RWE

Shancloon Proposed Wind Farm





The Need for Wind Farms in Ireland

The Government's Climate Action Plan 2023 (CAP23) is the second annual update to Ireland's Climate Action Plan 2019.

This plan implements the carbon budgets and sectoral emissions ceilings and sets a roadmap for taking decisive action to halve our emissions by 2030 and reach net zero no later than 2050. To achieve these goals we must harness our massive renewable natural resources. CAP23 provides us with greater energy security, stable prices, more jobs, and regional development, particularly to rural communities.

Electricity will play an important role in the decarbonisation of various sectors through electrification including transport, heating, and industry. Among the measures in the plan is to increase the proportion of renewable electricity to up to 80% by 2030. A target of 9 GW from onshore wind, 8 GW from solar, and at least 5 GW of offshore wind energy has been set to be achieved by 2030.

To get us to 9GW of onshore wind we will need to double the installed capacity of onshore wind in Ireland from over 4,400MW to 9,000MW. The development of new onshore wind farms are crucial as we move away from our reliance on fossil fuels and towards the electrification of transport, heat and other areas.

While offshore wind will play a part in these 2030 targets (rising from 25MW in 2021 to 5,000MW in

2030), onshore wind is still fundamental to the decarbonisation of the electricity market in Ireland.

Onshore Wind

The first onshore wind farm in Ireland was built in Co Mayo in 1992. Now there are about 400 onshore wind farms across Ireland capable of generating over 4,400MW of electricity.

Onshore wind energy makes sense for Ireland. Ireland has enormous wind generation potential. Wind energy is a clean, non-polluting energy source which does not produce harmful emissions or greenhouse gases in its generation.

According to the SEAI, wind energy is currently the largest contributing resource of renewable energy in Ireland. It is both Ireland's largest and cheapest renewable electricity resource. In 2021 wind provided over 85% of Ireland's renewable electricity and 34% of our total electricity demand.

In a recently published analysis by energy specialists Baringa ("Cutting Carbon, Cutting Bills: Analysis of gas savings delivered by wind farms in 2022), wind energy provided 34% of Ireland's total electricity demand, saving Ireland €2 billion on gas imports.

Onshore wind can help us achieve our renewable energy and climate action goals. Onshore wind development will also continue to provide investment and employment nationally, regionally and locally, and particularly in rural communities.

Why Onshore Wind Farms?

- CAP23 states that by 2050 our homes, cars, workplaces, shops and schools will be powered by electricity generated in Ireland from a renewable energy source and by 2030 that 80% of electricity generated in Ireland is to come from renewable energy
- An onshore wind farm generates clean, renewable electricity and is Ireland's cheapest method of electricity production (SEAI)
- Irish consumers avoided paying €2 billion for gas in 2022 because the country's wind farms provided 34% of our electricity. (Baringa report "Cutting Carbon, Cutting Bills: Analysis of gas savings delivered by wind farms in 2022.")
- Ireland has the second highest wind resource in Europe and wind energy is the largest contributing resource of renewable energy in the country (SEAI)
- Every MW generated is the equivalent of powering approximately 625 homes for a year (SEAI)
- Ireland has invested over €7 billion on developing onshore wind energy to date (WEI)
- The wind industry supports over 4,000 jobs in Ireland and annually pays more than €30 million in commercial rates to local authorities (WEI)
- The amount of fuel and carbon costs displaced by wind power across the island of Ireland from January to September 2022 was €1,890 million
- The amount of CO₂ avoided through the use of renewable energy in 2020, was 6.6 million tonnes of CO₂ (MtCO₂). This was equivalent to the CO₂ emissions of over half of all Irish homes. (SEAI)





Proposed Shancloon Wind Farm

RWE is currently investigating developing projects in many areas around the country, including around Shancloon in Co. Galway.

The proposed Shancloon Project could generate renewable energy for use in the national grid helping to displace thousands of tonnes of carbon dioxide over its lifetime. It will lead to cheaper electricity, energy security and help Ireland meet its challenging climate change and decarbonisation targets.

It could also lead to tangible local benefits such as employment opportunities during the construction and operation phases, possible payments under the Renewable Energy Support Scheme (RESS) to a Community Benefit Fund, or a specific Community Benefit Fund from RWE, and indirect benefits to the wider community from business rates paid to Galway County Council from the wind farm.

What Is Happening Now?

The RWE Development Team has identified an initial study area for the proposed Shancloon Project, for up to 13 wind turbines (with a capacity of up to 86MW) with associated internal roads, an

electrical substation, underground cabling and ancillary works. Environmental Impact Studies have commenced within the study area.

Public Consultation

For most large projects a consideration is whether the development is considered a Strategic Infrastructure Development (SID) or not. The Planning and Development (Strategic Infrastructure) Act 2006, says that an 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".

At this stage of the project we estimate that the output of the proposed Shancloon wind farm will be up to 86MW and therefore we envisage the development will be over 50MW in capacity and will likely fall under the SID process. RWE will need to go through a pre planning consultation process with An Bord Pleanála to determine who the consenting authority will be.

Under the Planning and Development (Strategic Infrastructure) Act 2006 an SID planning application, does not go to the local planning authority (Galway County Council), but instead is submitted directly to An Bord Pleanála (ABP) for a decision. However anyone can submit comments on the proposed application to ABP regardless of which planning authority it falls under.

RWE is committed to community engagement in all of its projects and is now entering into a pre-planning consultation period with stakeholders, especially local residents, to answer questions and gather feedback on the proposed project.

We hope that we will be able to visit you individually as we undertake our usual door to door engagement. You can of course call us on 087 151 9219 with any queries you may have. We can also facilitate Zoom or Skype calls.

We welcome email correspondence to our dedicated project email address (shancloon@rwe.com) or by post to our office in Kilkenny at Shancloon Proposed Wind Farm, RWE Renewables, Desart House, Lower New Street Co. Kilkenny, R95 H488.

We also have a project website which will be updated with relevant information as the project progresses. Please find it at www.rwe.com/shancloon





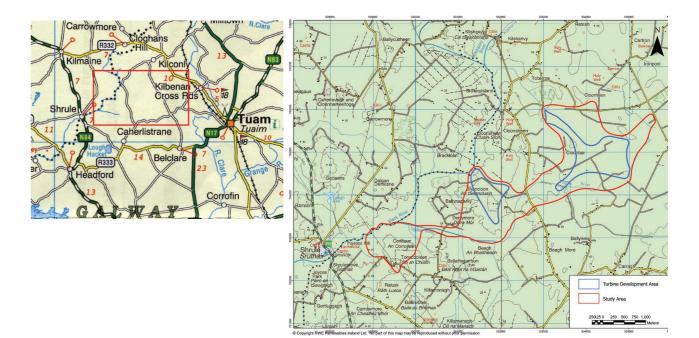
Next Steps

All feedback received from this pre-planning consultation and engagement with the local community will help inform the design of the proposed wind farm.

Once we have incorporated your feedback into the proposed project we will reach out to the community once again to update you.







Why is Shancloon Suitable for a Wind Farm?

Identifying a site suitable for a wind farm encompasses several considerations as outlined in more detail below in the section on "How Developers Decide Where a Wind Farm might be Placed".

In summary, the proposed Shancloon project is located in an area of appropriate wind speeds with suitable available land on which to develop a wind farm. The land is in an area designated in the Galway County Council Local Authority Renewable Energy Strategy (June 2022) as "Open to Consideration" for wind farm development.

The proposed Shancloon project site does not contain areas designated as European Protected Natura 2000 sites, meaning that it is not a Special Area of Conservation (SAC) or a Special Protection Area (SPA) and also does not contain any nationally designated Natural Heritage Areas (NHA).

The proposed site occupies a sufficient area of land to accommodate a wind farm while keeping an appropriate distance from dwellings in line with government guidelines, that of 4 times tip height which for a 180m tip height turbine is 720m.

Facts about the Proposed Shancloon Wind Farm

- The proposed wind farm is located approximately 12km West of Tuam, 8.5km North East of Headford and within 3.5km of the Co Mayo border.
- The study area comprises lands at Shancloon, Cloonbar, Beagh More, Derrymore, Cloonteen and Cloonsheen and measures approximately 689 hectares.
- The majority of the proposed wind farm area under consideration consists of agricultural land and cutover bog. These land uses could continue with a wind farm development at the site.

- Based on the results of initial studies it is considered that the proposed wind farm could accommodate up to 13 turbines.
- Each wind turbine could be between 150m and 180 metres in height (from the turbine base to the top of the turbine blade, when blades are in an upright position).
- Based on current available turbine technology, the capacity of each proposed turbine could be between 4.5MW and 6.6MW resulting in a total estimated capacity for the proposed wind farm of between 59MW and 86MW.

What Benefits are there for the Local Community?

If Shancloon Wind Farm is granted planning permission, RWE is committed to setting up a community benefit package to support the residents living closest to the project. We will work closely with the community to tailor this package of financial support ensuring that local people are at the heart of how this support works and how decisions are made.

If the project is successful in the Renewable Energy Support Scheme (RESS) auction and a community benefit fund is required at part of RESS, RWE will deliver a community benefit fund in line with all requirements of RESS.

Community Benefit Fund & the RESS Scheme

In 2020 the Government launched the Renewable Electricity Support Scheme (RESS) for communities living close to onshore wind farms. A key feature of RESS is that all renewable electricity generation projects must establish a Community Benefit Fund to be used for the wider economic, environmental, social and cultural well-being of the local community.

RESS currently stipulates that for every megawatt hour (MWh) of electricity generated, each wind farm project will contribute €2 to a Community Benefit Fund every year (as defined under the current RESS2 T&Cs) of the project for the full duration of the RESS support, typically 15 years. This fund will be under the control of the local community. The fund is also governed by the Terms and Conditions of RESS which includes a list of stipulations that the fund must adhere to.

The proposed wind farm in Shancloon has a potential installed capacity of up to 86MW. If future terms and conditions are similar to RESS2 requirements, this could mean that up to €526,000 is paid into a community fund each year (based on the amount of electricity that could be generated by the wind farm every year). The amount of funding will be dependent on the final capacity of the wind farm and the amount of electricity generated by the turbines when operational.

The current Government RESS Guidelines stipulate that the Community Benefit Funds generated will be distributed as per the guidelines which are prescribed as follows:

- **A.** "In respect of Onshore Wind RESS 2 Projects, a minimum of \in 1,000 shall be paid to each household located within a distance of a 1 kilometre radius from the RESS Project"
- B. "A minimum of 40% of the funds shall be paid to not-for-profit community enterprises whose primary focus or aim is the promotion of initiatives towards the delivery of the UN Sustainable Development Goals, in particular Goals 4 (Quality Education), 7 (Affordable and Clean Energy), 11 (Sustainable Cities and Communities) and 13 (Climate Action)"
- **C.** "A maximum of 10% of the funds may be spent on administration. This is to ensure successful outcomes and good governance of the Community Benefit Fund. The Generator may supplement this spend on administration from its own funds should it be deemed necessary to do so"
- **D.** "The balance of the funds shall be spent on initiatives successful in the annual application process, as proposed by clubs and societies and similar not-for-profit entities, and in respect of Onshore Wind RESS2 Projects, on "near neighbour payments" for households located outside a distance of 1 kilometre from the RESS 2 Project but within a distance of 2 kilometres from such RESS 2 Project"

Community Benefit Fund post 15 Years - RWE extra Community Benefit

In addition to the 15 years of Community Benefit Funds as stipulated in RESS, RWE will commit to maintaining a community benefit fund for the full lifetime of the windfarm (up to 35 years) in line with best practice and guidelines.

Administration of the Fund

As per the current RESS Guidelines, each Community Benefit Fund will be administered transparently by an independent organisation and any administration costs will be paid out of the Community Benefit Fund (up to 10% of the fund).

RWE supports the development of a funding process that puts decision making firmly into the hands of local communities. A panel of local community representatives would form a committee to decide how best to invest the fund in a variety of projects that could benefit residents, local businesses and the community. This could include skills development and creating job opportunities, tourism initiatives and area regeneration projects.





Jobs and Supply Chain Opportunities

Up to 100 jobs could be created during the 1.5 - 2 years of construction and then operation of the proposed Shancloon Wind Farm. The majority of construction materials will be sourced locally where possible, promoting employment in the area.

Once the main civil engineering and turbine contracts have been placed, there will be opportunities for local supply chain companies to tender for contracts including traffic management, materials supply, plant hire, fencing, fuel supply, security, waste management, signing & lighting, telecommunications, drainage and hospitality.

Business Rates

A significant wider benefit of the proposed Shancloon Wind Farm would be the annual business rates contribution paid to Galway County Council (based on the installed capacity of the project) to be paid for the full operational life of the wind farm. These business rates will significantly benefit the wider local economy and could represent an annual contribution of approximately €18,000 per MW per annum to the County, equating to between approximately €1 million and €1.5 million annually.

Wind Energy Development Guidelines

Wind farm design in Ireland is governed by a series of Governmental and environmental planning laws, regulations and guidelines including the Wind Energy Development Guidelines (2006), the Planning & Development Act & Regulations and the EPA Environmental Impact Assessment Report (EIAR) & Appropriate Assessment (AA) Guidelines. These take account of many factors and criteria. RWE will adhere to the latest planning laws and guidelines.

The Department of Housing, Planning and Local Government (DHPLG) published "Draft Revised Wind Energy Development Guidelines" in December 2019 and these draft guidelines were under public consultation until 19th February 2020. At the time of production, the 2019 Draft Revised Wind Energy Development Guidelines are not yet finalised and may be subject to further

change on foot of completion of the public consultation process, so the relevant guidelines remain those published in 2006.

As prescribed under EU and National Legislation, proposed wind farm developments with more than 5 turbines or having a total output greater than 50MW, must undergo an Environmental Impact Assessment (EIA) and require the preparation and submission of a comprehensive Environmental Impact Assessment Report (EIAR) by a prospective planning applicant. Subject to screening for the requirement for an Appropriate Assessment (AA), proposed wind farm developments may also require the preparation of a Natura Impact Statement (NIS). The results of the EIAR, AA screening and/or NIS feeds into the decision process in designing the layout of a wind farm.





RWE Pledge - "A Living Legacy"

RWE has pledged that the company will strive to leave a living legacy behind on each of its sites, not just in the development of clean renewable energy but also by increasing biodiversity and habitats while helping Ireland reduce the country's carbon emissions. RWE has pledged that it will deliver positive biodiversity elements in each of its new wind farm projects as they are developed.

During the planning and construction of a wind farm it is often possible to include improvements to

biodiversity within the project boundary, such as the development of ponds or wetland areas, wildflower meadows, planting of native trees, shrubs, butterfly & bird friendly zones and provision of "wild" areas on the site.

RWE will work with local landowners and ecologists to develop areas within the wind farm that can be rewilded or otherwise enhanced and improved for the benefit of wildlife, enabling RWE leave a living legacy behind at each of its wind farms.



How Developers Decide Where a Wind Farm might be Placed

1

Assess the areas of wind potential ranging from areas with extensive wind energy resources to lesser wind resources using SEAI's Wind Atlas for Ireland.

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- strategically for wind development Plan to identify those areas which have been zoned strategically for wind development by the County Council / local planning authority. In conjunction with the plan prepare an evaluation of the landscape and its sensitivity for wind energy developments.
- 3

Identify suitable lands in the area large enough to accommodate a wind farm, while maintaining an appropriate distance from houses in line with national guidance and best practice.

4

Identify any Natura 2000 Sites or national environmentally designated sites in the area are identified and avoided.

(5

Integrate the areas identified in the above steps with information regarding accessibility to electricity transmission and distribution grids.

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After these initial investigations, a potential area for development is identified and the next step is to identify 'constraints'. A constraint is a limiting factor on selection of a site such as nearby houses, cultural heritage, environmental or technical / physical factors (mountains / rivers / lakes/ geology, etc.).

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These are then mapped and the remaining parcels of land that could potentially accommodate a wind farm are identified.

Environmental Impact Assessment Report (EIAR)

The EIAR is a document that describes the proposed development and reports on all issues relating to the potential impact of the proposed wind farm on the environment. It forms part of the planning application which is submitted for consideration to the Local Authority or to An Bord Pleanála.

The Report includes many detailed chapters including Background to the Proposed Development, Site Selection and what the

alternatives might have been and a Description of the Project.

The Report looks at the direct and indirect potential effects of a project on the following factors: a) population and human health; b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; c) land, soil, water, noise, air and climate; d) material assets, cultural heritage and the landscape; e) the interaction between the factors referred to in points (a) to (d).

What makes up a Wind Farm?

A wind farm is made up of several structures including turbines, underground cabling from the turbines to an electrical substation and the substation structure itself. There would also be a network of roads on site linking the turbines and substation together for staff operations and maintenance.

A wind farm needs to be connected to the electricity grid which can be done either by linking to a suitable overhead powerline nearby or using underground cables to get the renewable energy to a nearby substation.

Wind Turbines

The wind turbines harness the wind energy and convert it to electricity before transporting it to the national grid for distribution. Generally the larger the turbine the more energy it can produce. In Ireland, wind farms are increasingly designed with smaller numbers of more powerful turbines to maximise the renewable wind energy from the site.



Access Roads

A network of access roads are needed to deliver the components to site and facilitate access by the operations team to the turbines for routine maintenance. We endeavour to use existing tracks and we aim to design roads along field boundaries to reduce potential impact. Landowners have use of these tracks once they are built.





Underground Cables

Each wind turbine is connected to the substation via an underground cable, generally running alongside the network of access roads.

Substation

All the electricity generated by the turbines is fed back through the underground cables to the substation before being transmitted off-site to the national grid network.





Your Views Matter To Us

We want to hear from the local community and provide you with the opportunity to find out more about the project, enable you to ask any questions and to feed your thoughts & concerns into the design evolution of the project.

More information can be found on the website at www.rwe.com/shancloon



Telephone **087 151 9219** and a member of our team will speak to you



Email us at shancloon@rwe.com



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RWE Renewables in Ireland

RWE Renewables Ireland (RWE) ranks among the largest companies in renewable power generation with its technology portfolio covering onshore and offshore wind farm projects, utility-scale photovoltaic (PV) solar power projects and energy or battery storage.

The Company has been in Ireland since 2016, and now has two offices, one in Kilkenny City and one in Dun Laoghaire, Co Dublin.

RWE's objective is to be a long-term energy partner for Ireland during the country's energy transition to zero carbon emissions. In line with this, RWE is aiming to further expand its portfolio in Ireland and is actively seeking new opportunities to expand the use of renewable energies with technologies that address the concerns about energy security, energy affordability and climate change.