Bord na Móna | sse Renewables

Proposed Bellair Wind Farm

Summer 2025

Powering
Green Energy
Together

Frequently asked questions

1. **How many turbines are proposed for the development?**

   As the project is at an early stage, the number and location of turbines has not yet been determined.

2. **Where will the power from the proposed wind farm go?**

   The electricity generated by the turbines would be transmitted directly onto Ireland's National Grid which is managed by EirGrid for distribution around the country. The proposed development will also make a significant contribution to Ireland's Climate Action Plan 2024, which has a set a target of 9GW of onshore wind capacity by 2030.

3. **What works are the project team currently undertaking?**

   Over the coming months, in order to determine the extent of the proposed development the project team will undertake a number of on-site surveys on Bellair North and Bellair South Bogs, such as ecology surveys, ornithology surveys, aquatic surveys, heritage surveys and site investigation works. Additionally the project team will also commence a series of off-site surveys, such as noise monitoring at sensitive receptors around the site and a range of environmental baseline surveys of the proposed grid connection and proposed haul routes.

4. **What information will be provided at the next stage of public consultation?**

   The draft wind turbine layout will be available at the second round of public consultations and will provide detail on the setback distance, location, height and number of proposed turbines.
   The project team will also have a subset of photomontages available that will show what the proposed development may look like from the local area.

   For more information on photomontages please refer to page 12.

Introduction

In March 2024, BnM and SSE Renewables, two leading low-carbon energy providers, announced their formation of a joint venture to develop a series of onshore wind energy projects. The proposed Bellair Wind Farm will be developed as part of this joint venture and will contribute towards the goals set out in Ireland's Climate Action Plan 2024 and will also offer new economic opportunities across the region. Working together, both companies will leverage their extensive expertise, resources, and presence across Ireland to generate positive outcomes for communities, local economies and climate change. The partnership will have strong commitments to community investment, delivering new public amenities where possible, and contributing to biodiversity net gain across all sites.

About BnM

BnM is a leading renewable energy provider supporting Ireland's journey to net zero by delivering secure, renewable energy for homes and businesses across the country.

Working with our landbank, strategic partners and local communities we are building a 5GW renewable energy pipeline, including onshore and offshore wind, solar, biomass and biogas projects – enabling industrial growth while contributing to our sustainable future.

BnM has been serving communities across Ireland for over 90 years. Today we continue to support business and local communities not only by safeguarding renewable energy supply, but also through our dedicated programme of community initiatives including community benefit funds, Mountlucas Wind Farm, Lough Boora Discovery Park, our business accelerator *Accelerate Green*, our Pathways to the Future educational supports and other initiatives.

For more information about BnM visit: bnm.ie

About SSE Renewables

SSE Renewables is a leading developer and operator of renewable energy in Ireland, operating some of the largest onshore wind farms on the island including the 174MW Galway Wind Park in Connemara and the 73MW Slieve Kirk Wind Park outside Derry City.

Part of FTSE100-listed energy infrastructure company SSE plc, its strategy is to lead the transition to a net zero future through the world-class development, financing, construction and operation of clean power assets across a diverse mix of renewable technologies.

SSE is delivering cleaner, more secure homegrown power assets to increase its operational renewable generation capacity from 5GW today to up to 9GW by 2027 as part of an almost €25bn clean energy plan, the five-year Net Zero Acceleration Programme (NZAP) Plus. This includes delivery of the world's largest offshore wind farm in construction.

SSE Renewables has a team of around 2,000 renewable energy professionals focused on championing clean energy delivery across the markets in which it operates. These include its core market focus in the UK and Ireland, as well as in selected markets in Continental Europe and Japan.

The Proposed Development - Bellair Wind Farm

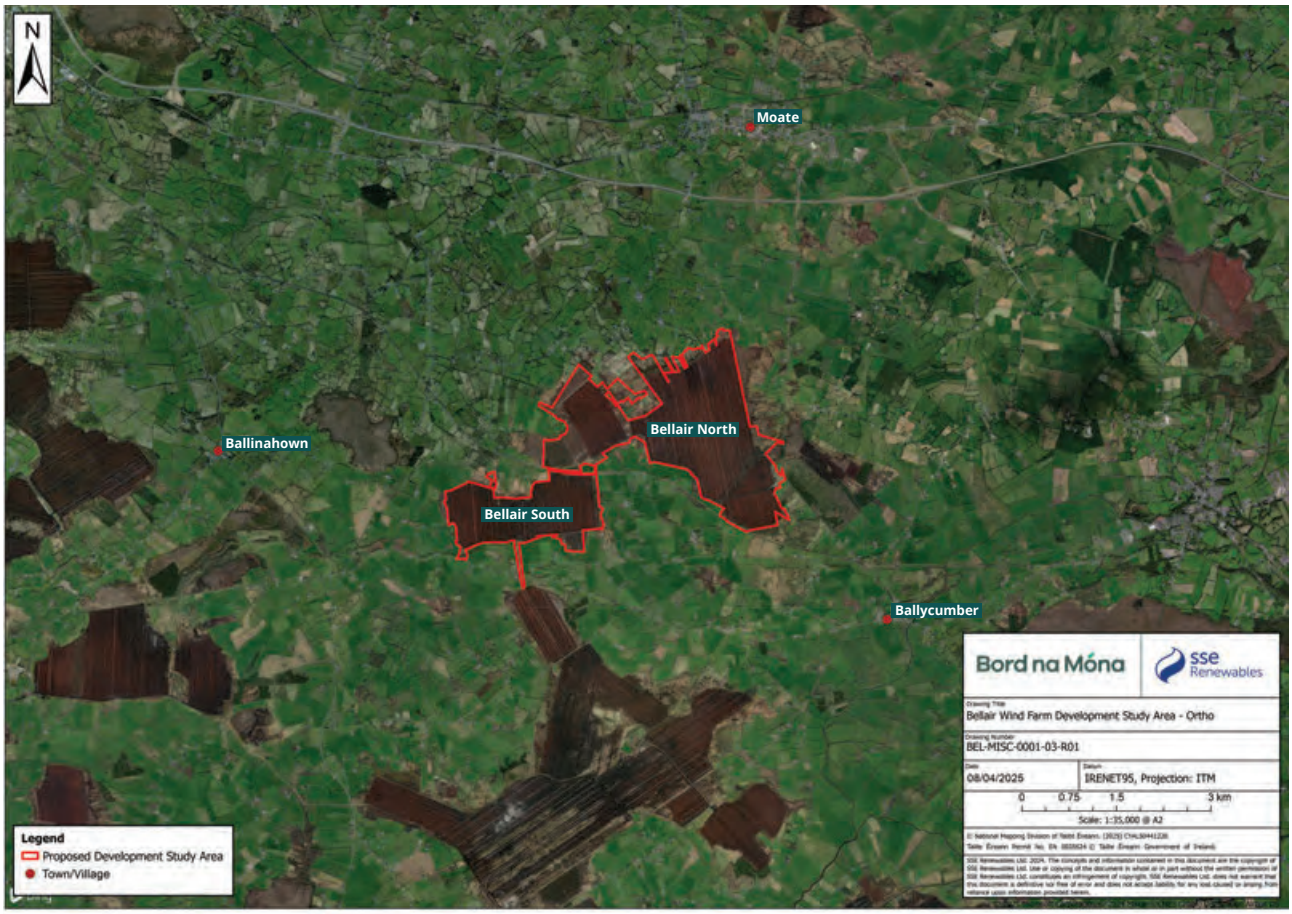


Figure 1: Study Area for proposed Bellair Wind Farm

The Development Study Area (as shown in Figure 1 above) for the proposed Bellair Wind Farm is on the Bellair North and Bellair South Bogs located in County Offaly and County Westmeath. The proposed development is adjacent to the communities of Ballinahown, Ballycumber, Castledaly, Moate and Tubber. As the project is at an early stage, the number and location of turbines has not yet been determined.

The development of a wind farm on these bogs would continue the long tradition of energy production in a new, increasingly sustainable form. The electricity generated by the turbines would be transmitted directly onto Ireland's National Grid which is managed by EirGrid for distribution around the country.

BnM's peatlands offer a number of advantages for the development of onshore wind farms, which include:

- Significant scale, and are present in large blocks
- Industrial, brown-field sites, suitable for redevelopment
- Open, unenclosed landscapes with good wind characteristics
- Linked by rail or road passageways, suitable for cable connection
- Generally flat and well drained, with minimal dangers of land slippage
- Proven delivery of this type of development, as demonstrated by Bruckana, Mountlucas, Cloncreen and Oweninny Wind Farms.

Irish Government Policy on Renewable Energy

Successive Governments have been developing policy to chart a course towards ambitious decarbonisation targets for Electricity, Transport, Built Environment, Industry and Agriculture.

In March 2019, the Joint Oireachtas Committee on Climate Action published its cross-party report entitled, Climate Change: A Cross-Party Consensus for Action, which set out 42 priority recommendations in the area of climate action, including a target for 80 percent renewable electricity.

The Programme for Government 2020 details how energy will play a central role in the creation of a strong and sustainable economy over the next decade. The reliable supply of safe, secure and clean energy is essential in order to deliver a phase-out of fossil fuels. We need to facilitate the increased electrification of heat and transport. This will create rapid growth in demand for electricity which must be planned and delivered in a cost-effective way.

The Irish Government supports the use of Ireland's wind resources to meet our renewable energy targets. Outlined below is some of the most recent relevant Irish Government Policy:

National legislation

- The Climate Action and Low Carbon Development (Amendment) Bill 2021 will support Ireland's transition to Net Zero and achieve a climate neutral economy by no later than 2050. It will establish a legally binding framework with clear targets and commitments set in law, and ensure the necessary structures and processes are embedded on a statutory basis to ensure we achieve our national, EU and international climate goals and obligations in the near and long term.
- The Climate Action Plan 2024 provides a road map for taking decisive action to halve Ireland's emissions by 2030 and reach net zero by no later than 2050. Central to achieving these goals is the strategic increase in the share of renewable electricity to 80% by 2030. This includes ambitious targets of deploying 9GW of onshore wind, 8GW of solar power, and at least 5GW from offshore wind projects. These measures are vital not only for reducing electricity sector emissions but also for enabling the broader electrification of other sectors, thus multiplying the impact on overall emissions.
- Department of Housing, Planning and Local Government is currently preparing an update to the 2006 Wind Energy Development Guidelines and in December 2019 published revised draft Wind Energy Development Guidelines for consultation.
- Department of the Environment, Climate and Communications is currently drafting the Renewable Electricity Spatial Policy Framework to support the delivery of increased onshore renewable electricity generation which will provide direct economic benefits to counties and regions across the country.
- Department of the Environment, Climate and Communications has launched the Accelerating Renewable Electricity Taskforce to identify, coordinate, and prioritise the policies required to fast-track and increase deployment of onshore renewable electricity generation and supporting technologies and ensure that barriers to the implementation of those policies are removed or minimised to the greatest extent possible, in order to meet the 2030 Climate Action Plan targets.
- The National Development Plan 2021 – 2030 includes commitments to increase the share of renewable electricity up to 80% by 2030. Regular Renewable Electricity Support Scheme (RESS) auctions will deliver competitive levels of onshore wind and solar electricity generation.

Need for Wind Energy

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.

The National Development Plan 2021 – 2030 includes commitments to increase the share of renewable electricity up to 80% by 2030. It is acknowledged that wind energy will provide the main component of Ireland's renewable electricity at that time. The proposed development is likely to be operational before 2030 and would therefore contribute to this 2030 target.

The Climate Action Plan 2024 (CAP) was approved by government on 21st May 2024. 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 9GW 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.

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:

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

Draft Revised Wind Energy Development Guidelines in Ireland

In 2019, Revised Wind Energy Development Draft Guidelines were issued for public consultation. Key aspects of these Draft Guidelines 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, as set out in the 2006 Wind Energy Development Guidelines.

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 in general, 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.

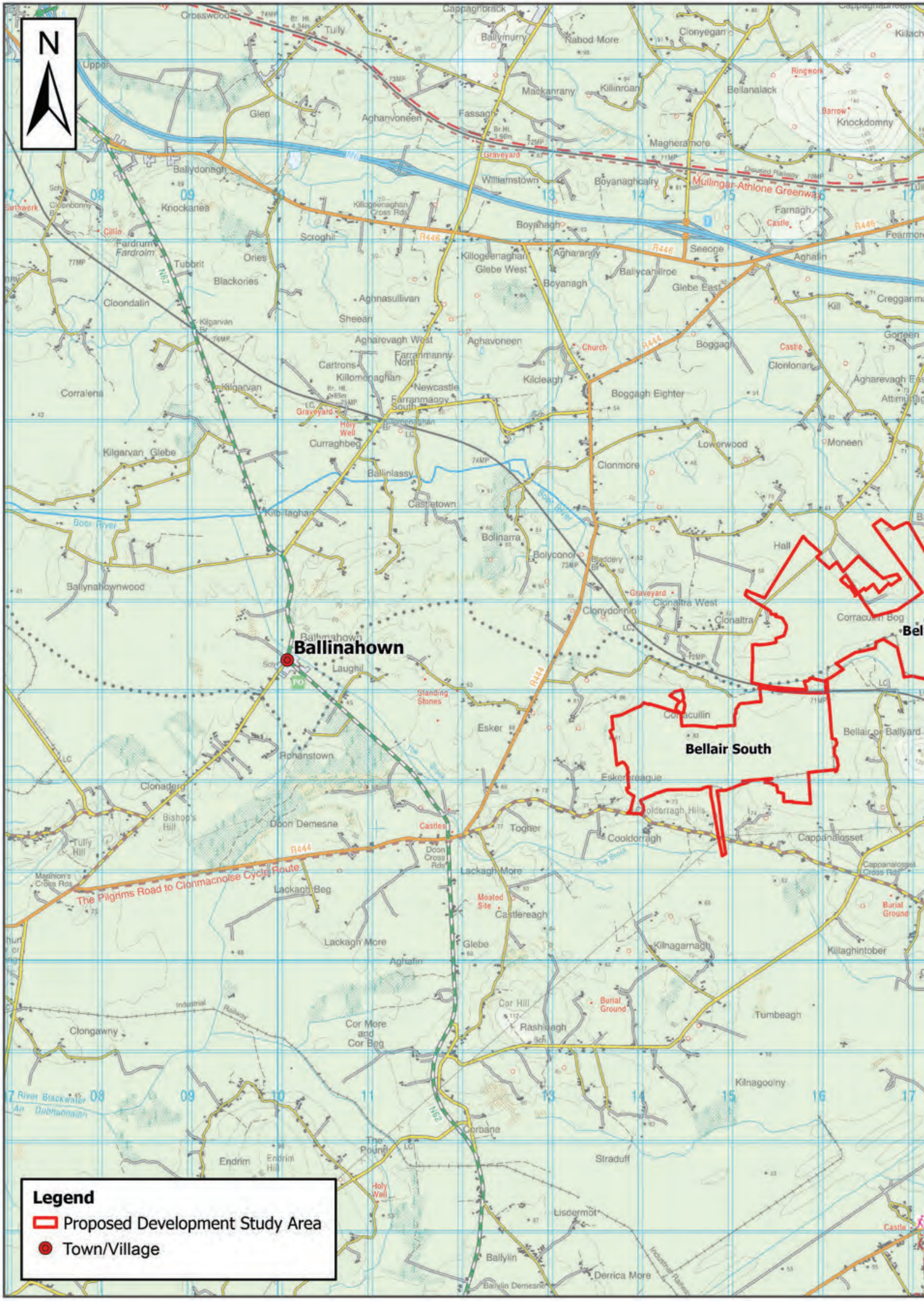
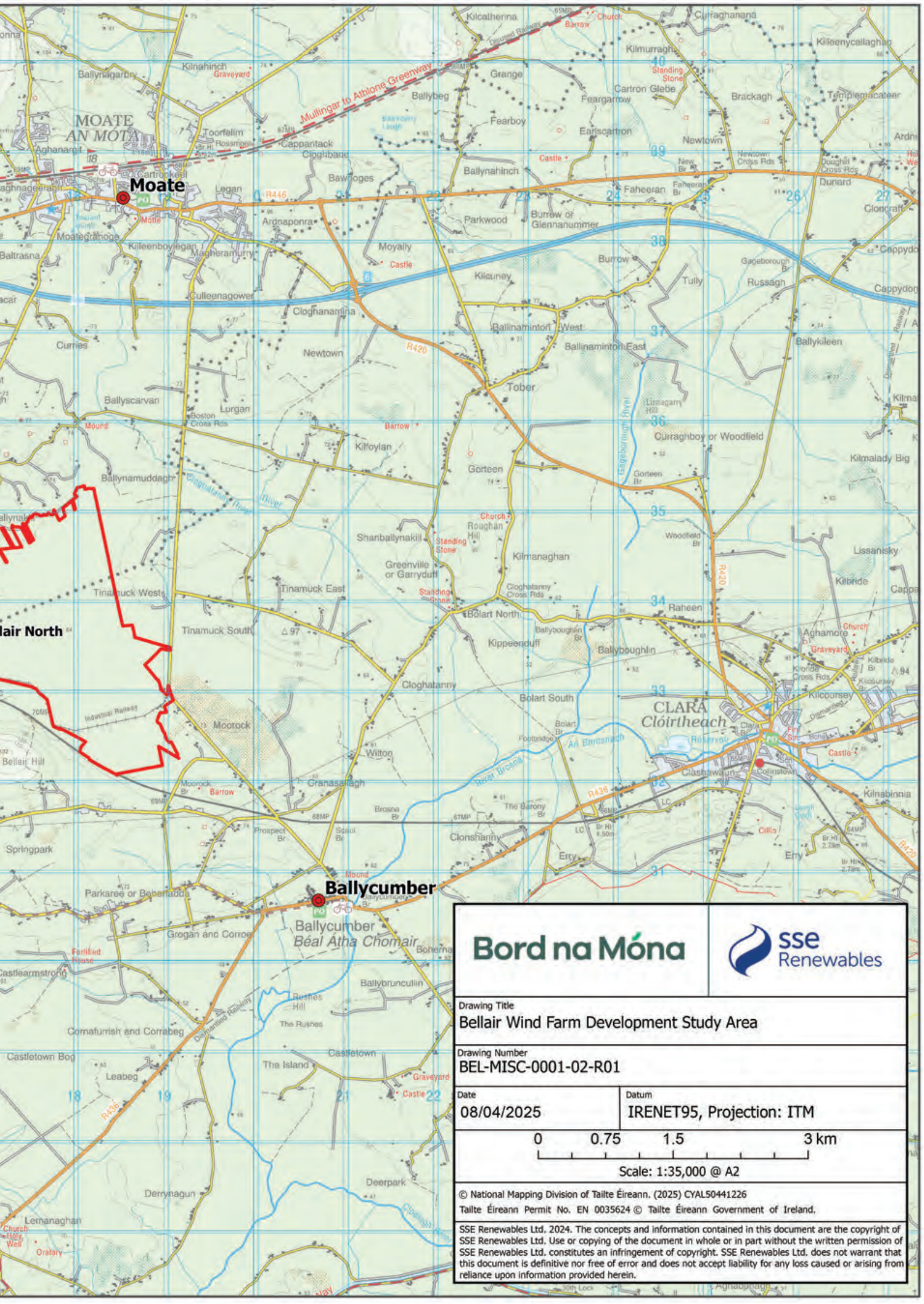


Figure 2: Bellair Wind Farm Development Study Area



How Wind Turbines Operate

Almost all wind turbines producing electricity consist of vertical blades which rotate around a horizontal axis. Most modern wind turbines have three blades which face into the wind when extracting the energy needed to generate electricity. The blades are attached to a hub which in turn is connected to a generator by means of a gearbox or direct drive mechanism, which are located inside a protective container called a nacelle. This is where the electricity is made. As the blades are turning, they spin the generator to create electricity. A generator is a machine that produces electrical energy from mechanical energy, whereas an electric motor does the reverse.

The nacelle is the large box at the top of the tower where all the main electrical components are located. Figure 3 shows an image which depicts the main elements of a modern wind turbine. Many of the key working parts of a wind turbine are located in the nacelle at the top of the tower and their enclosure within the nacelle reduces noise from the turbine. A schematic of a wind turbine nacelle is shown in Figure 4, with the key components labelled for easy reference.

Tubular towers, which support the nacelle and rotor, are usually made of steel and taper from their base to the top. The entire nacelle and rotor are designed to swing around, or 'yaw', in order to face the prevailing wind and extract the maximum amount of energy.

A modern wind turbine is designed to produce high quality electricity whenever enough wind is available. Wind turbines can operate continuously, unattended, and with low maintenance, with a design life of over 20 years. They are highly reliable, with operating availabilities (the proportion of the time in which they could generate if wind conditions were suitable) of up to 98%. Few other electricity generating technologies offer a higher availability.

Figure 3: Image of a typical Wind Turbine.

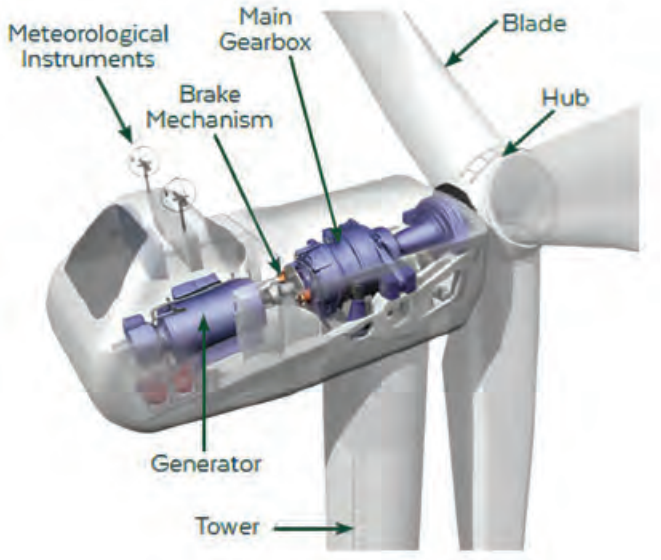


Figure 4: Schematic of a typical Wind Turbine nacelle.

Strategic Infrastructure Development Planning Process Explained

For most large-scale projects, a key consideration 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).

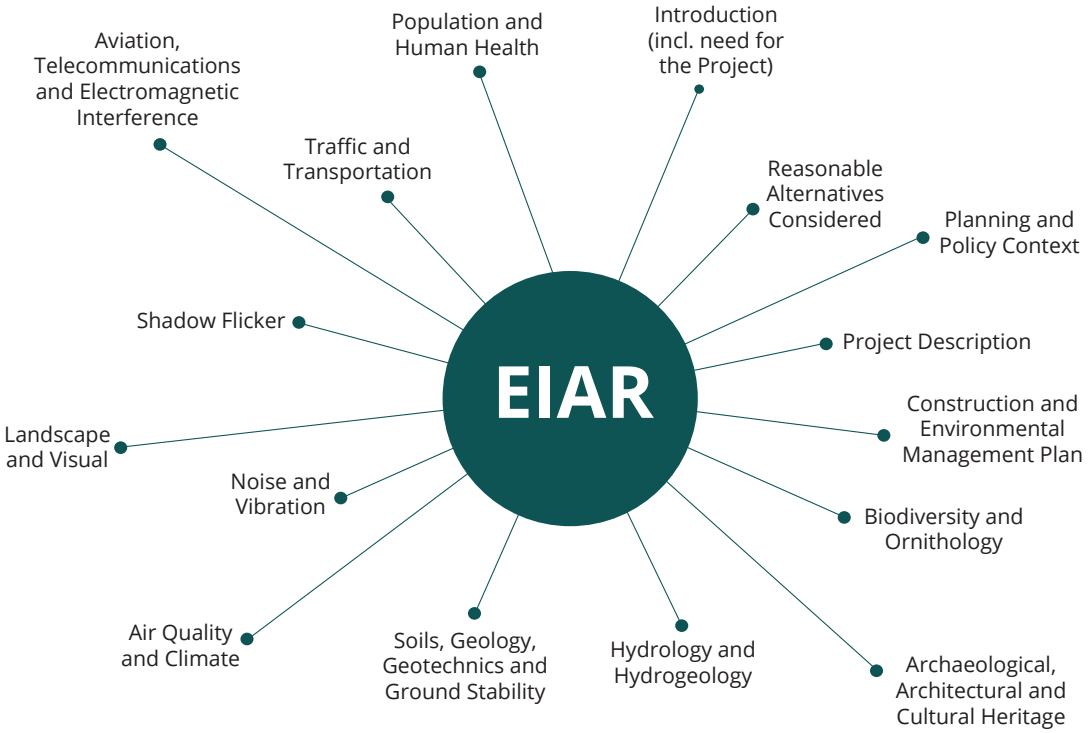
The Project Team will need to go through a pre-planning consultation process with An Bord Pleanála to determine with certainty who the consenting authority will be. Irrespective of the Consenting Authority, it is our view that an Environmental Impact Assessment Report and a Natura Impact Statement will be required as supporting documentation to the planning application. To learn more about the SID process please visit: www.pleanala.ie/en-ie/strategic-infrastructure-development

SID Projects	
Planning application to An Bord Pleanála.	Environmental Impact Assessment mandatory.
Non-SID Projects	
Planning application to local County Council.	Environmental Impact Assessment mandatory in some cases.

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) 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) which will accompany the planning application documentation submitted to the appropriate Consenting Authority for consideration. The EIAR will comprise the following as a minimum:



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 BnM's 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 provided at the second round of public consultations.

Figure 5: Sample of photomontage prepared and as built image of Mountlucas Wind Farm.

Benefits of the Development

The proposed development will give rise to a range of benefits at different levels:

At a Local Level, benefits arising from the construction and operation of the proposed wind farm will include:

- A Community Benefit Fund.
- 100 to 120 jobs at peak construction, followed by a number of long term, high quality technical jobs in operations and maintenance.
- Substantial commercial rates paid to the relevant County Council, and investment in the wider economy through tax and exchequer contributions.
- Upgrades to the road infrastructure in the vicinity of the wind farm (as required).
- Indirect employment created through the sub-supply of a wide range of products and services.

At a Regional Level, the new development will help to supply the rising demand for electricity, resulting from renewed economic growth in the region. During construction, additional employment will be created in the region through the supply of services and materials to the wind farm.

At a National Level, the new development will play a significant role in contributing to the country's national renewable electricity production and carbon emissions reduction targets by 2030, while also supporting a growing economy and population. During operation, the wind farm will eliminate the need to generate the equivalent amount of electricity from fossil fuels, and it will therefore help to reduce total national greenhouse gas emissions. In doing so, it will reduce our dependence on external energy sources, help improve our energy security of supply and make a major contribution to Ireland's Climate Action Plan 2024, which has set a target of 9GW of onshore wind capacity by 2030.

Bracknagh Heritage Society - community mural.

Killannin GAA for All – funding kits.

Ballyfore GAA - completed fence around Community Walking Track.

Bunroe – funding for EV charger.

Potential Wind Farm Recreational Amenities

A good example of one of BnM's existing wind farm amenity facilities is Mountlucas Wind Farm in North Offaly. The site consists of over 20km walkway / cycleway around the wind farm in addition to interpretative signage, sensory garden, outdoor exercise equipment and a learning hub which is utilised by various school and college groups for educational purposes and day trips. It is hoped to incorporate some similar amenities as part of this proposed development.

Another example is SSE Renewables Galway Wind Way, a range of recreational trails at Galway Wind Park. The 48km of trails across six distinct routes through the wind farm include a wheelchair accessible route and take you through the heart of Connemara. While exploring the routes, walkers can learn how the landscape of the Cloosh Valley has changed over hundreds of years.

How You Can Get in Touch

Community Liaison Specialist,
Enda: 087 0579141

The proposed Bellair Wind Farm will benefit from participation by all interested parties during each stage of the development.

Call us
If you wish to make a comment or require further information about the proposed wind farm please contact the project's Community Liaison Specialist, Enda: 087 0579141.

Email us
Email us any comments or queries via: info@bellairwindfarm.ie

Write to us
Bellair Wind Farm Community Relations Team,
Bord na Móna, Main Street, Newbridge, Co. Kildare.

Join our mailing list
Keep informed of all project updates by signing up to our project mailing list. Please visit the dedicated project website to complete the sign-up form: www.bellairwindfarm.ie

Note: The dedicated project website will go live on the date of the first public consultation, 17th June 2025.

Community Engagement Sessions

1st Public Consultation: Summer 2025

We intend to hold a series of Community Engagement Sessions during June 2025 in the locality of the proposed development as follows:

Tuesday 17th June 2025	**5pm - 8.30pm**	Ballycumber GAA Activity Centre, Ballycumber GAA, Moorock, Ballycumber, Co. Offaly, R35 T1H5
Wednesday 18th June 2025	**5pm - 8.30pm**	Ballinahown Community Hall, Ballinahown, Co. Offaly, N37 D768
Tuesday 24th June 2025	**5pm - 8.30pm**	The Carmelite Centre, The Newtown, Moate, Co. Westmeath, N37 AW24

Learn more at www.bellairwindfarm.ie

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