

Renewable Heat Incentive

MEA factsheet #2f



The Renewable Heat Incentive (RHI) is a new Government-backed initiative to make it more worthwhile installing wood fuelled boilers, solar hot water or ground source heat pump systems (GSHP) in your home, business or community building. It enables anyone to lower their carbon footprint and help tackle climate change, whilst at the same time reducing their energy bills and adding to the value of their property.

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. A similar incentive, Feed-In Tariffs (FITs) already pays participants for energy from PV solar panels, wind turbines, anaerobic digesters and hydroelectric technologies and also enables selling back surplus energy to the grid.

What are the savings?

Even before the RHI payments take effect, there are savings to be made on your fuel bill. The table below gives annual estimated savings based on what type of system you install and which fuel you are replacing.

	Electric	Solid Fuel	Oil	Gas
GSHP	840	600	160	190
Wood	410	170	N/A	0
Solar Water	85	65	50	50

If you currently use solid fuel, oil or electricity to heat your home you can save on your fuel costs by switching to wood, solar thermal (for hot water) or ground source heat pump. If you replace gas with a ground source heat pump or solar hot water you will achieve more moderate savings. If you switch from gas to wood you may initially pay more for your fuel. Better savings can be achieved if you are close to a wood fuel supplier, if you have space to store larger quantities of wood or if you have your own supply of logs.

These figures are of course based on current fuel prices and do not take into account the payments under the RHI that will come into effect in April 2011. Furthermore, gas and electricity costs are expected to increase dramatically in the next few years as fossil fuels become increasingly scarce whereas wood costs are expected to remain the same or even decrease in real terms as more people decide to use it. These factors, combined with the planned



RHI payments, will make switching from gas to renewable sources much more attractive in the medium to long term.

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 between 10 and 23 years, depending on the type of system.

Installing a biomass boiler could save you over £400 per year.

Choosing a system

Wood fuel heating systems covered by the RHI are boiler systems - standalone stoves, which provide heat to a single room, are excluded. Boilers may be fuelled by logs, pellets or woodchips.

Modern log burning boilers are a far cry from traditional open fires, being up to four times more efficient. Pellet fuelled boilers are also available, using pellets typically made of compressed sawdust or other waste plant material. Pellet fuelled boilers cost slightly more to buy than the log burning type, but require much less maintenance and can be set to refill automatically, whereas logs need to be loaded by hand. The price of pellets is competitive with logs as a fuel source, and both pellets and logs are considerably less expensive than coal or oil. Woodchips are similar to pellets and can offer even greater fuel cost savings but are generally only suitable for larger systems



Solar hot water systems use the sun's energy to heat water directly. They are not the same as photovoltaic panels, which generate electricity. They 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 existing boiler acts as a back up system, firing up automatically at any times when the solar system isn't providing enough heat.



Types of solar water heaters - tube (above) and flat plate (below)



Ground source heat pumps circulate fluid under the soil to extract heat from the ground. They are powered by electricity but can extract three to four times as much heat energy as the amount of electricity needed to run them.

Are there any restrictions?

There are a number of technical and legal restrictions on installing and using renewable heat technology. Wood burning equipment and flues will need to comply with safety and building regulations and you should also check with your local authority to see if you live in a Smoke Control Area. On the plus side you will generally not need planning permission for wood, solar or ground source heat pump installations unless you live in a conservation area or listed building, but again you should check with your planning authority.

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.

Further Information:

General information

Energy Saving Trust

0800 512012 energysavingtrust.org.uk

Centre for Alternative Technology

01654 705950 cat.org.uk

Solar Hot Water

Solar Trade Association

01908 442290 solar-trade.org.uk

Wood Heating Systems and Fuel

The Logpile

www.nef.org.uk/logpile

Ground Source Heat Pumps

Heat Pump Association

0118 940 3416 heatpumps.org.uk

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

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