



A beginner's guide to the Renewable Heat Incentive

The Renewable Heat Incentive is a government payment scheme designed to encourage people to invest in systems which generate heat from renewable sources.

The aim of the scheme, which launched on 9 April 2014, is to reduce our use of fossil fuels like gas and oil and increase the amount of heat generated by renewable technologies such as biomass boilers, solar thermal panels and heat pumps. The Renewable Heat Incentive (RHI) will pay a subsidy to people installing these kinds of heating systems.

The scheme applies to domestic *and* non-domestic systems (e.g. offices, factories and community buildings like village halls), though the details vary somewhat between them. This leaflet focuses on **domestic systems for homes**, and is really only an introduction to the scheme.

Householders who have installed eligible renewable energy systems since 15 July 2009, can claim RHI payments for every unit of heat generated. The amount you are paid will depend on:

- the type and (in some cases) the size of the system you've installed
- the amount of heat your system generates, measured in kilowatt-hours

Which technologies and fuels are eligible?

There are various heating systems that you could install in your home that qualify for the RHI. These provide either heating, or hot water for the kitchen and bathroom. The three main ones are:

- 1) **Solar thermal.** This type of solar panel uses energy from the sun to heat water, usually for washing and cooking. They are not the same as solar PV panels which generate electricity.
- 2) **Biomass boilers** for burning solid biomass fuel and **biomass stoves** burning wood pellets to provide space heating and domestic hot water.
- 3) **Ground source heat pumps and air-to-water heat pumps.** These extract the 'latent heat' from the ground or air and provide space heating and hot water. **Air-to-air**



For householders, the RHI can be claimed for solar hot water, biomass and heat pumps (inset)



source heat pumps are not eligible for the RHI scheme (see overleaf).

Whatever system you install, you won't qualify for the RHI unless you meet other eligibility criteria. One of these is that the building in question is properly insulated. See our page at www.cse.org.uk/rhi for a more detailed explanation, and visit www.ofgem.gov.uk/domestic-renewable-heat-incentive for more information on the criteria. In all cases, systems must have been installed by an accredited installer after 15 July 2009 to qualify.

For certain renewable heat technologies rated below 45kW, your installer should be Microgeneration Certification Scheme (or equivalent) accredited. See www.microgenerationcertification.org for details.

This is one of many energy advice leaflets covering subjects like insulation, draught-proofing, renewable energy, lighting and storage heaters. See www.cse.org.uk/loveyourhome



How much will I be paid?

The table below shows the current rates for the standard domestic renewable heat technologies. These payments are index-linked and will be calculated for a 20 year period (though people entering the scheme in future may receive less). In most cases payments will be based on an estimate of the heat demand at the property. Householders will receive these payments on a quarterly basis over the first seven years.

Technology	Payment per kilowatt hour (kWh)*
Biomass boilers	8.9p
Ground source heat pumps	18.8p
Air-to-water heat pumps	7.3p
Solar thermal	19.2p



Photo: Jake Rome

*Each quarter, the Department of Energy & Climate Change reviews the tariff rates. The rate for any of the four technologies can then be reduced by 10%. This may affect anyone applying for the RHI after the quarterly review.

Here's an example of how payment for a solar thermal system is calculated. Let's say you install a standard domestic solar hot water system. It will output around **1,720 kWh** over the year. You will be paid **19.2p per kWh**, which works out at $1,720 \times 0.192 = \text{£}330.24$ a year. The heat output may be metered, but is more likely to be 'deemed' (i.e. estimated according to the size of the system).

Regulation

The energy regulator Ofgem requires that recipients of the RHI comply with various obligations throughout the lifetime of the scheme. This may include providing meter

readings and undertaking regular maintenance, and there may also be periodic inspections. The property must also have 250mm of loft insulation and cavity wall insulation where appropriate. Householders applying after 20 May 2013 must also have a Green Deal Assessment completed before submitting a claim for RHI.

Things to think about and next steps

Even with the RHI, investing in a solar hot water system, a heat pump or a biomass boiler isn't a decision to be taken lightly, and it may not be worth your while. In particular, if you're currently heating your home with mains gas (which is cheap), your payback time will be much longer than if you're using a more expensive fuel like oil or electricity.

So when you do your calculations, remember to take any savings on fuel costs into account as well as the RHI payments. And bear in mind, too, that if you can combine the installation with works that you need to do anyway, for example having solar panels installed at the same time as having your roof re-done, this could reduce the cost.

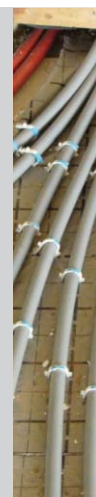
Other issues to consider are whether you have an appropriate place to store your fuel (if you're thinking of a biomass system), and whether or not you'll need planning permission (which may involve additional costs).

How to make a RHI application

To find out more about the domestic Renewable Heat Incentive, or to book a Green Deal Assessment, call the Energy Saving Advice Service on **0300 123 1234** (England and Wales) or Home Energy Scotland on **0808 808 2282**, or visit www.energysavingtrust.org.uk

If you are ready to apply to the domestic RHI, visit <https://domesticrhi.ofgem.gov.uk/apply>

For non-domestic applications, contact the Ofgem RHI team on **0845 200 2122** or rhi.enquiry@ofgem.gov.uk



3 St Peter's Court
Bedminster Parade
Bristol BS3 4AQ

0117 934 1400
www.cse.org.uk
info@cse.org.uk

Charity: 298740
Founded: 1979

The **Centre for Sustainable Energy (CSE)** is a national charity that helps people change the way they think and act on energy.

Our **Home Energy Team** offers free advice on domestic energy use to householders in Bristol and Somerset (including the unitary authorities of North Somerset and Bath & North East Somerset).



Call free: **0800 082 2234**

Email: home.energy@cse.org.uk

Web: www.cse.org.uk/loveyourhome



www.facebook.com/EnergySavingAdvice



www.twitter.com/@cse_homeenergy

Figures correct as of April 2015