

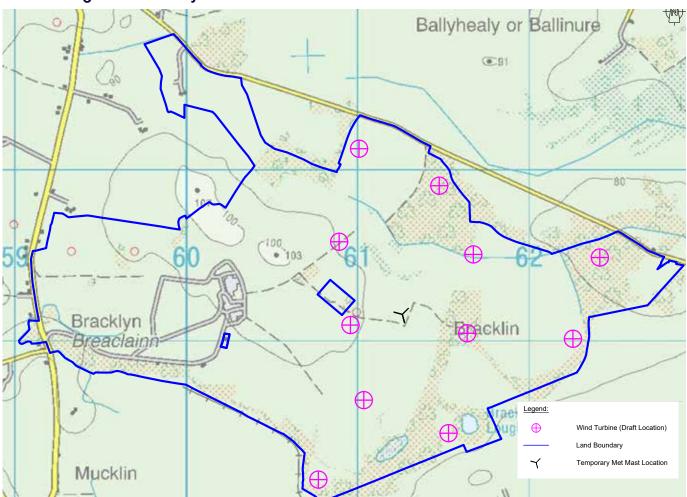
Bracklyn Wind Farm Project is a proposed wind energy development of approximately 11 wind turbines with a typical output of 5-6 Megawatts per turbine of renewable energy - enough to provide approximately 46,900\* Irish households with green energy every year. The proposed development is within the townland of Bracklin, Co. Westmeath.

A temporary 80 meter met mast has also been installed on the site over the past few weeks to collect wind speed, wind direction, temperature, humidity and air pressure, which will be used to predict and analyse the energy that the wind farm can produce on the site. The proposed development is being designed to the latest best industry standards and we are appealing to local residents to have their say at an early stage of the development so as to maximise the project benefits to the neighbouring community.

To book an appointment to attend one of our consultation clinics in July please contact us on freephone number 1800 140976

\*based on CRU 2017 annual report of 4,200KWhrs electricity consumption per household per annum based on an average dwelling.

## **Draft Design Turbine Layout**



## **Proposed Project:**

Assessment work at the proposed Bracklyn Wind Farm site has shown that it is capable of accommodating up to 60 Megawatts (MW) of installed generating capacity. The Project will essentially comprise of up to 11 wind turbines (5-6 Megawatts). Apart from the turbines themselves, the other principal components of the wind farm are the foundations to support the turbine towers, access roads, crane hard-standings, underground cables between the turbines, on-site electricity substation and an electrical connection to the appropriate node on the National Grid. The exact type of turbine that will be used has not yet been finalised, however in order not to underestimate any potential impacts, the largest physical dimensions of all of the wind turbines under construction have been used to assess the visual impact of the project. The maximum turbine envelope has a blade tip height of approx 180 meters.

It is intended to submit a planning application for the proposed project at the end of 2020.

## **Wind Energy - Climate Action**

Government policy has set a target for 70% of the electricity we consume by 2030 to be generated from renewable resources. Wind energy will be the main component of Ireland's renewable electricity by this time in order to play its part in achieving the European climate and energy ambitions.

## **How Wind Turbines Operate:**

Wind turbines convert the kinetic energy in wind to generate electricity. To create electricity from wind, the blades capture the wind which drives the shaft connected to a gear box, as shown in Figure 2.

The tubular towers, carrying the nacelle and rotor, are made of steel or concrete and taper from their base to the top. The nacelle which carries the generator and rotor are designed to rotate 360 degrees, or "yaw", in order to face the prevailing wind.

Wind
Sensors

Generator

Wind
Sensors

High-speed coupling
Mechanical brake

Gearbox

Pitch drive
Pitch bearing

Rotor main shaft
Main bearing

## **Safety**

Safety is our number 1 priority in the construction and operational phase of all our projects. There will be an opportunity to visit one of our operational wind farms to see how committed we are to health and safety by setting the highest standards.

### **Environment**

Wind power is a low-carbon energy source. When a wind turbine generates electricity it produces virtually zero carbon emissions. The development of clean wind energy avoids significant carbon dioxide (CO2) pollution. In 2019, wind energy met a record 32.5% of our electricity demand, the second highest in Europe and the highest in onshore wind.

# Winds as % Demand Republic of Ireland 2015 23% 2016 21% 2017 25% 2018 29% 2019 32.5%

\*\*Figures correct on 07/01/2020

\*\* 65 % renewable energy on the national power system at any given time, a milestone reached in April 2017. Bracklyn Wind Farm will supply the needs of approximately 46,900 \* homes with green energy every year, based on draft 11 turbine layout.



## **Benefits of the Development**

At National Level, the proposed Bracklyn Wind Farm will play a worthy part in assisting Ireland's commitment to increasing it's renewable energy sources in the post 2020 period with the production of renewable electricity. Our Government's new pledge on the 25 th March 2019 to generate 70% of electricity from renewable sources by 2030 is an increase from its previous target of 55% and will form part of the new Climate Action Plan that is being overseen by the present Minister for Communications, Climate Action, and the Environment. Our proposed Bracklyn project will contribute in reducing our total National greenhouse gas emissions. In doing so, it will reduce our dependence on external energy sources and help to improve our energy security of supply.

At Regional Level, this new proposed development will help to meet the rising demand for electricity especially renewable electricity, resulting from renewed economic growth in the Midlands. The construction phase will create additional employment in the region through the supply of services and materials to the proposed wind farm.

At Local Level, it will ensure the continuity of enterprise and employment in the area. It is expected that up to 100 workers would be employed on the project at peak. It will also support long term high quality technical jobs in operation and maintenance as well as ancillary functions. Once in operation the rates that will be paid by Bracklyn Wind Farm to Westmeath County Council will support the provision of local services. A range of other benefits associated with the development will be provided to the community. There will be a community fund set up in accordance with the Irish Wind Energy Association (IWEA) best practice and it will be available to the community.

# PROJECT MILESTONES AND TIMELINES

Oct 2016-Dec 2022

Initial Project Feasibility & Baseline Surveys

May 2020 - Dec 2025

Community Consultation & Stakeholder Engagement

Dec 2019 - Dec 2020

**Detailed Surveys & Engineering Design** 

**Winter 2020** 

Final Turbine Layout & Design Proposals

Winter 2020 - Spring 2021

Planning Application completion & submission

**Further Projects Milestones** 

Planning Decision will determine Further Project Milestones

# **Galetech Energy Developement**

Galetech Energy Group headquartered in Stradone, Co. Cavan, is an Irish wind farm develop and multi-disciplinary renewable energy consultancy and products provider to the wind and solar industries.

The group employ 103 people, providing full-service energy consulting in all areas of wind energy development, consultancy, construction and operation. Galetech Energy is currenty developing over 450MW of wind projects in Ireland; the group is also providing consultancy services to clients in Ireland, UK, France, Sweden, Poland, Bulgaria, Kazakhstan, Kenya and South Africa.

# **CONTACTS**

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