

# Knabs Ridge Wind Farm



## Key facts

- There are **eight turbines** operating at Knabs Ridge Wind Farm.
- Each turbine comprises a **58 metre** (m) tower with a **70 m rotor diameter**.
- The total height of the wind turbine (to the tip of the blades at their highest point) is **93 metres**.
- The turbines are manufactured by REpower Systems based in Germany and are each rated at **2 megawatts**, giving the wind farm a total capacity of **16 megawatts**.
- The wind farm generates enough clean electricity to meet the average annual needs of some **5,500 homes<sup>1</sup>**.
- The wind farm began operating in **November 2008**.

# Construction

Construction of Knabs Ridge wind farm - North Yorkshire's first new wind farm in 15 years - started in March 2007 and was completed during summer 2008.

These images shows the turbine blades and hub being lifted into place.



## Project location

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# Why do we need wind farms?

- ✓ **Clean** - Wind energy is one of the cleanest of all the commercial methods of generating electricity. It produces no harmful gas emissions which contribute to climate change, no effluent, no waste and no radioactive contaminants.
- ✓ **Abundant** - With 40% of Europe's total wind resource, Britain is well placed to reap the benefit of the most advanced and promising of all the renewable energy sources. There are 211 operating wind farms across the UK with a total capacity of 3,390 megawatts (MW) meeting the average annual electricity needs of some 1,895,565 homes<sup>2</sup>.
- ✓ **Sustainable** - Wind farms supply electricity from a free and everlasting fuel; the wind. Wind turbines generate electricity safely, without producing atmospheric pollutants or depleting finite resources of fossil fuels.
- ✓ **Popular** - People like wind farms. Numerous public opinion surveys show that the vast majority of people support the development of wind energy in the UK.

## Community

RWE npower renewables has set up a Community Fund in connection with Knabs Ridge Wind Farm.

The annual fund of £16,000, is indexed linked and will benefit the communities of Felliscliffe, Hampsthwaite, Birstwith, Norwood, Menwith with Darley, Haverah Park with Beckwithshaw and Fewston.

At other RWE npower renewables' wind farm sites the Community Fund has supported projects such as refurbishing community buildings, environmental education programmes, energy efficiency schemes and donations to local groups and organisations.

Independent charity the York and North Yorkshire Community Foundation will administer the fund and is setting up a steering group of local representatives to assess applications and make decisions about how the money is allocated. The steering group will consist of up to nine members, seven of them living in the local communities which will benefit from the fund.

The other two members will represent Nidderdale Area of Outstanding National Beauty and Harrogate and Area Council for Voluntary Services.



Knabs Ridge Wind Farm Inauguration, November 2008.

# About RWE npower renewables

RWE npower renewables is the UK subsidiary of RWE Innogy and is one of the UK's leading renewable energy developers and operators, committed to developing and operating wind farms and hydro plant to produce sustainable electricity. The company operates 17 hydroelectric power projects and 23 wind farms in the UK, including the country's first major offshore wind farm, North Hoyle. RWE npower renewables is also working with marine energy technology partners to deliver new wave and tidal stream power projects in the UK. Through our existing projects and those in development, we are working in close partnership with communities and companies throughout the UK. As Government policy drives the UK towards a target of supplying 10% of electricity from renewables by 2010, and 15% by 2015, we will be at the forefront of realising this aim.

For further information about RWE npower renewables and RWE Innogy visit [www.npower-renewables.com](http://www.npower-renewables.com) and [www.rweinnogy.com](http://www.rweinnogy.com)

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## Notes

1. The energy predicted to be generated by an operational project is based on operational data analysis, where sufficient is available, or long term output predictions derived from wind monitoring at the site. The energy capture and equivalent homes or emission savings figures relating to this project may change as more operational information is gathered. Equivalent homes supplied is based on an annual electricity consumption per home of 4700 kWh, which is derived from a total UK domestic electricity consumption of 117.589 terawatt-hours (TWh) (The Digest of UK Energy Statistics 2005) and 25.2 million UK households (Mid-year Household Estimates published in 2004 by the Office for National Statistics).

<sup>2</sup>Taken from the BWEA website [www.bwea.com](http://www.bwea.com)

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