



Project Profile: Kings Mountain, Ireland

Project name:	Kings Mountain
Owner:	Airtricity
Main contractors:	ESBI (Electricity Supply Board International).
Power utility:	ESB (Electricity Supply Board).
Installed capacity:	25,000 kW
Wind turbine type:	N80/2500 kW
Tower height and type:	60 m. tubular tower
Number of wind turbines:	10
Wind speed:	The estimated average wind speed is 9 m/s.
Site:	The wind farm is situated in the west coast of Ireland, near Sligo.
Site description:	The wind turbines are placed in a complex terrain of an hilly moorland area.
Wind turbine siting:	The remote location and a gradient of more than 12 per cent were a challenge for the transport.
Installation Period:	February 2003 – June 2003
Grid connection:	May 2003
Extent of delivery:	Nordex was responsible for supplying, installing and commissioning of the turbines. Nordex is also responsible for the maintenance.
Calculated annual power output:	85,000,000 kwh
Maintenance:	Nordex Energy GmbH
Warranty period:	5 years

Project Profile: Kings Mountain, Ireland



Nordex shared responsibility for implementing the wind park with the epc-contractor, ESBI (Electricity Supply Board International). While ESBI took care of the road and foundation work, as well as the electrical engineering, Nordex was responsible for supplying, installing and commissioning the turbines. This work was started in February 2003 and completed in the summer of the same year.

Overall, Nordex moved approx. 2,650 tonnes of material to the building site by ship and heavy-duty transport vehicles. A logistical challenge: the ten turbine housings from the Nordex factory in Rostock were shipped together with the rotor blades from Aarhus in Denmark to the Irish seaport of Killybegs. The towers from Wales were put ashore at the same point. The remaining 60 kilometres were covered using approx. 90 heavy-duty transport vehicles. For gradients of more than 12 per cent in some cases the transport vehicles even had to be supported by additional towing vehicles. But all this effort proved worthwhile..



Since June 2003 Ireland's largest wind park, "Kings Mountain", has been producing clean energy. In September 2003 Nordex and its partner ESBI handed the park over to the end-customer, the Irish green utility Airtricity.

The ten Nordex N80 turbines near Sligo feed some 85 million kilowatt hours into the public electricity grid – enough for the power consumption of more than 20,000 households. This is made possible by the large turbines, with a rated capacity of 2,500 kW each, and the good wind location. Here on the west coast of Ireland the wind blows at an average speed of 9.0 m/s.

