

An East Bridgford Hydro Power station

The burning of fossil fuels is creating high levels of CO₂ in the atmosphere which is leading to climate change. There is an urgent need for us to find alternative forms of energy. One that we could consider for East Bridgford is a hydro power station at Gunthorpe weir. Not only would we be making a significant contribution to reducing levels of CO₂ but such a scheme would provide significant funding for village projects.

There is already a hydro station 12 miles up stream from us at Beeston Weir. It was developed and commissioned by Hyder power in 1999 at a cost of £3million. It is relatively small, about half the size of a tennis court, and only a few feet above the water level. It is rated at 1.3 megawatts which provides enough energy to power approximately 2,000 homes and to save 2,800 tons of greenhouse gas emissions per year. In 2005, it generated electricity worth £500,000. There has been no community involvement and profits go directly to the generating company. The project has been backed by a Government Non-fossil Fuel Obligation contract which guarantees that the power produced will be bought at economic rates for 15 years. The plant is expected to run for a minimum of 30 years.

Our own weir is of similar height and we own the land adjacent to it. However, it would be impossibly expensive to supply homes in the village directly from the power plant since we would need to build our own grid system. The only practical alternative is for us to form a community energy group (which would attract grants from the Government and other bodies) and sell energy direct to the National Grid. An increasing number of these community energy bodies are being set up throughout the UK and there is help through the Energy Saving Trust's Community Action for Energy programme (CAfE). There are now nearly 3000 individuals and groups who have signed up to the CAfE network and who are willing to share their experience and knowledge with us. The majority of schemes utilise wind turbines but there are some hydro schemes. The Parish Council has given its full backing for an in depth feasibility study for an East Bridgford scheme.

The potential rewards are high. A government business model for alternative energy schemes gives an estimated return for a hydro station like that at Beeston of between £20,000 and £500,000 in the first year and between £7 and £17 million over a 20 year period. This is money that could be spent on community projects within the village and on a contribution to sustainable energy projects to combat poverty in developing countries.

A technical evaluation of the site will be necessary to determine the cost of construction, likely power output, cost of connection to the national grid, and running/maintenance costs. This would have to be done by qualified engineers.

Other aspects of the project would need to be explored and we probably have sufficient expertise within our village to do this. We need people with:

- project development skills
- tax, insurance and accountancy knowledge
- business and negotiating skills
- research skills
- legal advice about setting up a non-profit making body to distribute the returns
- knowledge and experience of making planning applications of this kind,
- knowledge of sources of grant funding and experience of making bids
- knowledge and experience and of raising capital through bank loans and/or share offers,
- advice about ecological impacts

If you feel you can offer help and would like to be involved in some way, please contact me on 20882.

John Chater
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