

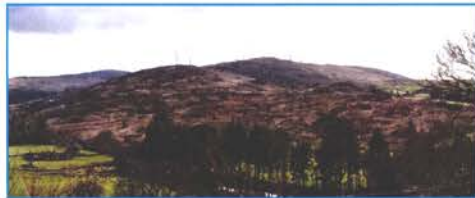
## **APPENDIX A.3**

# **INFORMATION DAY - BROCHURE**

## WIND DEVELOPMENT AT ESB

### Environmental Impact Statement

All issues relating to the potential impact of the wind farm on the environment are being addressed in detail in an Environmental Impact Statement which will be submitted to An Bord Pleanála as part of the planning application for the project where it will be available to the public for viewing. The Environmental Impact Statement will address cumulative impacts arising from the presence of other wind farm developments in the area.



### How Wind Turbines Work

The blades of wind turbines are designed to make the best use of the available wind. When the wind speed rises above 4 metres per second (a gentle breeze), the turbine turns slowly into the wind and the rotor begins to rotate. This causes a shaft inside the rotor to rotate. This shaft is attached, via a gearbox, to a generator. The rotation of the generator makes electricity in much the same way as a bicycle dynamo works. This electricity is carried via cables down the turbine tower to an Electrical Transformer Station within the site and out into the local grid to power homes and industries throughout Ireland.

The turbines are designed to withstand wind speeds double those of Force 12 (Hurricane Force) which is way beyond the highest wind speeds experienced in the country.

## BENEFITS OF THE PROPOSED DEVELOPMENT

- Clean, renewable indigenous energy
- Save emissions of about 170,000 tonnes of CO<sub>2</sub> annually
- Save the import of more than 75,000 tonnes of fossil fuels annually
- Produce enough clean energy to meet all the electricity needs of up to 60,000 homes
- Contribute to meeting Ireland's targets for generating energy from renewable sources
- Create and sustain jobs locally in construction, operation and maintenance of the wind farm
- Support the local economy through annual payment in rates to Kerry County Council

### Further Information

If you have any observations or queries about plans for Grousemount Wind Farm, we will be happy to hear from you. You can contact us as follows:

**Gerard Keenaghan 01- 702 7997**

**[gerard.keenaghan@esb.ie](mailto:gerard.keenaghan@esb.ie)**

ESB Wind Development  
Lower Fitzwilliam Street  
Dublin 2



## GROUSEMOUNT

### Proposed Wind Farm Development

### Information Day

## WIND DEVELOPMENT AT ESB

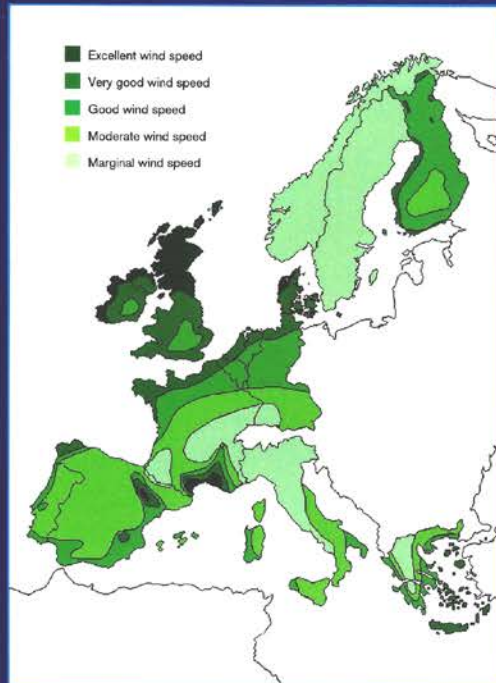


## WIND DEVELOPMENT AT ESB

### Wind Energy in Ireland

Wind energy is Ireland's greatest natural energy resource. It has been used in Ireland for millennia to mill grain and pump water. Today, Ireland is one of the most energy import dependent regions in Europe.

Sustainability is at the heart of Government's energy policy objectives. The Government's 40% renewable energy penetration target for 2020 is estimated to be the equivalent to about 5,100 MW of installed renewable capacity, indicating that further development is required.



## WIND DEVELOPMENT AT ESB

### Planning Application

ESB Wind Development will make a planning application to An Bord Pleanála in connection with the proposal.

An Bord Pleanála has determined that the project constitutes strategic infrastructure, since it falls within the scope of Section 182S of the Planning and Development (Strategic Infrastructure) Act 2006. The threshold for developments of this type is a wind farm with more than 25 turbines or having a total output greater than 50 MW. The Act requires that in such circumstance the planning application be made to An Bord Pleanála.

### Protecting the Environment

As well as being native, plentiful and free, wind energy is clean, producing no greenhouse gas (GHG) emissions. GHG emissions are harmful to both the environment and human health. GHG's include carbon dioxide ( $CO_2$ ), which is produced by the burning of fossil fuels, as are sulphurous oxides ( $SO_x$ ) and nitrous oxides ( $NO_x$ ).

Ireland has commitments at international level to reduce the amount of GHG emissions it produces. One important way to do this is to switch to using the clean indigenous energy provided by the wind.



The National Climate Change Strategy, implementation of which will ensure that Ireland can meet its international commitments, proposed a number of distinct approaches. As one of these approaches, much more of Ireland's energy will come from wind power.

## WIND DEVELOPMENT AT ESB

### The Proposed Development

Grousemount Wind Farm will comprise 38 wind turbines, each with a 2.5 – 3.5 MW nominal rating, which will be used to harness the natural energy of the wind to generate electricity.

In summary, the project comprises the amalgamation of two previously permitted wind energy projects, namely Barnastooka Wind Farm (14 wind turbines) and Grousemount Wind Farm (24 wind turbines). Overall, it comprises the same number of turbines as previously approved, all being located at the exact locations as approved and with a maximum overall dimensions of 125 – 126 metres, also the same as approved.

The electricity generated by the development will be exported from the site via underground cables.

In summary, the main features incorporated into the combined development centre on increasing the nominal rating of the turbines and certain features that improve the constructability of the project. The proposed turbines are in substitution for those already permitted and they are not additional.

