

# Gwynt y Mor's Green Light



Npower renewable has today been granted consent by the Department of Energy and Climate Change to build and operate the 750 megawatt Gwynt y Môr wind farm off the coast of North Wales. The wind farm, situated 13 kilometres out to sea, will be one of the largest offshore wind farms in the world and will be capable of generating enough power to supply the average annual needs of around half a million homes.

The wind farm design comprises an array of offshore wind turbines each with an installed capacity of between 3 to 5MW. Depending on the tides, the wind turbines would stand in water depths of between 12 and 34 metres, requiring a hub height of up to 100m and a rotor diameter of around 130m. The individual wind turbines would be built between 350m and 1000m apart to ensure optimum wind exploitation. Currently, it is anticipated that offshore construction works could begin in 2011 with final commissioning in 2014.

Through its UK subsidiary npower renewables, RWE Innogy already operates the 60MW North Hoyle wind farm off the Welsh coast, the UK's first major offshore wind farm. Its second offshore wind farm, Rhyl Flats, is now in construction off the coast of North Wales, and is expected to be operational in 2009 with a total installed capacity of 90 MW. Through npower renewables and in partnership with Scottish and Southern Energy, RWE Innogy is also involved in the construction of the 500MW Greater Gabbard Offshore Wind Farm, which is located 25 kilometres off the coast of Suffolk. Construction of this project is scheduled to be completed in 2011, with first electricity generation due in 2010.