

## **CURRAGLASS RENEWABLE ENERGY DEVELOPMENT**

The current proposal comprises up to 7 no. wind turbines, electricity substation and battery storage compound, borrow pits, anemometry mast, underground grid connection cabling, upgrade to existing site roads, proposed new site roads and all ancillary infrastructure (the 'Proposed Development').

### The Design Team

**Wingleaf Ltd.** is a company affiliated with Enerco Energy Ltd. which is an Irish-owned company based in Lissarda, Co. Cork. The applicant company has extensive experience in the design, construction and operation of wind energy developments throughout Ireland, responsible for projects currently operating in Counties Donegal, Kerry, Mayo, Cork, Limerick, Clare and Galway.

**McCarthy Keville O'Sullivan Ltd. (MKO)** is a Galway-based Planning and Environmental consultancy that is preparing the planning permission application and Environmental Impact Assessment Report (EIAR) on behalf of Wingleaf Ltd. MKO has developed significant expertise and experience as the lead planning and environmental consultants, over the last 15 years, on projects in the renewable energy industry and public infrastructure projects.

## ABOUT THE PROPOSED DEVELOPMENT SITE

The Proposed Development site is located approximately 5.6km northeast of Kealkill and 5.5km southwest of the village of Ballingeary, with proposed works taking place within the townlands of Cappaboy Beg, Derreendonee and Curraglass, Co. Cork. The total site area measures approximately 622 hectares. The site elevation ranges between approximately 130 metres and 530 metres above ordnance datum.

The previous wind turbines at the site were granted planning permission in 2002 and the site was constructed and became operational in 2006. The turbines were removed in June 2018 as they had reached the end of their productive lifespan. The previous development consisted of 10 turbines, with a hub height of 50m and a total tip height of 75m.

Wingleaf Ltd. is now seeking to optimise the site with a renewable energy development comprising 7 turbines with a tip height of up to 178.5 metres. The Proposed Development will ensure that it maximises the amount of renewable energy generated from the wind resource at this site using the most modern wind turbine technologies in order to contribute to Ireland's ambitious renewable energy generation targets as set out in the Climate Action Plan 2019, i.e. 70% renewable energy generation by 2030.

The Proposed Development site is currently used for commercial forestry. These land-uses can continue in conjunction with the proposed renewable energy development at this site.

## WHY CHOOSE THIS SITE?

This site of the Proposed Development was considered to be the optimal location to propose a renewable energy development because:

- The site is located within an area designated as “**Open to Consideration**” for wind energy development, as designated by the Wind Energy Strategy, Cork County Development Plan 2014.
- Being that the site was previously used for wind energy generation, the site still includes infrastructure that was part of the previous wind farm and which can be utilised for the Proposed Development, for example, existing access tracks.
- The site has good annual average wind speeds.
- The site is not designated as a Natura 2000 site, i.e. Special Area of Conservation (SAC) or a Special Protection Area (SPA), nor is the site designated as a Natural Heritage Area (NHA).
- The site can be accessed directly off the R584 Regional Road at Derreendonee, Co. Cork.
- There is a good network of existing roads/tracks onsite which can be readily improved to access the site.
- A significant setback distance from houses can be achieved.

## SITE CONSTRAINTS AND DEVELOPMENT DESIGN

The design process for the Proposed Development was constraints led. A desk-based constraints study was carried out to identify a 'Viable Area' within the site; this is the area in which it is considered suitable to locate the proposed infrastructure.

The constraints map for the site has been produced following a desk study of all site constraints. The constraints study encompasses the following constraints and associated buffers specifically in relation to the wind turbines:

- Residential dwellings plus a minimum 500-metre buffer (the actual closest house is 760m away, exceeding the current 500m guidance);
- Natura 2000 sites and Designated sites plus 200-metre buffer;
- Telecommunication Links plus operator specific buffer;
- Watercourses plus 50-metre buffer;
- Archaeological Sites or Monuments, 50-metre buffer, plus 'Zone of Notification' as required by the National Monuments Service (ROI).

A turbine layout was then developed to take account of all the constraints mentioned above and their associated buffer zones and the separation distance required between the turbines.

In addition to the above, the locations of the proposed wind turbines and all other proposed infrastructure locations have been informed by rigorous site investigations and assessments carried out over a two-year period including:

- Ecological Surveys
- Ornithological Surveys
- Geotechnical, Hydrological and Geological Site Investigations
- Shadow Flicker Modelling
- Noise Modelling
- Archaeological Surveys
- Landscape and Visual Assessment

## THE PROPOSED DEVELOPMENT

The constraints, site investigation and survey and public consultation processes led to the current layout of the Proposed Development. The Proposed Development currently comprises the following:

- Up to 7 no. wind turbines with an overall blade tip height of up to 178.5 metres and all associated foundations and hard-standing areas;
- 2 No. borrow pits;
- 1 No. permanent meteorological mast with a maximum height of up to 100 metres;
- Upgrade of existing and provision of new site access roads;
- Upgrade to existing access junction;
- 1 no. 38kV electrical substation in the townland of Curraglass. The electrical substation will incorporate a battery storage compound including 4 no. battery storage containers, 1 no. control building with welfare facilities, associated electrical plant and equipment, security fencing, waste water holding tank and will connect via an underground cable connection to the existing overhead line,
- Forestry Felling;
- 1 No. temporary construction compound;
- Site Drainage;
- All associated internal underground cabling; and
- All associated site development and ancillary works.

## THE PLANNING PROCESS

### Scoping and Consultation

Scoping is the process of identifying the significant issues which should be addressed by the Environmental Impact Assessment Report (EIAR). MKO prepared a Scoping Document, which was circulated to statutory and non-statutory consultees, in December 2019, to provide them with an opportunity to comment and to inform the development design and assessment process.

Door-to-door consultation with local residents, within 2 kilometres of the proposed project, was carried out by a community liaison, Patrick McMorrough, on a continuous basis between January 2020 and April 2020. The door-to-door consultation process was carried out to provide those living closest to the Proposed Development site with a description of the project, regular updates on the progression of the development layout and an opportunity to provide feedback and comments on the project.

The feedback received from scoping consultees and throughout the public consultation process has informed the proposed development design and assessments undertaken during the EIAR preparation.

### Planning Application

The application to be submitted to **Cork County Council** will include for:

- 7 no. Wind Turbines and all associated foundations and hard-standing areas;
- 1 no. Electricity Substation and Battery Storage Compound;
- 2 no. Borrow Pit;
- 1 no. temporary construction compound;
- 1 no. permanent meteorological mast;
- Underground Internal and Grid Connection Cabling
- Upgrading of Existing Roads
- New Site Roads
- Upgrade to existing access junction;
- Forestry Felling;
- Site Drainage;
- All associated site development and ancillary works.

## ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR)

The planning application for the Proposed Development will be accompanied by an Environmental Impact Assessment Report (EIAR). The EIAR will be a publicly accessible document and will be prepared under the following headings:

1. Introduction
2. Background to the Proposed Development
3. Site Selection and Alternatives
4. Description of the Proposed Development
5. Population & Human Health
6. Biodiversity: Flora & Fauna
7. Biodiversity: Birds
8. Land, Soils and Geology
9. Hydrology and Hydrogeology
10. Air and Climate
11. Noise and Vibration
12. Landscape and Visual
13. Archaeological, Architectural and Cultural Heritage
14. Material Assets (includes Traffic and Transportation, Telecommunications, Aviation and Electromagnetic Interference)
15. Interaction of the foregoing.
16. Schedule of Mitigation

MKO are compiling the EIAR with the input of a number of other specialist consultants, including:

- Hydro-Environmental Services
- Gavin and Doherty Geosolutions Ltd.
- Tobar Archaeological Services
- AWN Consulting (Noise & Vibration)
- Alan Lipscombe Traffic and Transport Consultants

## NEED FOR THE PROPOSED PROJECT?

### National and EU Targets

Ireland has set a target for 70% of the State's electricity to be produced by renewable sources by 2030. Given its rich abundance in Ireland, wind energy is targeted to be the main renewable energy source that will help meet our national climate change and renewable energy supply obligations and needs. By so doing, the State aims to harness a clean renewable, carbon-neutral non-imported form of energy.

Renewable energy development is a vital component of Ireland's strategy to tackle the challenges of combatting climate change and ensuring a secure supply of energy. Ireland is one of the most energy import-dependent countries in the EU, importing 67% of our energy needs in 2018 at a cost of €5 billion. (Source: Energy in Ireland - 2019 Report, SEAI, December 2019).

### Wind Energy in Ireland

The amount of wind energy installed on the island of Ireland as of June 2020 reached 5,030 MW. (Source: *Irish Wind Energy Association*)

As of June 2020, there were 368 wind farms operating on the island of Ireland.

### Environmental Benefits

The Proposed Development could generate approximately 30 MW of renewable, carbon-neutral electricity, which is enough to supply over 21,900 homes per annum, based on average household use (Source: *Commission for Regulation of Utilities Typical Consumption Figures Decision, 2017*).

Renewable energy reduces Ireland's costly reliance on imported fossil fuels.

Wind turbines do not emit toxic substances or air pollutants, unlike coal or gas power stations.

In addition to a reduced dependence on oil and other imported fuels, the generation of electricity from the Proposed Development will displace approximately 91,980 tonnes of carbon emissions per annum from the largely carbon-based traditional energy mix, the detail of which will be presented in the EIAR.

The Proposed Development will take up only a small portion of the total site area; the existing land-uses of commercial forestry can continue in conjunction with the Proposed Development.

## COMMUNITY GAIN PROPOSAL

### What is community gain?

The Proposed Development has the potential to have significant benefits for the local economy, by means of job creation, landowner payments and commercial rate payments. An important part of wind farm development, which Wingleaf Ltd. has been at the forefront of developing, is its Community Gain. The Community Gain Proposal will be directed by feedback from the ongoing consultation with the local residents.

### How will it work?

Community gain proposals can take a number of forms, generally depending on the nature and location of the Proposed Development and the nature and make-up of the local community. In some instances, funds are paid by the developer, either annually or as a one-off payment, to a community fund that is administered by a voluntary committee.

These funds may then be used for a variety of projects, such as:

- environmental improvements;
- local amenities and facilities;
- voluntary and sporting groups or clubs;
- educational projects; and,
- energy efficiency improvement works.

The community benefit scheme proposes to provide a fund of €60,000 per annum over the lifespan of the proposed development based on the current estimated generating capacity. This will equate to potential funding of €1.8 million to the local community which is a substantial contribution.

The number and size of grant allocations will be decided by a Community Fund liaison committee with various groups and project benefiting to varying degrees depending on their funding requirement.

The above figures are indicative only and will be dependent on the actual generating capacity of the wind turbines.

### Additional benefits?

Additional Benefits arising from the construction and operation of the Proposed Development:

- Up to 70 people directly employed at peak construction
- Approximately 3 long term, high quality technical jobs in operation and maintenance.
- Substantial rates paid to Cork County Council
  - Rates paid to Cork County Council for the Proposed Development potentially will have a significant, positive impact on local infrastructure and amenities such as roads, public lighting, street cleaning, libraries, fire services and public amenities etc.
- Indirect employment created through a sub-supply of a wide range of products and service



## PROJECT DEVELOPMENT: NEXT STEPS

Upon completion of the EIAR, Wingleaf Ltd. intends to submit the planning application to Cork County Council in the coming weeks. The planning application will include:

- Application Forms and Public Notices
- Planning Drawings
- Environmental Impact Assessment Report
- Natura Impact Statement

Notification of the intention to lodge the application will be placed in a local newspaper. Wingleaf Ltd. will also continue to update all residents closest to the development on the project progress and will notify them of the intended lodgement date.

Once submitted, all planning application documents and drawings will be available for viewing in the offices of Cork County Council (Norton House). The information will also be available to view on the Council websites, this usually takes a few days for the Council to upload the documentation onto the website.

Following lodgement of the application, members of the community can make submissions to the relevant Local Authorities during the 5-week public consultation period. Wingleaf Ltd. will continue to be available to discuss any individual queries in relation to the application.

## PLEASE LET US KNOW WHAT YOU THINK

We value your feedback during the design process and we appreciate your consideration of the information provided up to now. Consultation is ongoing and we continue to seek your views in the following ways:

- By email at [patrick.mcmorrough@turnkeydev.com](mailto:patrick.mcmorrough@turnkeydev.com)/[info@mkoireland.ie](mailto:info@mkoireland.ie);
- By post to Patrick McMorrough, Wingleaf Ltd., Lissarda Business Park, Lissarda, Co. Cork, P14 YN56.