

Renewable Energy and East Bridgford Community IPS

In our magazine article of October, we explained that we were a group of village volunteers, who felt it our duty to take a lead in 'doing our bit' as a community to help tackle climate change. We reason that unless all local communities and individuals do their bit, our grandchildren will have good cause to ask why, when we could have taken action, we did too little or nothing, and left them with a damaged environment as well as a severely depleted supply of finite fossil fuel energy. There is little dissent amongst world leaders and scientists that something needs to be done about climate change, and we cannot leave it all to governments.

That said, we do understand that some people in our community do not agree with our suggested way of achieving this aim. A wind turbine is not a pleasant sight to some people, although it most certainly is to others. In the same article, we responded to a call for a discussion around any viable alternative suggestion(s), but so far this has not been forthcoming.

It is important to us that there is harmony in our community over the way that we 'do our bit', and we are very much open to constructive dialogue about the way forward. In this respect, it is pleasing that recent articles against the turbine project have mentioned some form of discussion, upon which we would like to build. However, such a discussion does need to be led by referenced facts rather than by emotion. A very readable paper produced in May 2011 by the *Centre for Sustainable Energy*, a national charity, with the title "**Common concerns about wind power**"¹ addresses most of the issues that have been raised in opposition to our project, and is perhaps a helpful reference for all of us.

In addition, we are doing our best to respond to some of the issues raised:

- We are currently investigating alternative sites which would have less visual impact
- We originally planned for a turbine which would be almost five times the output of our present proposal and twice the height (120m). Because of the concern over visual impact, we have reduced this to a hub height of 50m and total height to blade tip of 66.5m
- We repeat the offer, already made to some people, of arranging a visit to a wind farm to allow first-hand experience

We thank Chris Brownson for his article last month, but as part of a fact-led debate, it is important that we correct some of the misconceptions in it:

- Although electricity cannot easily be stored, it can be exported to other EU countries at times of surplus and imported when the wind does not blow. This would substantially reduce the need for back up fossil fuel power stations².
- Wind energy is cost effective – please see the independent report by Mott McDonald consultants³ commissioned by the last government. It shows that for projects starting in 2013, on shore wind energy is, along with gas, the cheapest form of energy. The report does not take account of any subsidies, feed-in-tariffs etc. It is therefore the genuine cost to the country of choosing the different forms of electricity generation
- Subsidies are necessary to increase investment in 'green' energy and away from highly polluting fossil fuels. Over the last 150 years, we have been getting energy on the cheap because we have not been paying directly for the damage to the environment caused by fossil fuels. This damage and its costs will become higher and higher the longer we leave it⁴.
- It is often quoted in the media that wind turbines are only 25% efficient but this is a capacity factor not efficiency. The amount of energy in the wind that can be extracted by a turbine is higher and up to 35%.⁵ In comparison, worldwide coal-fired power plant efficiency averaged 35.1% in 2007⁶
- Less than 1% of the dwellings in the parishes of East Bridgford and Kneeton will be able to see our turbine let alone hear it so it is hard to see how it will generally affect house prices.
- Photo-voltaic panels would need to cover 10,000 square metres to produce the same amount of electricity as our turbine and would cost many times as much. The recent changes to subsidies (F.I.T's) make this technology less cost effective.
- The carbon produced in the manufacture, installation and maintenance of a wind turbine is called its carbon footprint. A Government report says that 'fossil fuel electricity generation has the largest carbon footprint' and that 'Electricity generated from wind energy has one of the lowest carbon footprints'⁶ Typically a wind turbine repays its carbon footprint in 3-6 months.
- To avoid any confusion, we emphasise that we are not part of the turbine proposal at Gunthorpe

Finally, there are many local people who would welcome our project as an investment opportunity. Nearly all of our group's profits will be used for village projects. If we are unable to proceed, it is likely that sooner or later a private company, with no interest in the village, will take our place.

We believe that the impact of the turbine on our local countryside is insignificant when compared to that expected from climate change. Please let us have a constructive dialogue and contact us if you would like to discuss the project or suggest alternatives. Please also contact us if you would like to invest in the project or help in any way.

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You can also find us on *facebook*

¹ http://www.cse.org.uk/downloads/file/common_concerns_about_wind_power.pdf

² http://www.economist.com/node/9539765?story_id=9539765

³ <http://www.decc.gov.uk/assets/decc/statistics/projections/71-uk-electricity-generation-costs-update-.pdf>

⁴ *The Economics of Climate Change; The Stern Review*. Camb. Univ. Press 2007

⁵ <http://www.ftexploring.com/energy/wind-enrgy.html>

⁶ www.iea.org/ciab/papers/power_generation_from_coal.pdf p.57

⁷ www.parliament.uk/documents/post/postpn268.pdf