

# Solar Hot Water

MEA factsheet #2c



## Using solar hot water

Solar hot water systems trap the sun's heat in panels or tubes and are used to provide a hot water supply. A solar hot water system can save 50-70% on hot water heating bills over the year. Up to 100% of hot water needs can be provided during the summer months and a significant proportion can still be provided during autumn, winter and spring.

You may immediately benefit from lower fuel bills. It is also hoped that from April 2011 you will also be paid for the heat you produce under the planned Renewable Heat Incentives (RHI) programme. RHIs were approved in principle by the previous government with details to be finalised, but as with any spending proposals this may now change. However, if implemented, RHI would be a world first for the UK. It would stimulate the whole renewable heat industry and create new jobs.

## Integrating solar technology

Solar hot water systems usually take 1-2 days to be professionally installed and integrated into an existing hot water system. The systems generally work alongside standard boilers.

The standard boiler acts as a back up system, firing up automatically at any times when the solar system isn't providing enough heat.

Usual controls are included, such as timers and temperature controls, making the system as easy to use as any other modern heating method.

With a well designed system, there should be no need to use a solid fuel boiler at all during summer months. Even during the autumn, winter and spring, the system will still make a significant contribution to hot water needs.

## Cost effectiveness

Solar hot water systems can make significant savings on hot water heating bills (50 – 70%). Systems currently cost from around £2500, but a good quality, well installed system is more likely to cost between £3500-£4500 for the average 2 or 3 bedroom property. This price includes standard installation charges.

The savings achieved depend on the size of the installation and on which fuel you are currently using. Replacing peak-rate electricity, oil, coal and LPG with solar will achieve the most dramatic savings. This does not take into account the RHI payments that should come into effect in April 2011 as the tariff has yet to be announced - however, it was intended to be a significant incentive.

Furthermore, gas and electricity costs are expected to increase dramatically in the next few years as fossil fuels become increasingly scarce. These factors, combined with the RHI payments, will make switching from gas to renewable sources much more attractive in the medium to long term.



Solar hot water systems can be made up of tubes...



or panels. Both convert energy from the sun into heat for hot water.



Although the exact amount payable by the RHI scheme has yet to be finalised, any eligible system installed after 15th July 2009 will qualify for the incentives from 1st April 2011. You will earn an amount based on an estimate of how much heat your system can produce. The tariffs will be index linked to allow for inflation. The payments will be made annually for twenty years.

There are a number of factors that can affect the cost effectiveness of the system. Installations at bigger houses or that involve complications of some kind, may be less cost effective as they are likely to incur higher installation costs. Things which might affect this are:

- Access issues to the roof, loft or plumbing system
- Mains pressure or “unvented” cylinder replacement
- Very long pipe runs or a complex building structure
- Requirements for contributing to an under floor heating system.

Costs can be reduced by self installing or if installing the system as a house is being built. If buying a professionally installed system, it is advisable to get three quotes, read the small print and never to sign up for anything on the spot.



## Are there any restrictions?

Although details of the RHI have yet to be finalised, you will probably have to use a registered supplier and/or installer to qualify for the payments. A similar scheme, the MCS, applies to the Feed-In Tariffs for home electricity generation and it is likely that the RHI will follow suit.

You will generally not need planning permission for solar installations unless you live in a conservation area or listed building, but you should check with your planning authority.

## Further Information:

### General information

**Energy Saving Trust**  
0800 512012 [energysavingtrust.org.uk](http://energysavingtrust.org.uk)

**Centre for Alternative Technology**  
01654 705950 [cat.org.uk](http://cat.org.uk)

**Solar Trade Association**  
01908 442290 [solar-trade.org.uk](http://solar-trade.org.uk)

### Suppliers and installers

Please note this is not an exhaustive list and is not an implied recommendation of any product or service

**Southern Solar Ltd.**  
0845 456 9474 [southernsolar.co.uk](http://southernsolar.co.uk)

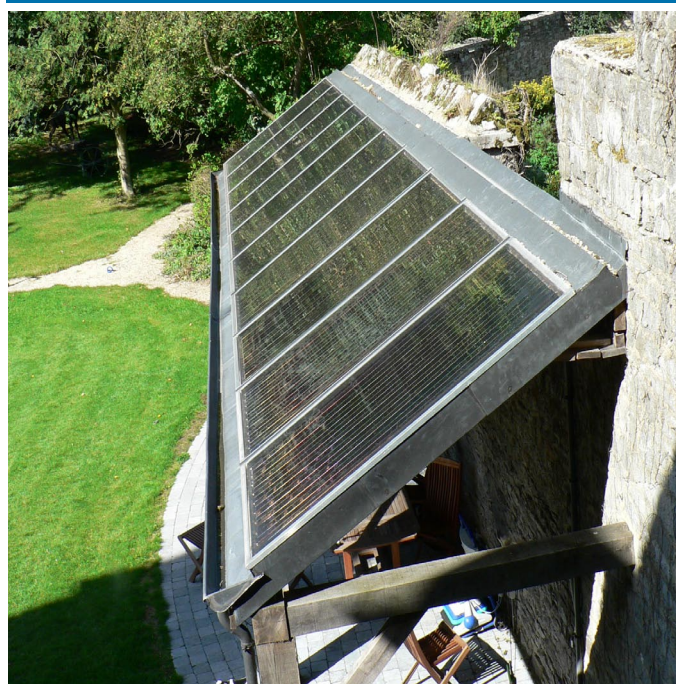
**Bredondale Solar**  
01386 561133 [bredondalesolar.co.uk](http://bredondalesolar.co.uk)

**Energy Engineering**  
01694 731648

**Green Earth Energy**  
01981 241399 [greenearthenergy.co.uk](http://greenearthenergy.co.uk)

**Solar Dawn**  
01588 680469

**Solar Twin Ltd**  
0845 1300 137 [solartwin.com](http://solartwin.com)



[www.mea.org.uk](http://www.mea.org.uk)  
[info@mea.org.uk](mailto:info@mea.org.uk)

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