development there are a number of criteria that must be considered. Based on these criteria some sites are more suitable for wind farms than others. The main criteria that we consider include:

- Grid Access
- Proximity to Dwellings
- County Development Plan
- Environmental Sensitivity
- Telecommunications Links
- Cumulative Visual Impact
- Flooding Risk
- Supporting Infrastructure
- Aviation

Draft Revised Wind Energy Development Guidelines in Ireland

Draft Revised Wind Energy Development Guidelines were issued for public consultation in December 2019 after the review of the 2006 Wind Energy Development Guidelines. Key aspects of the draft included:

1. Noise Limits

Noise restriction limits consistent with World Health Organisation standards are proposed. The noise limits will apply to outdoor locations at any residential or noise sensitive properties.

2. Visual Amenity Setback

A visual amenity setback distance, of 4 times the tip height, between a wind turbine and the nearest residential property is proposed, subject to a mandatory minimum setback of 500 metres.

3. Shadow Flicker

It is proposed that technology and appropriate modelling at design stage is adopted to eradicate the occurrence of shadow flicker and must be confirmed in all planning applications for wind energy development.

4. Consultation Obligations

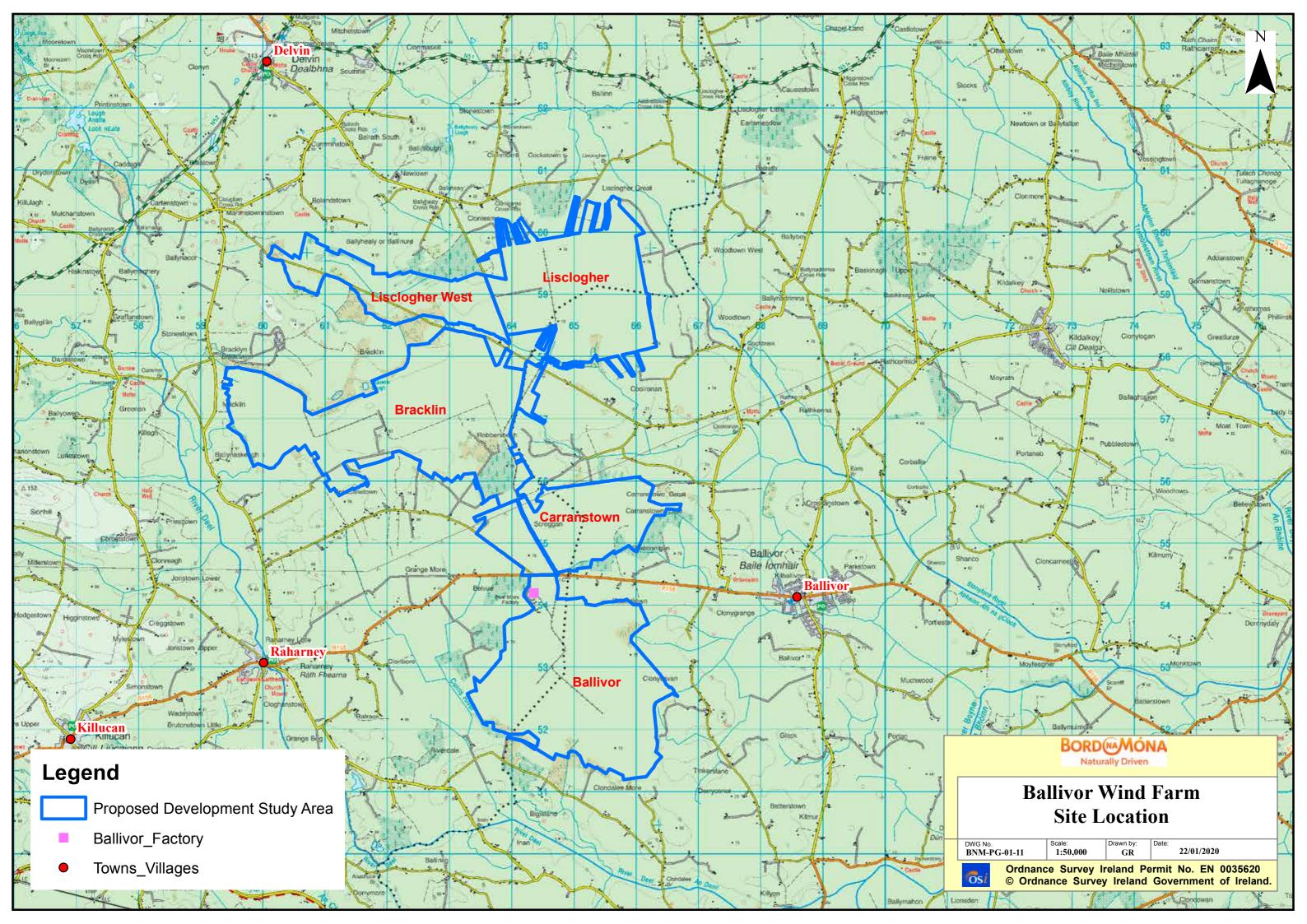
Planning applications must contain a 'Community Report' prepared by the applicant which will specify how the final proposal reflects community consultation and the steps taken to ensure that the proposed development will be of enduring economic benefit to the communities concerned and demonstrate adherence to community engagement codes of practice.

5. Grid Connection

From a visual amenity aspect, undergrounding of cable connections from wind farms to the transmission and distribution system is the most appropriate solution, except where specific ground conditions or technical considerations make this impractical.

6. Community Dividend

Wind farm developers will also be required to take steps to ensure that the proposed development will be of enduring economic benefit to the communities concerned.



Strategic Infrastructure Development Planning Process Explained

For most large projects, a key issue is whether a development is Strategic Infrastructure Development (SID) or not?

Energy infrastructure which is considered SID* includes:

"An installation for the harnessing of wind power for energy production (a wind farm) with more than 25 turbines or having a total output greater than 50 megawatts"

*(as outlined in the Seventh Schedule, Section 1 of the Planning and Development (Strategic Infrastructure) Act 2006).

SID Projects	Non-SID Projects
Planning Application to	Planning Application to Local
An Bord Pleanála	County Council
Environmental Impact Assessment	Environmental Impact Assessment
Mandatory	Mandatory in some cases

At this early stage of the project, Bord na Móna estimate that the output of the proposed wind farm will be in excess of 50MW. Consequently, Bord na Móna will need to go through a pre-planning consultation process with An Bord Pleanála to determine with certainty who the consenting authority will be.

Irrespective of the Consenting Authority it is our view that an Environmental Impact Assessment Report will be required as supporting documentation to the planning application.

What is included in an Environmental Impact Assessment **Report (EIAR)?**

Due to the nature and scale of the proposed development an Environmental Impact Assessment (EIA) of the proposed development will need to be carried out. As part of this process, an environmental baseline for the proposed development site will be established through fieldwork and other baseline surveys.

All of this information will be described and documented in an Environmental Impact Assessment Report (EIAR) (formerly known as an Environmental Impact Statement (EIS)) which will accompany the planning application documentation submitted to the appropriate Consenting Authority for consideration.



Landscape and Visual Impact Assessment

A typical tool utilised in the assessment of the visual impact of a wind farm is a Photomontage. Photomontages are visualisations that superimpose an image of a proposed development upon a photograph or series of photographs and are used to illustrate the potential impact of a development on the existing landscape. A number of photomontages will be created as part of the Landscape and Visual Impact Assessment (LVIA) for the proposed wind farm.

Photomontages were produced as part of the LVIA for Mountlucas Wind Farm during the planning application process. A comparison of one of the photomontages generated for the LVIA, and a photograph taken from the same location post construction, is shown below. It illustrates the effectiveness and accuracy of this tool when applied to this type of development.

Samples of the photomontages which will form part of the LVIA for this proposed development will be displayed at the next round of Community Information Sessions.

Mountlucas Wind Farm





Local road immediately west of site VRP Ref: VRP 12 Comparative

Local Benefits of the Development

Benefits arising from the construction and operation of the proposed wind farm will be:

- 100 to 120 jobs at peak construction.
- Substantial rates paid to the relevant Local Authority.
- Supporting 3-5 long term, high quality technical jobs in operations and maintenance.
- Upgrading of the road infrastructure in the vicinity of the wind farm (as required).
- Payment of taxes from the project, and dividends from Bord na Móna to the State.
- Indirect employment created through the sub-supply of a wide range of products and services.

Community Benefit Funds

As part of our Bruckana and Mountlucas Wind Farms we have designed and are operating both Community Gain Schemes and Near Neighbour Schemes in conjunction with the local communities. In developing this wind farm project Bord na Móna wish to engage with the local communities regarding potential types of benefits including but not limited to:

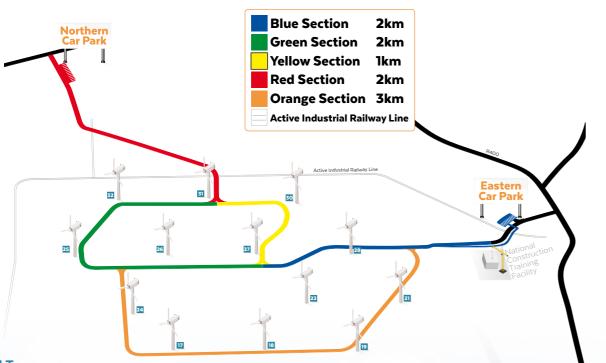
- A Community Benefit Fund
- Amenity/Recreational Facilities



Potential Wind Farm Recreational Facilities

Public Walkway - Cycleway

Mountlucas Wind Farm consists of a 10 km walkway / cycleway around the wind farm. It is generally accessible all year round - free of charge with onsite parking facilities at both the Northern and Eastern access points. This amenity is for walking, running and cycling and it is hoped to incorporate similar amenities as part of the proposed Ballivor Wind Farm. Since 2016, over 150,000 visits have been made to the wind farm's amenity facilities.



Organised Tours

Mountlucas Wind Farm also offers free guided tours of the site. In 2019 we welcomed over 4,000 people to the wind farm on prebooked visits. The guided tour lasts approximately 2 hours and covers renewable energy, wind farm construction, biodiversity and archaeology. Facilities for the tour include: car and coach parking, 10 km walkway-cycleway and toilet facilities. If your family, group, club or school would like to book a tour please contact Mountlucas Wind Farm on: 087-1175756 to arrange a visit.

Wind Farm Development Timeline

How long does it take to develop a wind farm?



Example: Mountlucas Wind Farm Timeline

- Site Identification and feasibility studies. 2008 _
- Planning application to Offaly Co. Council. 2009
- 2011 Planning Approval from An Bord Pleanála.
- 2013 - Commencement of onsite construction works.
- 2014 Completion of ground works. Completion of the erection of all 28 turbines.
- 2015 - Official opening in March 2015.



12 - 24 months

Pre-construction studies, procurement and financial close

18 - 24 months

Construction of wind farm (including commissioning)

Typically 6 to 8 years

Community Engagement

1st Public Consultation: March 2020 - Initial consultation sessions. 2nd Public Consultation: Late 2020/Early 2021 - Pre-planning public consultation sessions.

Bord na Móna will engage on an ongoing basis with the local communities regarding the development of the proposed Ballivor Wind Farm through:

- Door to door house calls in the vicinity of the proposed wind farm
- Community Liaison Officer
- Project Clinic (by appointment)
- Organised visits to Mountlucas Wind Farm
- Dedicated project website www.ballivorwindfarm.ie

About Bord na Móna

Established in 1934 as the Turf Development Board, renamed Bord na Móna in 1946, the Company committed itself over 80 years ago to delivering sustainable industry to Ireland using indigenous resources. Ireland's urgent need to support positive climate action measures means the company is now managing its land in a very different way.

As part of its Brown to Green Strategy, Bord na Móna is implementing an extensive peatland rehabilitation programme and expanding its new low carbon operations. A key objective of this strategy involves using the land to continue to underpin Ireland's energy independence by developing green, sustainable energy sources to assist with Ireland's commitment to achieve 70% renewable electricity by 2030.

Further Information (contact details)

Address: Ballivor Wind Farm Project Team, Bord na Móna Powergen, Main Street, Newbridge Co. Kildare. Website: www.ballivorwindfarm.ie E-mail: ballivorwindfarm@bnm.ie **Phone:** 087-7087022

