

LG Air Solution White Paper

The LG Guide to Grants for Air to Water Heat Pumps - For Trade





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Introduction

Making the change to low carbon heating

Heating and hot water for UK buildings makes up 40% of the country's energy consumption and 20% of its greenhouse gas emissions - of which 68% is generated by residential dwellings.

For decades, we have relied on gas for much of our space heating and hot water requirements. The UK Government has brought in schemes and legislation to make the change to the use of renewable technologies. By increasing the use of heat generated by renewables over fossil-fuels, the UK will reduce greenhouse gas emissions and have a far better chance of meeting Government targets for reducing the effects of climate change.

Fortunately, the UK has been successfully switching to renewable energy sources to produce electricity – creating a 'green grid'. This, combined with the latest heating and hot water technologies, make that carbon reduction goal far more achievable.

Heating emissions % of total	Source of emissions
54%	Residential space heating
14%	Residential hot water

Figures from CCC report: Next steps for UK heat. Figures rounded up so may not total 100%



The Committee for Climate Change document 'Net-Zero: The UK's contribution to stopping Global Warming 2019' suggests actions for individuals and householders to take now to reduce their carbon footprint and contribute to the UK net-zero goals. These include: Eat less red meat; curb flights and install low carbon heating systems into our homes - and this is re-highlighted within the recent Sixth Carbon Budget report, with an emphasis on 'off-grid' homes to have heat pumps installed as a matter of urgency.

Future Homes Standard

All new build homes from 2025 will no longer be heated by fossil-fuel boilers.

Air to water heat pumps are not only a low carbon alternative, they cost less to run than conventional boilers and they have no need for flues or fuel tanks. LG are providing low carbon heating to our homes now, so there is no need to wait until 2025, the futures here.

LG Therma V R32 Monobloc

Therma V R32 Monobloc: a simple, fast and efficient system for heating and domestic hot water, operating at an outdoor temperature as low as -25° C, with remote control, pre-installation adjustment, simplified maintenance and energy efficiency.



The domestic Renewable Heat Incentive (RHI)

– closing spring 2021

England, Wales, Scotland.

The RHI scheme currently pays participants that generate and use renewable energy to heat their homes. There are limits on the amount of space heating a house can receive payments for. The heat demand limits are set at 20,000kWh for ASHPs. If the deemed demand is more than the capped limit then you will be paid the unit tariff multiplied by the amount of renewable heat that contributes to the capped demand.

Payments are made for 7 years and only MCS certified products qualify and these must have been installed by an MCS certified installer or company.

The Essential Guide for Applicants PDF can be downloaded from Ofgem's website.

https://www.ofgem.gov.uk/system/files/docs/2018/07/essentialguideforapplicants_july_2018.pdf

Who can apply for the RHI?

Homeowners, private and social landlords and self-builders can all apply for RHI payments.

LG recommends that you find out if you are eligible for the domestic renewable heat incentive before the installation. However, the owner has a year from the commissioning date to register their system with ofgem. The commissioning date can be found on the MCS certificate.

About payments

Payments for the air-to-water heat pump are based on the estimation of the renewable heat generation – the seasonal performance factor - and are paid quarterly.

Check the list for RHI applications:

1. The home must have a current (less than 24 months old) Energy Performance Certificate
- Any recommendations must be carried out
2. Both the product and installation company must be MCS certified
- LG's Therma V Product range all have MCS certification.
3. The RHI application must be made within 12 months of the commissioning date
4. The air source heat pump must supply heated water to radiators or underfloor heating and/or domestic hot water.

Note, a supply of heated water to a swimming pool does not qualify.



Renewable heat is defined - as the heat generated minus the electrical input.

Example, if the output is 10kW and the electrical input is 3kW, then the renewable heat output is 7kW. $10 - 3 = 7\text{kW}$ or 7kWh

What is...

Microgeneration Certification Scheme

The official standard for air to water heat pump products.

MCS – 007, under BS EN 14511:2007 (4 parts). Air Conditioners, liquid chiller packages, and heat pumps with electrically driven compressors for space heating and cooling.

The LG Therma V product range all meets the MCS certified product scheme and can be found on the MCS website – head for <https://mcscertified.com>

To qualify for the domestic RHI, the installation also needs to be completed by an MCS certified engineer, either an individual installer or an installation company.

Please note, all MCS registered companies can be looked-up on the MCS website as the MCS certificate numbers will need to be provided on the RHI application.

Further information here: <https://www.ofgem.gov.uk/environmental-programmes/domestic-rhi>

Energy Performance Certificate

Before applying for the Domestic RHI, the property must have an Energy Performance Certificate (EPC) less than 24 months old. The EPC has information about the property and can provide the homeowner with recommendations that will need to be done before applying for the RHI, such as loft insulation or glazing. If this is the case, the homeowner will need to renew the EPC to reflect the fact that the recommendations have been completed.

Assignment of Rights

The Department for Business, Energy & Industrial Strategy (BEIS) introduced the option of assignment of rights on the 28th June 2018 and this offers an option to help householders and landlords access finance by allowing an “investor” to cover the upfront costs of the air source heat pump, installation and maintenance, for a householder or landlord’s renewable heating system.

Householders and landlords are then able to assign their 7 years of RHI payments to the investor, who is referred to in the RHI Regulations as the “nominated” investor.



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For continual product development, LG reserves the right to change specifications without notice.

Information on the complete range of LG Air Conditioning and Energy Solutions is available on our website. You can also download from PDF versions from our website. Whilst every care has been taken in the preparation of this catalogue, some changes may have occurred since publication. LG Electronics cannot accept responsibility for errors and omissions. We advise that you check the latest Product Data Book.

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Renewable
technology



Comfortable
home



Lower
bills



Reduce
carbon emissions