

Case Study: Bolton Memorial Hall Energy Generation

November 2012

Bolton is one of twelve parishes covered by the 2009 Heart of Eden Community Plan. Bolton village sits above the River Eden approximately 4 miles North West of Appleby.

Bolton Memorial Hall, established in 1922, together with the Church of All Saints, a Chapel, Pub, Primary School and Nursery serve a population of just over 450.

Background

The Heart of Eden Development Trust was set up to deliver some of the actions in the Heart of Eden Community Plan. The Plan identified the need to conduct research into the feasibility of renewable energy projects. The Management Committee of Bolton Village Hall wanted to generate additional income and reduce their energy usage.

The Project

The Heart of Eden Development Trust led a project to help community buildings install solar PV (Photo Voltaic) panels to generate electricity. Income would also be provided from the Government's Feed in Tariff (FIT).

Bolton Memorial Hall joined the scheme, agreeing to split the income with the Development Trust. The total cost of the project was £14,111. The Hall Committee contributed £4,000 with the balance provided by a Big Society grant. The Parish Council paid the planning permission fees.

What has been achieved?

18 PV panels have been installed on the roof of Bolton Memorial Hall. Each panel is 1580 x 808 x 40 mm in size and can generate up to 185 watts giving a peak system capacity of 3.3 kilowatts.

It was agreed that the Memorial Hall would own and have responsibility for maintaining and insuring the panels. The Hall Committee would keep 64% of the income, with the Development Trust receiving 36%.



Bolton Memorial Hall

The FIT means the hall gets paid for both the electricity it generates and uses, and that which it generates and exports back to the grid. In the first 12 months, 2,942 units were generated, with a total income of £1,245 from FIT payments. The Committee kept £797 and gave the Development Trust £448. The hall's electricity consumption from the Grid has reduced by around 25% as the electricity used during the day is generated by the PV panels.

To retain heat and save energy, the Committee insulated the loft with *Thermafleece* and installed draft proofing, blinds and fully lined curtains. Funding for this was provided by Cumbria Waste Management Environment Trust and Eden District Council (Village Hall Grants). People using the hall have seen a noticeable difference in the way the hall retains heat.

Within Bolton the project has raised awareness of the opportunities the FIT presents with eight residents installing PV panels on their own homes in less than six months, and more are considering it.



Solar Panels



PV System Generation Meter

The Learning

The project was developed very rapidly after funding was made available through the Big Society Grant Fund. There was a project completion date of 31st March 2011 but the funding wasn't approved until early February.

The Committee knew that planning permission was not required for the installation of PV panels on most domestic properties. However, in January 2011 it was discovered that planning permission and listed building consent would be required for the installation on the Memorial Hall.

The tight timescales for project completion proved to be a challenge as planning consent was only received mid-March 2011. Early discussion with the local planning authority is recommended in order to clarify whether planning or building control permission is required for PV installation.

There was some uncertainty as to whether the grant fund could meet the full project costs which meant that the Committee had to find additional funding at short notice.

Feed in Tariff levels have reduced since this project was completed, however, so have the costs of installing Solar PV. As electricity prices continue to rise this type of project is still worth considering.

Eligibility for Feed in Tariffs can be affected by grants from some sources. Further information is available from the Energy Saving Trust at

www.energysavingtrust.org.uk

Installing energy efficiency measures has meant the hall stays warmer for longer when the heating is turned down or off. This can now be done before events are due to finish, saving heating oil and further reducing the hall's running costs.

Contact Details

See the **Heart of Eden Development Trust** website for a report on the PV project www.heartofeden.co.uk

Get Generating: A Renewable Energy Guide for Rural Communities produced by Action with Communities in Rural England (ACRE)

www.acre.org.uk/Resources/ACRE/
Documents/Renewable Energy Guide.pdf

Plan LoCaL - Planning for Low Carbon Living www.planlocal.org.uk

Department of Energy and Climate Change (DECC) www.decc.gov.uk

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