



SARAH LONSDALE

HOW TO BE GREEN AND STAY SANE

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Want to trim your bills, update your home and do your bit for the planet? Sarah tests the latest 'eco' products, sorts the fads from the finds and reports back on the greenest homes in Britain

When Mark Edwards and his wife, Lucy, first saw Rock House, an elegant Georgian town house in the Worcestershire village of Shrewley, 10 years ago, they both knew immediately that it was where they wanted to settle, start their family and grow old together.

"It was perfect: tall windows, handsome façade, high ceilings and surrounded by green fields," says Mark, a promotions consultant. "There was only one problem: it was cold. In the winter, even with extra jumpers it was almost unbearable." As fuel bills began to rise, the couple saw their costs for the liquid petroleum gas (LPG) they used to heat their house go from £500 a year to £2,000 – on top of the £600 they were

spending on logs for the wood-burning stove in an effort to stave off misery through winter.

By 2007, Lucy and Mark started to think the unthinkable: their beautiful

Georgian home, where they now had two boys, would not see them into old age. Its heating requirements were demanding enough while they were earning: how would they afford to keep themselves warm when they became pensioners?

"But we didn't want to leave the area, and we eventually decided to build a new efficient house in the garden," Mark says.

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home should also have its own renewable heat source and underfloor heating, which works most efficiently with heat pumps. So I went to Germany, where they manufacture the best underfloor heating systems." So began an odyssey for Mark, with an unexpected ending.

"During my research, I learned about heat pump technology and that while it is not advised for an old draughty house, if you make changes to the size and type of radiators and improve its insulation, it can be made to work." During another building delay to the new house, Mark decided to make £20,000 worth of changes to the Georgian house so the new owners would not suffer as they had during winter. "I replaced 13 radiators with new Belgian ones specifically designed to work with heat

WARM UP

DeLonghi air-source heat pump:
www.icsheatpumps.co.uk

Radiators: www.jaga.be

Heat store: www.heatweb.com

Insulating paint: www.thermiate.com

Sheep wool insulation:
www.bleckmountaininsulation.com

Skirting board radiators:
www.discreteheat.co.uk

pumps, on cooler water temperatures and which are twice the size of the old ones. In the kitchen, we've chosen 'skirting board radiators', which are being assessed as part of the Government's 'Retrofit for the Future' programme and which work well with the air-source heat pump I installed. This then feeds hot water into a 'thermal store' – a 475-litre super-insulated hot water tank, which also stores water heated by the back boiler of the wood-burning stove and acts like a warm heart of the house."

In addition, Mark stuffed the loft with 400mm-thick wool insulation which, on top of the 100mm of fibreglass already there, takes



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Despite hiring an architect and a project manager, the building process was fraught with delays and overspend. During this time, Jacob, the Edwards' eldest son, had joined his school's Eco-Action Committee, and told his parents about the dangers of climate change. "After listening to Jacob – after all it will be his generation that is going to have to sort out our mess – I decided our new highly insulated



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In addition, Mark stuffed the loft with 400mm-thick wool insulation which, on top of the 100mm of fibreglass already there, takes his loft insulation to nearly double Building Regulation requirements. Finally he painted the inside walls of the house with an insulating paint compound, used on space shuttles to reflect heat, which he mixed with Farrow & Ball colours.

The changes to Rock House were completed in time for this year's cold winter. "It was the warmest winter we had ever spent in the house and our heating bill was halved. An environmental consultant took readings and informed us we have reduced carbon emissions by 42 per cent," Mark says.

Thanks to the changes made, the Edwards have decided to stay in the house they wanted to grow old in, now made possible by its lower bills and the spare eco home in their garden is now for sale through Info@getahead.co.uk.

