## The Danzey Green Windmill (below) now preserved at the Avoncroft Museum at Bromsgrove was built around 1820 to produce flour.

- The windmill is 28 feet tall; the wind turbine is 59 feet tall.
- The windmill rotor is 52 feet in diameter; the wind turbine rotor is 43 feet in diameter.
- The windmill rotor turns at 15 revolutions per minute; the wind turbine rotor turns at 73 revolutions per minute.
- The windmill has a mechanical power output of 2 kilowatts; the wind turbine has an electrical power output of 15 kilowatts.



## Wind Power then and now

## How Community Owned Energy Works...

- A community group can purchase a wind turbine and connect it to a group of homes, farm, village hall etc.
- The electricity generated by the turbine can be directly used for free on site instead of drawing electricity from the national grid.
- The homes, farm etc are still connected to the national grid and can still draw power from the grid when the turbine isn't running.
- The community group receives the Feed In Tariff and export tariff payments for generating renewable electricity.
- The community group can use this income to spend on other community projects.
- Community energy projects, mainly in rural locations and many of these in the Scottish Islands where the electricity supply from the national grid can be unreliable have bought their own small wind turbines. Buying their own turbines gives these communities some security in their electricity supply and also earns them some finances to spend on other community projects.
- Members of Transition Worcester are planning to build a wind turbine. We will be using a tried and tested design produced by Mr Hugh Piggott who has designed homemade wind turbines for people in many countries.



The 'H15' wind turbine (above) is a modern machine for generating electricity.

 We would welcome anyone who would like to join us in making this turbine.

If you would like to know more about renewable energy please feel free to contact the Transition Worcester energy group using this email address: transitionworcester@gmail.com
Or visit the Transition Worcester website:

www.transitionworcester.org.uk