



## CASE STUDY May 2012

### **Kathryn Billings Printing and Embroidery Ltd is a family firm benefitting from installing solar PV.**

#### **A family company**

Kathryn Billings Printing and Embroidery Ltd supplies and personalises school uniforms and corporate clothing from purpose-built workshop at Potterhanworth Booths. It supplies a wide range of clients both locally and nationally and in addition to Kathryn and her husband Rob, the company provides employment for five local people.



#### **Business and sustainability**

When the business was set up, providing a high quality living and working environment, and creating opportunities for flexible rural employment were key considerations. Incorporating practices that have positive outcomes in terms of sustainability have been made on purely business grounds.

- The original oil-fired condensing boiler installed 18 years ago was chosen for its efficiency and long life. At 92% efficiency it was streets ahead of most others available then and has easily earned back the extra cost incurred at the time.
- The workshop's energy use is minimised through a number of features incorporated when it was constructed: suitable insulation in ceilings and walls; double-glazing with low-emissivity glass; roof-lights maximising the use of natural light; good ventilation enabling the workshops to remain comfortable in summer without the need for air-conditioning.
- Clothing is despatched to customers in re-used cardboard boxes. These are collected flat and in bulk from another East Midlands supplier. Not only is the re-use more environmentally sustainable, but the price per box is less than a quarter of the price of a new equivalent.
- Any clothing seconds are kept and sent to new homes overseas rather than shredded or land-filled. Fabric wastage is minimised by careful pattern-cutting.
- In October 2011 the company invested in a 3.5 kW array of solar PV panels to provide some energy for the electrically powered embroidery and sewing machines.

#### **SOLAR PV FACTS AND FIGURES**

Electricity bill in the year to October 2011	£1262 (11053 kw/h)
Size of solar PV array	3.5 kW
Estimated generation	2975 kW p/a
Estimated payback time on original investment	6 years 10 months
Estimated savings over next 25 years	£30135*

*\*This is based on today's figures and does not take inflation into account – either on FIT payments or fuel costs.*

## Finding the time

As for most small business owners, for Kathryn and Rob time is money. Finding the time to think about sustainability and business development can be difficult. Renewable energy had been on their background agenda for months before they finally took the plunge, and in the end the impetus was provided by an employee who had had panels installed on her home. Rob freely admits that the positive experiences of a trusted friend – bringing the theory to life - made all the difference.

And when time allows they are ready to explore other business opportunities linked to sustainability.

- How might they reduce the number of individual plastic packaging bags?
- Can the fabric off-cuts find a better and more cost effective home than landfill?
- How can they use their localness and green credentials within their marketing?

## In Kathryn's words:

"We all feel privileged here to be able to work in such an attractive part of the Lincolnshire countryside. Whereas I appreciate the need to reduce pollution, I am also concerned about the industrialisation of our county, especially in beautiful areas like the Wolds. So how to contribute something positive and practical to the debate on green energy?"

Solar energy is relatively inoffensive. The installation of our fourteen panels was quick and the outlay wasn't huge. It is sensible for us as we supply school uniform and corporate wear and our busiest times are in the summer. We run embroidery and sewing machines during the day and we don't have a night shift. As we started this scheme during the winter we have yet to reap the full financial rewards but the benefits already seem very promising and it is one sure way of keeping down rising energy costs.

This is something that many SME's could do. Far better to have many small schemes like this, which offend nobody and bring benefits to a business, than suffer other large controversial schemes. If enough businesses did this, it could make a difference."



*Kathryn and Rob outside their workshop*



To source uniforms and corporate wear produced locally and with an eye to sustainability visit [www.printing-embroidery.co.uk](http://www.printing-embroidery.co.uk) email [sales@printing-embroidery.co.uk](mailto:sales@printing-embroidery.co.uk) or telephone 01522 794979