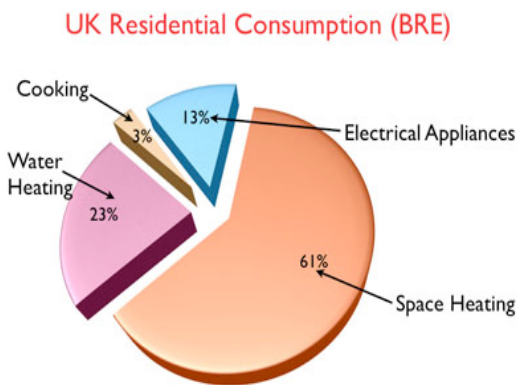




A QUIET GREEN ENERGY REVOLUTION IS COMING



In the UK, **approximately 26% of total energy use is for space heating**, and a further 8% for water heating. Of **domestic energy use, heating accounts for 84% of the total**. It is a significant contributor to UK CO2 emissions, **equal to approximately the total energy consumption of the transport sector**.

Skyrad is a new technology that addresses space heating energy consumption. Invented in the UK, it is designed to work on the UK's large period building stock, with solid walls and high energy consumption, but can

also easily be specified as part of a new build.

For architects and consultants it provides a **powerful new tool for reducing carbon footprint and meeting Passive House standards**. For householders it means **80-90% off energy bills** forever.

Far more efficient than either solar or external wall insulation alone, a quiet green revolution is coming - Skyrad.

**80% GAS SAVING =
3.5 TONNES CO2/YEAR
HEATING BILLS 80% OFF**

Skyrad is an integrated solar space heating, space cooling and solar hot water system in one that can be retrofitted to buildings.

It saves over 80% of total heating energy bills, equating to a carbon saving of **over 3.5 tonnes per year** on a typical family home, or about **half a family's total Carbon Footprint**. If you're off mains gas the saving can be double that.

SKYRAD



Heating



Hot water



NO CHANGE TO ROOM SIZE

Skyrad is discreetly applied to exterior surfaces only. That means no need to move furniture - or indeed anything at all. It also means no upheaval for you and your family.



RAPID INSTALLATION

Installing Skyrad on a standard family home can take as little as 2 weeks. During initial consultation we provide an accurate estimate of both timing and cost.



LOOKS HOWEVER YOU WANT IT TO

The patented Skyrad coating can carry brick slips or render to retain original looks, or be clad in a huge range of styles and finishes. Keep it looking the same or give it a makeover, it's up to you.

COMFORTABLE, CONVENIENT, GREEN

The Skyrad system is a new kind of External Wall Insulation (EWI) that controls the rate of heat absorption, insulation, storage and rejection from buildings.



When the sun shines in the autumn, winter and spring, it rapidly absorbs and stores solar energy. It then re-emits the heat slowly into the house, keeping rooms at a comfortable temperature.

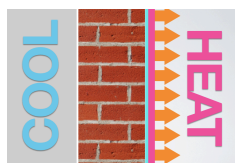
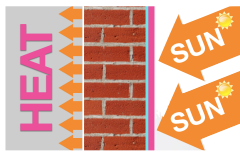
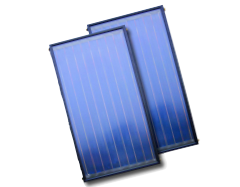
If the sun isn't shining, Skyrad

switches to maximum insulation mode, keeping heat in as long as possible.

In the summer it works backwards, conducting heat out of the house to create comfort cooling. And there's enough spare heat left over from the collector system to provide **nearly all of an average family's hot water requirements.**

So unlike a traditional solar heating system, the sun's energy shining on solar collectors is used not only to heat hot water, but also to heat your house. As your space heating is typically 70-75% of your overall heating energy requirements, **it saves vastly more energy, and more carbon.**

HOW IT WORKS



- 1** In the winter, solar collectors facing the low sun gather as much solar energy as possible
- 2** The heat is stored in the existing walls of your house and is emitted gently into the house through the walls themselves by our unique controllable insulation
- 3** When the sun is not shining the natural insulating properties of our 'heat lock' system prevent stored heat from escaping.
- 4** In the summer, the walls of your house are automatically cooled by our controllable insulation system, keeping the interior of the house at a cool comfortable temperature
- 5** Plus there's enough spare heat to provide the majority of your hot water needs. Sometimes that can mean free hot water for months on end.



And the energy source for all this is clean, sustainable and completely free - the sun.



SOLAR SPACE HEATING THAT WORKS IN THE UK

The UK's older solid walled housing stock is one of the reasons we have higher heating energy consumption than other countries in Europe. It is also why addressing heating energy usage is so important.

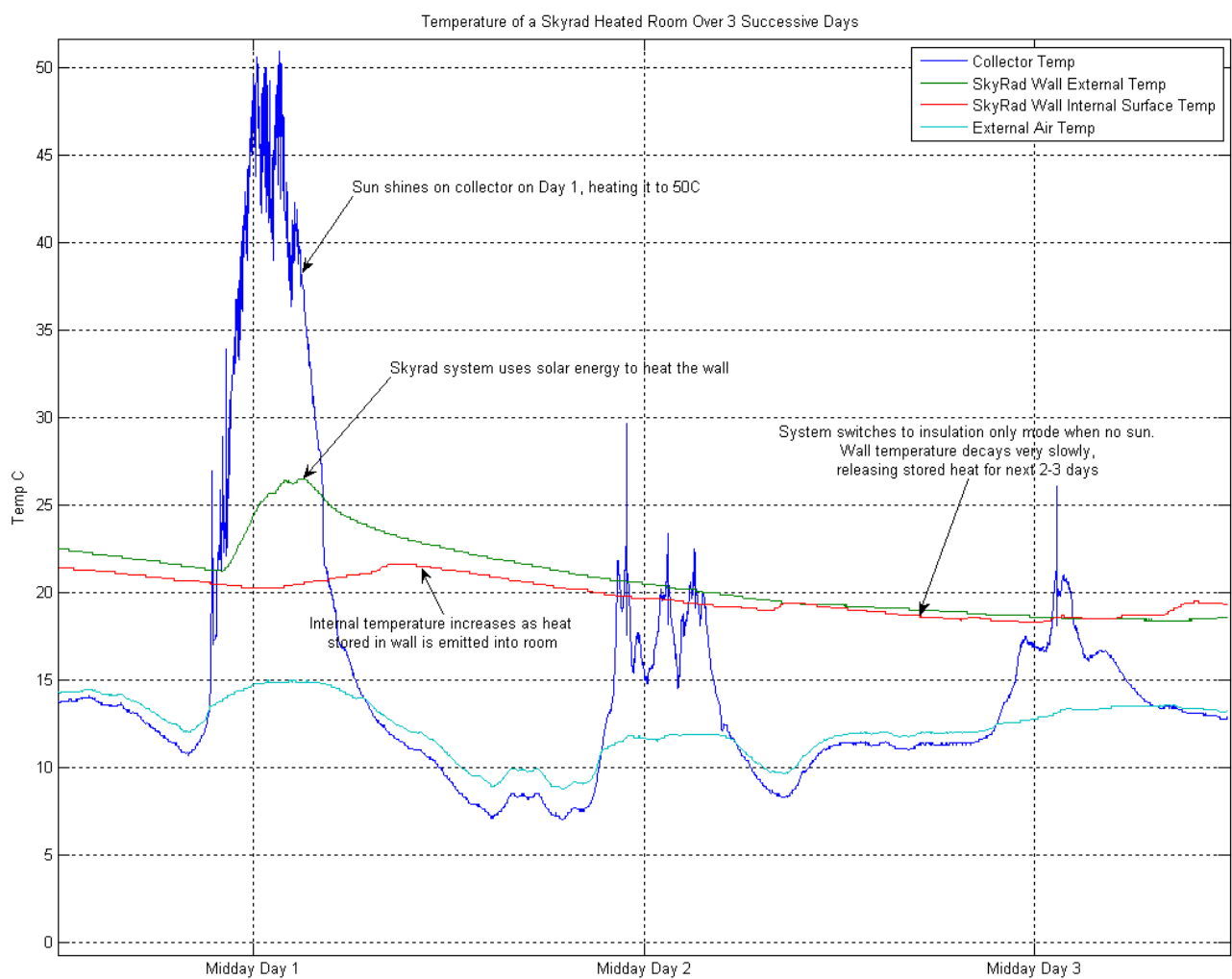
Germany, Austria and Scandinavian countries have been developing and using solar heating systems for several decades, proving beyond doubt that solar can successfully make a very large contribution to heating. However these systems are so far virtually unheard of in the UK.

To a large extent this is because they are only effective when the building is well insulated, there is low temperature radiant heating system (e.g. underfloor or in wall heating) and space for a large thermal store. Few UK houses have this, and certainly very few period properties do. Because of the unique way Skyrad works, it can create the ideal conditions for solar heating to work on an old 'hard to treat' UK solid walled house.

SOLAR SPACE HEATING THAT WORKS IN THE UK

This graph shows how Skyrad achieves its reduction in energy usage. By absorbing solar thermal energy, storing it and preventing it from re-escaping, it heats and/or insulates depending on the weather conditions. This gives savings that vastly outweigh any comparable system.

All readings below are accurately measured from a Skyrad installation.



A RENEWABLE TECHNOLOGY NOT SIMPLY CARBON DISPLACEMENT

Other renewable heating systems tend to have either small energy contributions, such as Solar Hot Water or Micro CHP, or simply emit the CO₂ at the power station instead like Heat Pumps.

Biomass, whilst in theory being Carbon Neutral, only works if you are sure you are replanting to cover what you burn (a process that is not scalable, as devoting land to biofuel displaces food production) and contributes significantly to other airborne pollution.

Skyrad suffers from none of these drawbacks. It requires only the energy from the sun, and around £10 per year of electricity to run the controller.

Skyrad is one of the first truly green space heating solutions - and it works in Britain.

Technology	Approx Cost Fitted	Approx Savings p.a.	Rate of Return on Investment	CO ₂ Saving tonnes p.a.
Solar Hot Water	£4000	£75	2%	0.6
Micro CHP -	£5,500	£125	2.5%	1.5
Ground Source Heat Pump	£10,000+	£190	2%	1.3
Biomass Pellets	£9,000	None – more expensive	n/a	5.1 or nil
SKYRAD	£19,000	£850	4%	3.7

IS YOUR PROJECT SKYRAD READY?

Take the Skyrad test and find out how suitable a building would be. Answer 'yes' to both sets of questions and the property may also be eligible for a reduced cost installation, thanks to Skyrad's support from the Carbon Trust.

	YES	NO
Does it have solid walls?		
An accessible South facing roof or wall (un-occluded or shaded by trees) or a larger back garden?		
The building is not a listed building or in a conservation area*		

*Skyrad is acceptable in some conservation areas - call us if you'd like to find about yours

SCORING

If you answered YES to all of these, your project is ready for Skyrad!

Drop a note to Skyrad at enquiries@skyrad.co.uk and we're happy to give you any more information you need, or arrange a free consultation. It comes with no obligation.

REDUCED COST PROGRAMME

If you would like to be considered for Skyrad's part-funded programme, please also answer the following:

	YES	NO
Does the house have a hot water cylinder (rather than a combi-boiler)?		
Is it a detached property?		
Is the householder open to occasional monitoring of your installation for its first 24 months?		
Would the householder be willing to let us use your property in marketing literature and/or possible TV documentary?		

SCORING

If you answered YES to all of these too, you may be eligible for a part-funded Skyrad installation!

As above, drop us a line at enquiries@skyrad.co.uk and we're happy to give you any more information you need, or arrange a free consultation.



MEET SKYRAD

Established in 2010, Skyrad was set up to help near-eliminate home energy costs.

That's not our only goal of course, and the reason the Carbon Trust is so keen to support Skyrad is that it's also an exceptionally efficient way of reducing carbon emissions.

It does this by combining green technologies in a completely new way. To find out more, see **How it Works**.

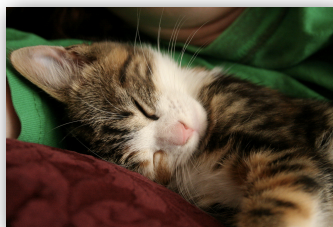
Maybe more important is what that means to you, which is very straightforward: more comfort in your own home - being cooler in summer and warmer in winter - whilst paying a great deal less for it.

Helping the environment doesn't need to be painful. With Skyrad it will also save your clients money.



SUPPORTED BY THE CARBON TRUST

Funded by the UK government, the Carbon Trust is a not-for-profit organisation that supports green businesses and initiatives. Skyrad was one of those selected for support.



COMFORTABLE - ALWAYS

With Skyrad in your home you'll find it's automatically more comfortable. Without touching your thermostat, Skyrad helps maintain a steady room temperature whether it's hot or cold outside.



HASSLE FREE

Installation can take as little as 2 weeks, won't affect the interior of your house and can leave the exterior near-identical to its original state. And that's just the fitting. Ongoing comfort cooling and heating requires no user effort whatsoever.



SKYRAD

NEXT STEPS

If you've taken the Skyrad test or would simply like to know more, please get in touch:

Email enquiries@skyrad.co.uk

Web www.skyrad.co.uk

All statistics correct at time of going to press. Terms and conditions apply, not all homes are suitable. Please see our website for more detail at www.skyrad.co.uk

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