

## SOLAR PANELS CUT CARBON EMISSIONS HAMBLESIDE DANELAW LIMITED

MCRMA member company and British building products manufacturer Hambleside Danelaw has installed solar PV panels on its factory roof in Daventry to cut energy bills and further reduce the company's carbon footprint.

The 600 new solar panels, covering 990 square metres, will help to save an estimated 55 tonnes of CO<sub>2</sub> emissions a year for the medium-sized manufacturer that already has a very low total carbon footprint equivalent to that of only 45 average households. The system is expected to produce the same amount of energy as 55 domestic houses with typical solar PV installations; a huge 110,000kWh per year.



*Solar panels fitted on the factory roof at Daventry*

The latest initiative is linked to Hambleside Danelaw joining Daventry District Council's 'Build a Better District' campaign. The panel installation will not only save energy usage in the building but will also provide the council with an estimated annual income of £17,000 from the government's feed-in tariff scheme.

Since the new factory was opened in September 2007, its energy bills have been slashed by the original installation of insulated roofing panels and Hambleside's own GRP insulated rooflights on the roof of the building which houses the company's injection moulding production, central distribution facility and sales offices.

The company immediately enjoyed savings of up to £2,800 per month on energy at the 50,000 square feet facility in comparison with the bills at its old thermally inefficient premises in the East Midlands, despite a big rise in electricity and gas prices during the period.

The GRP low carbon StepSafe rooflights and unique Insulator core, which cover 20 per cent of the roof area, diffuse daylight evenly across the building, reducing the need for artificial lighting, and provide a U-value as low as 0.8kW/ m<sup>2</sup>K. The new solar panels in conjunction with the performance of these rooflights will result in a further 40 per cent reduction to energy bills.

Evidence from the United States shows that in addition to potential savings for the building occupier, green buildings can achieve 5 -10 per cent higher rents over the long term and command a 15 per cent premium in capital values.

Hambleside Danelaw's other factory in Inverness has also reduced its carbon footprint by using 100 per cent renewably sourced electricity and liquefied petroleum gas.

Chris Avery, managing director at Hambleside Danelaw, said: “Hambleside Danelaw has achieved a 70% reduction in its carbon footprint over the last five years and we are committed to further reductions. With the rising cost of renewable energy, we feared that further cuts would be difficult. However, the installation of the solar PV panels in partnership with Daventry District Council means that our zero carbon target remains realistic while at the same time we are saving on our energy bills.”



*Installation of solar panels on the Hambleside Danelaw roof*



<http://www.hambleside-danelaw.co.uk/>