# Green Hotelier UK 2013: Beechenhill Farm B&B

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# Beechenhill Farm was winner of the UK Green Hotelier 2013 competition, which searched the UK for the most innovative sustainable hotel out there

Beechenhill Farm is a small organic dairy farm in the Staffordshire Peak District, within the National Park, offering eco tourism accommodation (including for wheelchair users), eco weddings and conferences in the restored Haybarn and renewable technology demonstration days. The business strives to be sustainable through reducing its environmental impact, supporting its local community, contributing to the global community and enabling others to experience and appreciate a sustainable way of living.

Beechenhill is a holder of a Peak District Environmental Quality Award and has a Gold GTBS award. In November 2012 the B&B was one of the few English finalists in the carbon reduction category of the Virgin Responsible Tourism Awards and in the same year they won the Environmental Business Award in the Sentinel Business Awards. Beechenhill is also currently in the final of the sustainable tourism category of the Visit England Awards for Excellence.

# The gradual implementation of sustainable initiatives at Beechenhill

In 2008 Sue Prince, owner, developed the eco-wedding business, where families can book the whole farm for the weekend, decorate the Haybarn, eat local food, have local live bands and their guests staying at some of the many tiny B&Bs and cottages in the surrounding 3 mile radius. Crucially Beechenhill works with its local coach company to arrange delivery and collection of guests to and from the celebration.

As a way of reducing their environmental impact, continuing to diversify, innovate and offer a distinctive experience to visitors Sue Prince developed the <u>Pilot Light Project</u> in 2009; the greening of farming and tourism in a protected landscape.

The purpose of the Pilot Light Project is firstly to explore innovative, practical and appropriate ways to address rural resource efficiency, economic pressures and reduce the carbon footprint of a tourism business in the Peak District National Park. And secondly, to demonstrate the range of technologies to an audience of influencers, planners, Government bodies, small businesses, individuals and

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holiday guests; 'if we can do it, so can you, and here's how' and 'we made the mistakes so you don't have to!'

So far several Pilot Light demonstration days have been held with extremely positive feedback. But it's not just about communication. Since the introduction of the Pilot Light Project, the carbon footprint of the farm has reduced from 41 tonnes to 14.4 tonnes, despite the addition of the wedding venue and an additional dwelling. The farm has also experienced a 90% reduction in the amount of oil used.

A key part of the Pilot Light project is the other organisations that have got involved. Beechenhill has been very committed to accurately measuring the impact of its sustainable initiatives and turning to experts for advice. For monitoring and research the Pilot Light Project has involved Keele University, Marches Energy Agency, The Peak District National Park Authority and Staffordshire Business Environment Network. Aberystwyth University has been involved in monitoring the ecological effects of certain initiatives and guests are also encouraged to get involved by recording changes to wildlife.

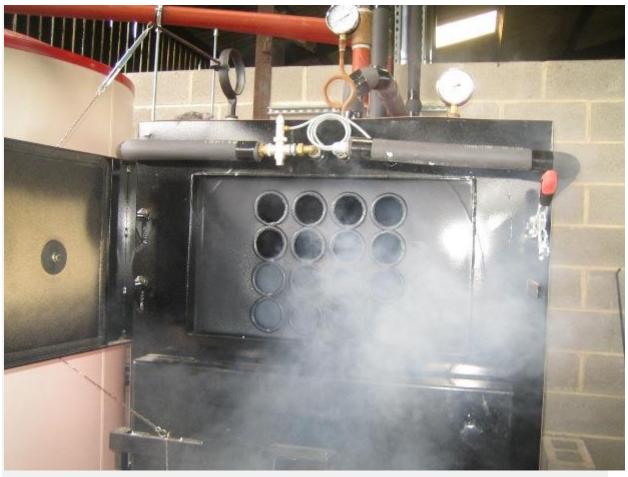
#### The environmental initiatives:

Here are some of the sustainable practices in place at Beechenhill:

- Low energy lighting all lighting on site is now either low energy or LED from farm flood lights to wedding barn fairy lights. The carbon saving is approximately 0.75 tonnes
- PIR sensors on all public lighting ensuring no waste of energy and no unnecessary light pollution. This was also tried in windowless bathrooms but failed as people need more control to switch lights on or off
- Natural sun tunnel in a windowless room there is no need to turn lights on in daytime, reducing energy and carbon cost
- 120kw biomass (pellet) boiler and mini district main installed this is 90% fuel efficiency and has reduced carbon footprint from 41 to 23 tonnes by replacing 2 oil CH boilers and 4 immersion heaters. A carbon saving is approx 19 tonnes
- Solar PVs, 2 x 4kW arrays these innovative lightweight solar PV film generate 14% more electricity per Kwp than conventional panels. The product is almost unknown in UK (but more common in Europe) and is very suitable for fragile roofs typically found on farm barns and warehouses. A carbon saving of 4.3 tonnes
- Under floor heating has proven an excellent source of low energy heating for a large space like the hay barn since a lower water temperature required than the use of radiators
- Rayburn cooker conversion has reduced oil usage by 30-40% and saved approximately 2.5 tonnes of carbon. An induction cooker also helps save energy and costs
- Electric bikes two electric bikes are offered for hire allowing them to explore nearby rather than driving all day
- Insulation use of natural sheep's wool where appropriate although the farm struggled to find a very local product. Even though their sheep's wool insulation is from the neighbouring farm, it had to be processed in Ireland
- Insulation normally around a third of all heat lost in an un-insulated building is through the walls but lime-plaster insulation stops this. Lime plaster with Pearlite insulates efficiently while retaining the character of the building and so is best for rural and old buildings
- Rain water harvesting the farm has rain water flush toilets in two cottages and the Haybarn wedding barn. These use an existing 8000 gallon rain water tank behind the house, where water is collected from north-facing roofs. Water from the south roofs is collected and feeds a restored pond (traditional mere), which is home to a colony of great crested newts

In addition to the above the farm also has the following:

- All accommodation is double glazed and has wooden window shutters
- Eco cleaning products and recycled paper products are used
- Guests can be collected from the bus station and their bikes stored safely
- There are recycling and composting facilities for guests and all farm waste. Since on-site recycling and composting started the quantity of un-recyclable waste has reduced. Three bins of rubbish per week were being produced; now one and a half are being produced every two weeks.
- There are bird boxes and wild birds are regularly fed, in particular a large flock of gold finches that over winters on the farm
- The family have planted 250 indigenous trees in 1985, 1000 trees in 1993, 500 trees in 2009
- Beechenhill is an organic farm so no synthetic chemicals are used on the 37 hectares
- The farm is carefully managed to encourage flora and fauna, using only clover and composted manure to support fertility and encourage insect life, which in turn attracts birds



The bio mass boiler at Beechenhill B&B

### The ultimate benefits

Besides from the huge savings on carbon and therefore cost, benefits of the project have spread far and wide.

For Beechenhill, the biggest benefit of the Pilot Light project has been sharing the lessons they have learned with other small businesses and encouraging and enabling others to make sustainable decisions in the future. Beechenhill is very much a part of the green movement in the local area and helps to drive this agenda by example.

In three years 4000 people have become aware of and experienced the above changes at Beechenhill Farm (annually 700 staying guests, 700 wedding guests and 300 day visitors, school groups, Pilot Light Demo day participants for three years).

Sue observes that guests also benefit from the changes,

WITH THE NEW SYSTEM GUESTS HAVE AN IMPROVED EXPERIENCE BECAUSE THEY CAN BE AS
WARM AS THEY WANT AT ANY TIME, THIS IS PARTICULARLY IMPORTANT FOR WHEELCHAIR USERS.
IT HAS BEEN IMPORTANT TO DEMONSTRATE THAT BEING ENVIRONMENTAL DOESN'T MEAN BEING
'WORTHY OR PREACHY'

#### So what's next at Beechenhill?

Sue and the family plan to consolidate their initiatives, for example the low energy lighting is gradually being replaced with LED and better rated white goods are purchased when replacements are needed. As decorating happens in rooms and cottages, rain water flushes will be installed in more toilets and induction hobs will replace conventional. They also plan to create and install an innovative, low-tech, small scale bio digester dome to make methane from cow manure.

## Beechenhill's top three tips to hoteliers:

- 1. Do a really thorough environmental audit. We all think we know roughly what is going on in our businesses but it's amazing and life changing when you find out what is actually happening, based on real evidence. Understanding the real story empowers you and justifies necessary investment
- 2. Visit other businesses that have already made changes to talk about your ideas and concerns. Business advisers are all well and good but there is nothing better than talking to someone in the same boat
- 3. If you decide to make change, do it as a special project. Give it a title, aims and objectives and decide when you'd like to complete. Then stick to it!

For more information go to <a href="www.beechenhill.co.uk">www.beechenhill.co.uk</a> or you can read more about our winner and runners up at Green Hotelier UK 2013 competition winners