Sunflower Stakeholders Site Visit Programme

Howsham Mill
Howsham Mill dates back to c.1755.It was built both as a working corn mill and as an 'eyecatcher' or 'folly'. Milling of flour ceased in 1947 and the building fell into decay by the 1960s. In 2004 the Renewable Heritage Trust was formed by local residents with the intention of preserving and restoring the mill.
Fund raising, volunteer labour and grant funding, have enabled the installation of a new waterwheel and a modern hydropower system based on the Archimedean screw principle to generate electricity and help fund the project in the long term.
http://howshammill.ning.com/

Hill Top Farm, Spaunton
Hill Top Farm is a mixed organic farm with ancillary businesses of flour milling and tool making. The owners of the farm also looked at providing sufficient energy to run freezing equipment for the storage of moorland mutton produced on the farm.
The first phase was the installation of a pair of small wind turbines on the roof of a barn at the site. Two additional wind turbines and a solar PV array were added. The system is designed to work primarily off grid in order that energy to the freezers is maintained during power cuts, which are relatively frequent in this area.
http://www.yorkshireorganicmillers.co.uk/
http://www.lazydogtools.co.uk/

Grange Farm, Spaunton
Grange Farm has recently converted farm buildings to holiday cottages and has included a biomass district heating scheme for the farmhouse and the three cottages. The owner has also purchased a press to process oilseed rape into oil, potentially for consumption and waste to burn in the boiler.

Marsh Farm
Marsh Farm is a Dairy Farm that has a very high energy demand of 40,000kwh / annum. They have installed a 24m high, 10kw Bergey Wind turbine which produced 15,000 kwh last year (though 18,000kwh was predicted). Initially they had a number of problems with the grid connection but have managed to find a novel way around this!

Ruswarp Weir - Esk Valley Hydro Power
Early in this project's development it was recognised that the Esk River and its tributaries could provide a sustainable energy source in the Esk Valley. A feasibility study (by Mann Power Consulting) identified 26 sites suitable for the development of micro hydro. Whilst 6 potential sites were selected for detailed studies, discussions with the Environment Agency and the reality of connecting to the grid at each location revealed the prime site to be at Ruswarp.
The Esk is known as the most important Salmon and Sea Trout River in the North East of England and the impact of the development on migratory fish needs to be carefully monitored. In discussion with the Environment Agency the Archimedes screw turbine came out as the preferred option, to be accompanied by improvements to the fish pass and a three year monitoring programme of fish behaviour.
www.eskvalleyenergy.org.uk