

## Warmer homes

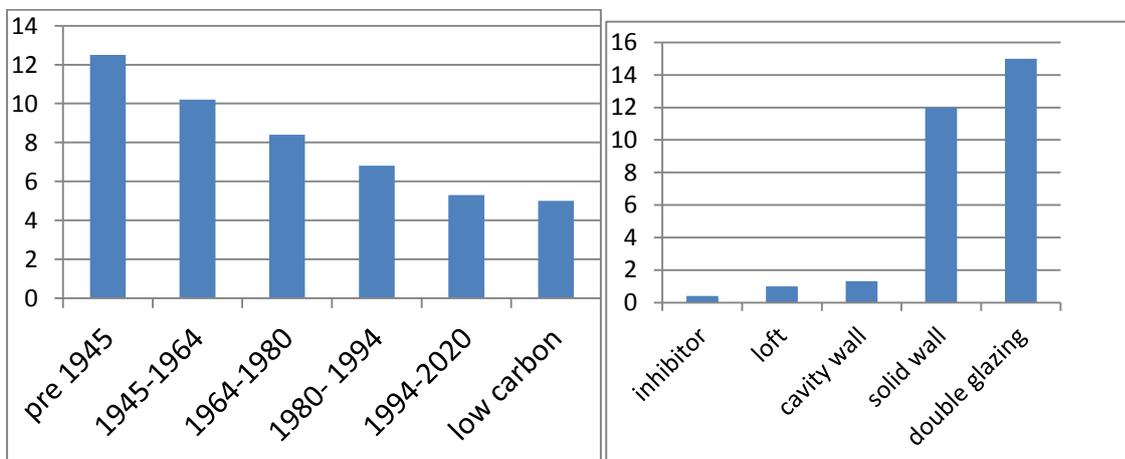
The Green Homes Grant (GHG) scheme which the Government has introduced this autumn has 5 objectives –

- warmer homes
- lower heating bills
- generating local employment
- preparing for the introduction of low carbon heating systems as gas is phased out from 2025 onwards for new homes
- reducing greenhouse gases like carbon dioxide which are responsible for global warming

The reality is that prior to 1965 there was no requirement to fit any thermal insulation and in that year 25 mm was specified for the loft. Compare that with today's requirement of 300 mm as the thermal regulations have been progressively increased. So today's buildings have only 40% of the heat loss of dwellings built prior to 1945 so the GHG will help you to reduce your heat loss and create warmer homes.

This will be a good investment for both you and the environment as the rate of replacement of the UK housing stock is less than 1% per year and so your house's fabric will benefit for very many years.

If you take advantage of the GHG voucher scheme then the payback time will be reduced by 70% as you will only have to pay one third of the cost. Eligible improvements fall into two groups – those with a payback time less than 2 years which includes loft and cavity wall insulation and chemical inhibiting/descaling of your heating system and those with payback time of more than 10 years which includes solid wall insulation and double glazing.



Heat loss (kW) versus build year for average semi detach; payback time (years) for various measures

### Eligible measures

For each of the following measures, an explanatory leaflet can be accessed by clicking on the title – [Green homes grant](#)

[Reducing heat demand Primary measures](#)

[Reducing heat demand Secondary measures](#)

[Restoring radiator efficiency](#)

[Low carbon heating Solar heated water](#)

[Low carbon heating Heat pumps](#)

### **Green Home Grant scheme**

The scheme is in the form of a voucher, which will cover two thirds of the cost of specific measures and can have a value up to £5,000. If you are on low income and receive certain benefits, the voucher could cover all your costs up to £10,000.

*Don't delay so you (or your landlord if you are a tenant ) need to apply quickly to prevent the funds being drawn down.*

All work has to be completed by 31 March 2022.

### **What can the voucher be used for?**

Insulation measures include –

- Cavity wall, solid wall, loft and flat roof and underfloor

Low carbon heating measures include –

- Heat pumps, solar thermal, biomass boilers

If any of the above measures are installed then your voucher can also be used to fund secondary measures including secondary glazing, double (or triple) glazing, and heating controls.

Information leaflets on many of these measures are also available.

### **Requirements include -**

- Work has to be undertaken by an installer who is TRUSTMARK registered and is PAC/MCS accredited
- Low carbon heating has to replace a fossil fuel boiler
- Installations to be serviced in accordance with manufacturers' instructions over lifetime of installation

### **To obtain the voucher**

Decide what improvement you need. Then consult a registered local installer or identify a registered installer by going to [www.simpleenergyadvice.org.uk](http://www.simpleenergyadvice.org.uk), obtain a quote and complete an application form for a voucher.

The good news is that there is at least one local installer who has the capacity to retrofit insulation even to solid walls ([www.instagroup.co.uk](http://www.instagroup.co.uk)) and one chemical descaler/inhibitor supplier who is willing to provide 3 years supply of descaler/inhibitor for a limited time as free issue ([email\\_voucher@vexoint.com](mailto:email_voucher@vexoint.com)).

In addition today (18 November) the Government announced as part of the Green Revolution a further £1 billion of funding for the Green Home Grant scheme and an extension of the Grant scheme until 31 March 2022.

### **Renewable heating incentive (RHI)**

This incentive is available until 31/03/2022 and can be used together with a Green Homes Grant provided they fund separate portions of the work. The most favourable option would be to use the GHG to fund the insulation upgrade of your home to reduce the heat loss whereas the RHI will pay a rate of 21.1 p/kWh for every unit of renewable heat you produce over a 7 year time interval.

For further information go to [www.energysavingtrust.org.uk](http://www.energysavingtrust.org.uk)

## Frequently asked questions

### Insulation

**Loft insulation** *do I need to clear the loft?*

Yes, you will need to clear the loft ; when putting the goods back, it will be very desirable to board over the insulation to prevent it being compressed

**Roof insulation** *do I need to clear the loft?*

Yes – however after insulating, you can replace the goods directly

**External wall** *how do I know if my external walls have a cavity?*

from date of build as compulsory post 1945; you can also tell from the way in which the bricks are laid – all bricks laid side on

*how can I tell if my cavity has been filled?*

Internal walls will seem warm to the touch; there may be circular holes externally which have been subsequently filled where the fibres have been blown

**Solid walls** *how can I insulate my external walls if there is no cavity?*

*internal insulation* is an option but it is much more disruptive as fittings and radiators have to be removed and then replaced after fitting the insulation and floor space will be reduced;  
*external insulation* is less disruptive and more insulation can be added.

*is planning permission needed?* – only if you live in a listed building or a conservation area

*are renders available to match existing appearance* – yes including brick work

*can external wall insulation be added to cavity walls to increase the insulation level?* – yes it can be added

**Double glazing** *is double glazing eligible for funding?*

Only up to the value of one of the primary measures as listed above

### Low carbon heating

Low carbon heating *is it eligible for grant funding?* Yes, but it has to replace a fossil fuel boiler.

**Heat loss** *Should I reduce the heat loss before installing a low carbon heating system?*

Yes, because it is more cost effective to reduce heat loss first and then to install a smaller size heating system as low carbon heating systems are capital intensive but have low running costs

*What heat loss should we aim to achieve before fitting a low carbon heating source?*

Calculations suggest that for an average size dwelling, one should aim for a heat loss no greater than 5.0 kW at -1 C outside temperature

Heat delivery *Is it possible to reuse existing radiators with low carbon heating systems?*

Yes, if you reduce the heat loss by adding insulation and adding an appropriate chemical inhibitor/descaler to your central heating water system. Such chemicals can limit corrosion between central heating water and pipe work, radiators and heat exchanger and dissolve inorganic salts plated on the inside of radiators which reduce heat flow.

**Biomass boilers** *are these eligible for funding?*

Yes, but such boilers require more space than a gas boiler and also space to store the biomass for say 3 months supply

**Air source heat pumps** - *as their efficiency depends upon the ambient temperature, can these supply sufficient heat in very cold weather?*

Unlikely and so provision will likely be required for an additional heat source

**Ground source heat pumps** – *is their efficiency independent of the outside temperature?*

Yes, as their collector pipes are either laid at least one metre below surface or located in a vertical borehole

*What length of collector pipe is required?*

In an area like Reading, one hundred metres should suffice if the heat loss is not greater than 5.0 kW at -1 C outside temperature

*How is the heat transferred?*

A water/glycol mixture is pumped through the collector pipe

### **Communal geothermal energy sources**

*Will communal geothermal energy sources will become available for use with a ground source heat pump located in each home?*

No such supplies are yet available in Reading but it is likely that these will be installed as the chalk aquifer that underlies Reading could contain sufficient renewable heat to heat all its housing stock.

*can Eco funding be used together with the Green Homes Grant?*

Yes, but they cannot fund the same measure

RHI funding *can RHI funding be used together with the Green Homes Grant?*

Yes, but they cannot fund the same measure

### **Installers**

Installers *can any undertake the work?*

Work has to be undertaken by an installer who is TRUSTMARK registered and for low carbon heating is PAC/MCS accredited

Identifying an installer - consult local directories such as checkatrade or go to website [www.simpleenergyadvice.org.uk](http://www.simpleenergyadvice.org.uk)

*Is there a time limit?* Yes, the work has to be completed by 31 March 2022

*What happens if they do not complete the work in time?* Your voucher cannot be redeemed

*How do I know if quotes are reasonable?* Look at the section below on price guide (to be uploaded)

### **Further information**

Sites with further information include

[www.energysavingtrust.org.uk](http://www.energysavingtrust.org.uk); [www.checkatrade.com](http://www.checkatrade.com); [www.edfenergy.com](http://www.edfenergy.com)  
[www.homebuilding.co.uk](http://www.homebuilding.co.uk); [www.instagram.co.uk](http://www.instagram.co.uk)

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