SC2B Policy CC/2: Renewable and Low Carbon Energy

Statement by Gamlingay Community Turbine (16468) 65330, 65331

provides the opportunity for local communities to identify suitable areas for wind energy developments through a Neighbourhood Plan, and therefore community wind turbines could still be delivered during the plan period if a local community identifies a suitable site through a Neighbourhood Plan.

In it's response to the WMS HCWMS 18 June 2015 the local plan as proposed makes no effort to identify areas suitable for wind energy but instead states that this is an issue for neighbourhood plans. It is very important that this is not misinterpreted and put a block on all future wind energy development. The basic issue is what is to be taken as the default position if an area has not been properly analysed. What if in a few years a community wants to do the sort of project that Gamlingay did and has a suitable site? It would be totally unreasonable, and against government stated support for community energy, for this to be blocked just because there was no study of the site years before.

If a council makes a proper study of its area for potential wind energy developments, with objective criteria and proper consultation then that is one thing. However this is unrealistic for many parishes. Even then circumstances change. For example changes in technology, changes in land use, other developments in the area and so on.

The only sensible way for councils to represent all the views of present and future constituents is to take a pragmatic approach, perhaps by stating that renewable energy is possible in principle, subject to normal planning processes and by committing itself to allow revisions as circumstances change.

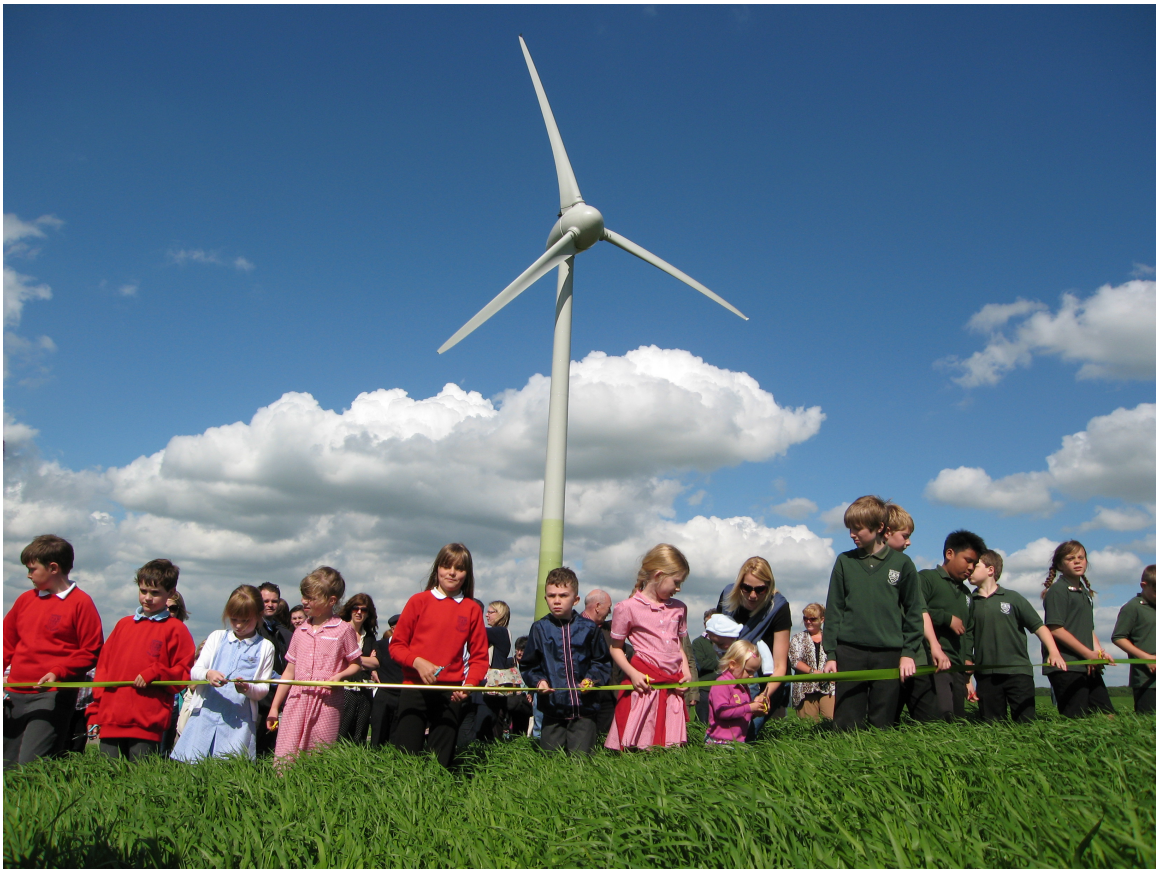
I have come across other communities with an interest in community renewable energy projects, for example groups in Barton, Girton, Milton and Sawston have carried out feasibility studies. It would be a shame that in years to come they might be inadvertently prevented from doing what Gamlingay did because of a rigid interpretation of a ministerial statement and inflexibility in planning policy.

Mike Brettle

Gamlingay Community Turbine

GAMLINGAY COMMUNITY TURBINE – A WINDFALL FOR A SOUTH CAMBRIDGESHIRE VILLAGE

A summary



The opening ceremony of the Gamlingay Community Turbine, 18 children from 3 local schools simultaneously cut a ribbon.

Introduction

A group of Gamlingay residents has installed a single 33m diameter wind turbine just over 1km outside the village. This is a local project, by the community and for the community that is significantly offsetting the village's carbon footprint. Part of the profit from the turbine's operation is being used to provide a regular income to the village to be spent on local charities and community projects, hence the title 'Community Turbine'. The project was funded entirely by local residents and businesses who either loaned money of invested in shares in the project. Appendix A lists some key statistics

and Appendix B the calendar of events that led up to the opening of the Gamlingay Community Turbine on the 14th June 2013.

The GCT project was able to tap into the underlying support for clean energy throughout the population and the enthusiasm of Gamlingay residents. This is putting localism into practice in a positive way, residents accomplishing something rather than opposing projects.

The GCT project was listed, along with a community solar park, project by the SCDC Sustainable Parish Energy Partnership, (SPEP) as an exemplar of community-based initiatives for carbon reduction, see attachment 1.

Project benefits

Gamlingay Community Turbine Ltd has pledged to give 10% of its net income to a community fund. The fund has already made several grants to benefit the community. Appendix C lists beneficiaries to date. These grants have made a significant contribution to a small village.

The GCT has also offset substantial amounts of CO_2. By August 31st 2016 it had offset 950 tons of CO_2 *. For just one village this is a useful contribution to SCDC commitment to carbon reduction.

* The turbine had generated 1,983,600 kWh. Based on a conversion factor of 0.458 kg/kWh from DECC '2015 Government GHG Conversion Factors for Company Reporting'.

Potential planning problems for similar projects in the future.

At the time the GCT project was conceived there was no local plan that identified areas suitable for wind turbines. It would be very difficult for a Parish council to conduct and then consult on a detailed study to establish areas that may or may not be suitable for wind turbines. If the Ministerial Statement HCWS42 was to be interpreted as meaning that unless such a study had been carried out then a wind turbine could not be built irrespective of benefits or absence of planning obstacles then other communities will be prevented from benefiting from similar projects in future. If this had been the situation in 2013 then the GCT project of which Cambridgeshire is rightly proud could not have been implemented.

However an interpretation that if land has not been properly studied for suitability and found not suitable then, by default, a wind turbine could be built (subject to normal planning process) would allow projects similar to the GCT to go ahead.

Appendix A Key statistics

- Total cost about £900
- Minimum investment £500 (priority given to small investors)
- CO_2 Offset 284 Tons in First Full Financial Year.
- CO_2 Payback Time Less Than 1 year
- Load Factor to Date 22% (forecast 23%)
- Generating Electricity about 85% of the time
- Tithe £6k in year one increasing to £10k pa

Appendix B Calendar of events

- Public announcement of project – September 2010
- Twelve months public consultation
- Submit planning application – December 2011
- Planning permission granted – May 2012
- Turbine installed – May 2013

Appendix C Beneficiaries of the GCT

The following organisations have received financial support from the GCT: -

- Bedfordshire, Cambridgeshire and Northamptonshire Wildlife Trust
- Gamlingay Allotments
- Gamlingay First School

- Gamlingay Library
- Gamlingay United Football Club
- Hatley St. George Parish Church
- Sunshine Pre-School
- Waresley Cricket Club

People Powering Change:
Community Energy Case Studies

In January 2014 the government published the UK's first Community Energy Strategy. Community Energy Strategy: People Powering Change acknowledges the important contribution that individuals and local communities can play in transforming the way energy is generated and used in Britain in order to maintain energy security, tackle climate change and keep costs down for consumers; and outlines actions to unlock the full potential of community energy.

In South Cambridgeshire, the council has been supporting community energy since 2009. By setting up and assisting the Sustainable Parish Energy Partnership, (SPEP) the council has helped more than 30 parishes to organise projects to promote using energy more efficiently and less wastefully, and to install small scale renewable generation technologies.

As the government's Community Energy Strategy is implemented, it should become easier for communities to undertake more ambitious energy projects. The council is committed to engaging and empowering local communities in South Cambridgeshire; in the first instance by raising awareness of the different types of community energy projects; what is involved and what the benefits for communities are.

This document describes six case studies of local community energy projects, some completed, others in process, each very different. They range from home energy saving, through solar schemes and a wind turbine, to a fledgling hydro scheme.

If you are interested in embarking on a community energy project, see information signposted after the case studies, and feel free to contact the council's Parish Energy Project Officer to explore what support the council may be able to offer.

November 2014

Case Study 1

Energy Advice and Behaviour Change - volunteer run projects available through SPEP

www.spep.net

Overview

The Sustainable Parish Energy Partnership was set up by SCDC in 2009 to support parish councils wanting to make their parishes more sustainable.

Volunteers in over 30 parishes run a variety of projects to provide advice and information to residents to help them save energy through behaviour change and home energy improvements.

Sustainable Cottenham's Energy Saving Advice stall at the Fen Edge Festival

Main projects

- Evening Information meetings
- Advice stalls at village events
- Weekend 'Village Energy Days'
- Thermal imaging surveys
- Electricity monitor library
- Energy Saving Light Bulb library

Financing

- Resources such as Thermal Imaging camera & training, Electricity Monitors and Light Bulb Libraries are provided free of charge to participating parish groups by SCDC
- Some events are self-financing; funds are available where needed from SCDC

Project impacts

15 village events held

1000+ people have attended village energy days

355 homes surveyed using thermal imaging

670 electricity monitor loans made

Of interest to...

Any parish council in South Cambridgeshire can join SPEP and avail themselves of the support and resources on offer.

Case Study 2

Community Involvement in Energy Saving Programmes - Action on Energy

www.actiononenergy.net

Financing

- Action on Energy is a partnership of the Cambridgeshire local authorities with energy efficiency company, Climate Energy Ltd
- The scheme offers households in the private sector advice, access to funding, good value home energy surveys, and quality installations of home energy improvements.
- The scheme is set to run for an initial three years (launched November 2013).

Overview

- A Community Champions scheme is in development. This will reward community groups who register with the scheme with a sum of £15 for each lead resulting in installation of measures.
- The sum will be payable to the group if formally constituted, or to a charity chosen by the group.

action on energy South Cambridgeshire

Project impacts

- The scheme has government funding to support installation of solid wall insulation in around 1000 homes in Cambridgeshire, leading to significant energy savings.
- The contract requires Climate Energy Ltd to work towards using 100% local assessors and installers.

Community Involvement

- The scheme has been promoted by parish councils and SPEP groups through village newsletters, websites and social media.
- The scheme has government funding for solid wall insulation; Information evenings and stalls explaining what solid wall insulation is have been held in a number of villages.

Main projects

Any community group or parish council can apply to participate in the Community Champions scheme.

Case Study 3

Renewable energy - eCoton go solar! Bulk discount scheme for solar pv

www.cotonvillage.co.uk

Overview

A group of green-minded Coton residents set up a bulk purchase scheme in order to increase local uptake of solar pv panels.

Key features

- The scheme organisers collected a list of over 100 interested households through leaflets, posters and a village meeting.
- They then invited 7 local solar PV installers to submit tenders for consideration, and from those submitted, selected the one they felt offered the best deal for the group.
- Another village meeting was held at which the bulk purchase group was introduced to the chosen supplier.
- Households going on to purchase panels through the scheme entered into individual contracts with the company.

Pupils at Oakington primary school with solar panels provided free of charge through the eCoton bulk

Of interest to...

The eCoton group was particularly successful as it operated when the feed in tariffs were at their highest. A similar scheme set up now would probably not achieve so much, but might nevertheless be worth doing.

Project impacts

- The scheme led to at least 75 installations of solar pv in Coton and nearby villages.
- The main benefits for those installing pv through the scheme were:
- The supplier offered to install solar panels for free on local school if a target number of installations took place. They did, and Oakington school were the lucky recipients. (It was originally envisaged that Coton school would receive the panels, but this proved not possible due to structural reasons.)
    - Support from the eCoton team and other members of the scheme through the process
    - Recommendation of a carefully selected installer
    - No high pressure sales – members were free to choose other suppliers

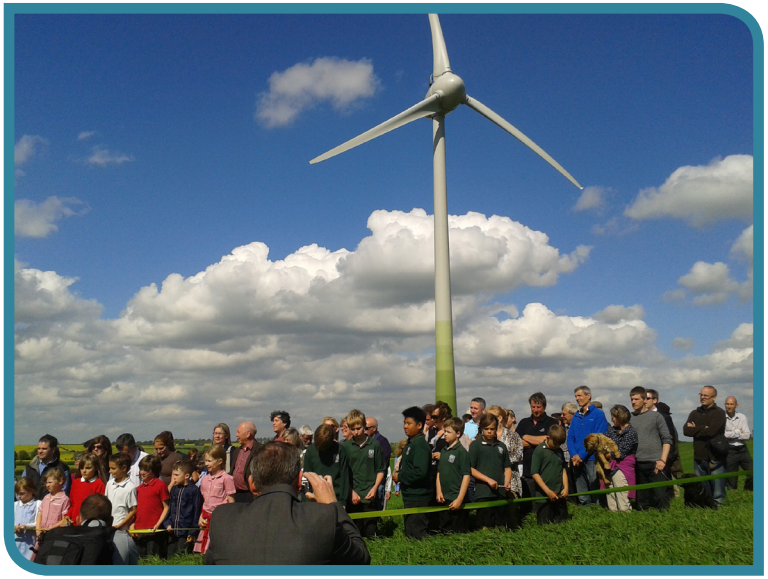
Case Study 4

Renewable energy - Gamlingay Community Wind Turbine

www.gamlingay-community-turbine.co.uk

Overview

- The turbine went into operation in June 2013, five years after the project was initiated by a group of local residents.
- It operates under a private company structure and is owned by residents and businesses in the local community



Financing

- Total cost £900k
- Funded entirely by investments from within the local community
- Two investment options have been offered:
  - Fixed interest loan at 6%
  - Equity investment – projected rates of return 7-12%
- £30k was invested at risk to get the project through the planning process

Main projects

Setting up a community wind turbine is a major undertaking, not to be undertaken lightly. However,this project demonstrates that, with a strong team with the right skills, a successful project can come to fruition, bringing many benefits to the local community

Project impact highlights

- Expected generation of 665,000 kWh pa
- Equivalent to about 10% of local domestic electricity needs
- The project has overcome local concerns; a vocal minority opposed planning permission
- 10% of net income generated goes to a Community Fund for reinvestment into local environmental projects. This amounted to £6,000 in the first year.

Key features

- The turbine is an Enercon E-33
- It has a 37 m mast
- Installed capacity is 330kW

Case Study 5

Renewable energy - Reach Community Solar Farm

www.reachsolarfarm.co.uk

Overview

- Planning permission has recently been granted for this community solar farm, to be owned and run by a co-operative of local people.
- The farm is expected to generate approximately as much electricity as is used by houses in the village each year

key features

- 500kW: approx. 2000 ground mounted solar panels
- The site is on a local farm ½ mile from Reach village in East Cambridgeshire
- The site covers approximately 5 acres, and is screened by hedges

Features of Community Ownership

- Not for profit
- Co-operative ownership
- Pays lease to landowner
- Pays interest to investors
- Other profits returned to the community

Project impact highlights

- The cost will be around £600,000
- Expected income approx. £50,000 pa
- Costs around £10,000pa: admin, land lease and maintenance
- The remainder will go to share payments, repaying capital and to a community fund.
- The project will be owned by a Co-operative, with community benefit as one of the objectives.
- Local people will be able to invest between £500 and £20,000 and will receive annual interest payments on their investment
- A share offer is to be launched once technical details are finalised. Anticipated interest rate around 4%.

Case Study 6

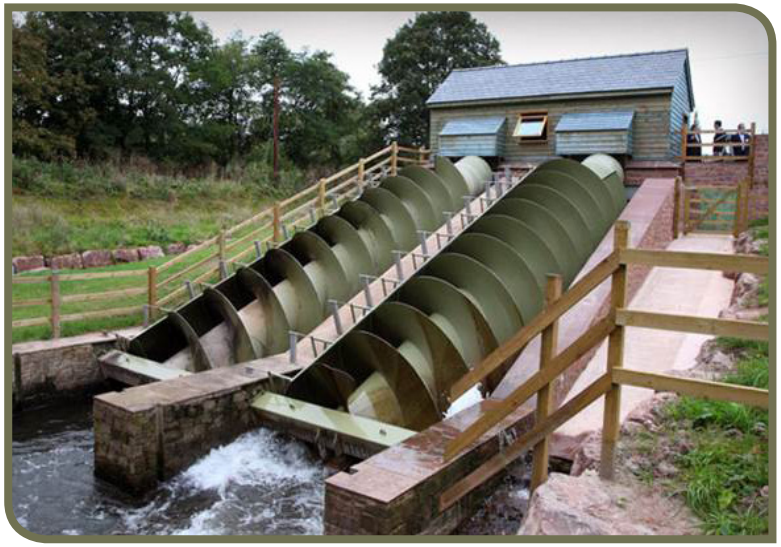
Renewable energy - St Neots Community Hydro Scheme

www.stneotshydro.co.uk

Financing

It is proposed that funding will be raised from three sources:

- A Community Share offer with shares of £250 or £500, open to individual investors, local business, local venture capital funding, parish and district councils and local landowners.
- Grants as possible
- Commercial loans from banks such as the Charity bank, or other similar institutions or through 'crowd funding'.



Key features

- The type of plant proposed comprises two 3.25 m diameter Archimedes Screw turbines, connected to a gear box, which is in turn connected to an electric generator.
- It is anticipated that the plant will have a rated generating capacity of between 195 – 215 kW, capable of producing 660-750 MWh.

Overview

- The proposed scheme is to install a hydro electric plant on the Great Ouse river in St Neots
- The scheme is at an early stage; a prefeasibility study carried out in conjunction with a team from Anglia Ruskin University concluded that the scheme is practical and financially viable.
- The proposers of the scheme are now in the process of seeking funding to commission a full feasibility study. This is expected to cost up to £50,000.

Other community hydro schemes in the UK

- Stockport Hydro in Greater Manchester, up and running since October 2012 www.stockport-hydro.co.uk
- Torrs Hydro in Derbyshire, up and running since 2008. www.torrshydro.org
- Osney Lock Hydro, Oxford, work started with electricity generation anticipated to start by the end of 2014. www.osneylockhydro.co.uk

For more information on Community Energy Projects, see:

https://www.gov.uk/community-energy
Government guidance for local groups who are interested in setting up a community energy project

http://www.planlocal.org.uk/pages/videos#section4
Short films from the Centre for Sustainable Energy giving support and advice on setting up a community-scale energy project.

http://www.planlocal.org.uk/pages/getting-people-involved
Guidance on community engagement from the Centre for Sustainable Energy

http://communityenergyengland.org/
Organisation representing and supporting those commited to creating the conditions within which the community energy sector can rapidly scale and grow across the country.