## Frustration – the mother of invention...

Years of frustration at continually being told that solar thermal collectors were only useful for domestic hot water systems, convinced Matt Lee – founder of Cheltenham-based solar energy business, So-Lar Smart Heating Systems - that there had to be a more effective way to capitalise on the redundancy of so much natural energy.

Having been 18 years in the plumbing and heating industry, and knowing that there were no conventional solutions that could be readily adapted, he started to 'think outside the box'.

Matt's theory was that, if solar-heated water could be supplied to under-floor heating systems - or even conventional radiators - in a way that was affordable, then solar panels could be providing 'more for longer', together with a substantial saving on domestic fuel.

His challenge was therefore to get the under-floor heating and the hot water cylinder to work together. This could only be facilitated through an intelligent control package and an adapted cylinder that could both receive and supply energy.

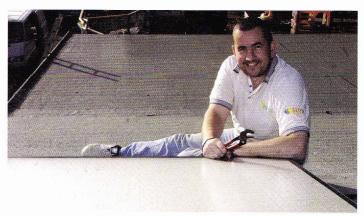
## SUNi Solutions is born...

Thus the concept was born, and "SUNi" was created as a new brand to fully capitalise on solar energy.

"It sounds easy," said Matt, "but it has taken years of work to bring the invention to fruition, protect the intellectual property and secure the financial backing to make the business a commercial reality. I'm pleased to say that we have now achieved all three."

Matt then explained the challenges he faced... "To achieve hot water within the domestic hot water cylinder to 35C, all that is often required on the roof, or at the collectors, is just 39C - a temperature that is possible up to 10 months of the year," he said.

Recognising all the obvious problems, contradictions and challenges that surrounded his quest, the basis of Matt's eventual design was a three-coil cylinder where the bottom two coils operate conventionally in 'accepting' hot water, with the third distributing hot



Matt Lee puts the finishing touches to a SUNi Solutions charity installation his company has recently undertaken for Hop, Skip & Jump – α play and support centre in the Cotswolds for children with special needs

water to under-floor heating or radiators. The control package had to regulate in-flow and out-flow so as to enable constant temperatures in tandem with any supplementary energy supply that may, from time-to-time, be needed.

"After various test and installation configurations, I took my designs to a few well-respected figures within our industry and the general opinion was that this was an 'interesting concept'," he continued. "I applied for my first patent back in Nov 2005, and then the hard work and R&D really started."

Matt had a brief excursion with Dragons Den where, he says, he "broke their rules". But this led to the exposure he needed, and, ultimately, to investment and support from steam technology entrepreneur, Tim Gardner.

After years of frustration, setbacks, and ultimately the recognition he truly deserved, Matt founded his company, So-Lar Smart Heating Systems, as the vehicle to market SUNi Solutions. This is now considered by the industry as a major breakthrough in solar thermal technology, allowing free underfloor warmth as well as domestic hot water from solar panels.

www.sunisolutions.com

## Website helps solar panel customers



CompareMySolar.co.uk is a new website to help consumers discover the potential benefits of solar panels, without having to arrange individual cost quotations.

The free-to-use website offers a comparison of prices and details of local installers, the most suitable systems, warranties, specifications, etc. If interested, the customer can make an online request for a site visit and specific cost quotation from up to three chosen solar installers.

"Buying solar panels can be a daunting task, but becomes clear, quick and easy with CompareMySolar," says the company. www.CompareMySolar.co.uk

## Verdo to expand retail network

Plans to establish a network of 150 retailers across the UK have been announced by Verdo Renewables, one of Europe's top manufacturers of eco friendly wood fuel products.

As well as traditional domestic fuel suppliers, Verdo is looking to recruit hardware retailers, garden centres, farm shops and agricultural supply outlets to retail both its wood pellets and briquettes. Verdo briquettes are used in open fires, wood burners and multi-fuel stoves, whilst the company's wood pellets are used in biomass heating systems.

The company is expanding its current UK network of 34 retailers, in response to growing demand for its energy efficient wood fuel products, manufactured exclusively from sustainable virgin timber at plants in Andover, Hampshire and Grangemouth, Scotland. www.verdorenewables.co.uk

