



Solar thermal

Solar thermal panels are usually sited on a south-facing roof and use the heat from the sun to warm water, making it a fully renewable heating system. In Britain, solar thermal water heating isn't suitable for use as a stand-alone system, but it's a great way to pre-heat water that is then used by other heating systems. This helps to save fuel costs and reduce your carbon emissions. This water warming capability is particularly useful in the summer because it avoids the need to use your main heating system or an electric immersion heater when room heating isn't needed and only warm water is required.

Electric night storage heaters

Night storage heaters are cheap and easy to install, making them a popular off-mains gas heating choice, particularly for rental properties. Compared to oil they have significant disadvantages because they are expensive to use and offer limited control – the owner has little flexibility over the heat output and adjusting the temperature can only be achieved through a crude form of trial and error. They can work quite well

if you plan to be home during the day, but their heat output usually declines towards the end of the day, just when many homeowners need it most.

Finding an OFTEC registered technician

The OFTEC website enables you to locate your nearest registered technicians by postcode entry. OFTEC registered technicians are appropriately qualified and insured to work in your home. They can also advise on energy efficiency. For further information on oil heating and cooking, please see www.oftec.org

About OFTEC

OFTEC plays a leading role in raising standards within the heating industries of the UK and Republic of Ireland. Our trade association represents the interests of oil storage, appliance and supply equipment manufacturers and we develop course and assessment material for training providers. We also operate a UKAS accredited competent person registration scheme for over 8,000 technicians involved in the installation and maintenance of oil, solid fuel, and renewable heating equipment and Part P electrical work. Our online shop, OFTEC Direct, supplies a range of technical books, equipment and clothing products for heating technicians

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Home guide to 'off the grid' heating



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Home guide to 'off the grid' heating



For homeowners who live off the mains gas network there are a wide range of heating options including oil heating, liquid petroleum gas (LPG), electric storage heaters, wood burning stoves and a new breed of renewable heating systems.

Many homeowners worry about which heating system offers the best combination of value for money, energy efficiency and overall convenience. Finding reliable advice can be difficult and this guide is designed to unravel some of the complexity.

Heating oil

Oil heating is the fuel of choice for around one million homes in Great Britain and a similar number in Ireland. It can be used for both heating and cooking and offers similar advantages to mains gas in terms of convenience and ease of use. The latest oil condensing boilers have efficiency ratings of over 90% - equal to gas boilers - and heating oil is one of the cheapest fuel options available. Another advantage is that it's easy to shop around for the cheapest deal because homeowners are not tied to using one supplier. You can also choose when to fill your tank, enabling you to buy when prices are low. The latest heating controls

offer excellent flexibility and control, enabling you to heat your home precisely as you want.

Liquid petroleum gas (LPG)

From a user perspective, LPG works in a similar way to mains gas and, rather like oil heating, the LPG is usually stored in a tank in the garden. However, unlike oil, the tank is usually owned by the company that supplies the gas, which can make a new installation cheaper, but means an annual rental charge will apply. This can also cause difficulties when customers want to change fuel supplier.

The biggest disadvantage of LPG is that it is one of the most expensive heating fuels and homeowners using LPG are usually tied into long contracts, which limits your options when it comes to finding a better deal. On a more positive note, the carbon emissions from LPG are slightly lower than oil and LPG systems offer the same convenience as oil and mains gas.

Heat pumps

Heat pumps, like biomass boilers, are usually thought of as renewable heating systems, although the electricity they run on is still generated mainly from fossil fuels. Heat pumps extract heat from the outside air or ground which can then be used to heat radiators, underfloor heating systems or provide hot water in your home. Other variants are available that provide warm air heating. In hot weather they can be used in reverse to cool your home, making them very versatile.

Heat pumps work most efficiently when producing heat at lower temperatures than conventional boilers. This means they are best suited to homes with excellent insulation and are not suitable for many older properties unless significant renovation has been undertaken. When installed as a replacement for gas or oil heating, heat pumps will usually need more or

larger heat emitters, adding to the already high installation cost, and they may be no cheaper to run than a conventional oil or gas boiler.

Solid fuel heating and biomass

Solid fuel heating can range from simple open fires and stoves – useful as secondary heating - to more sophisticated biomass boilers that supply hot water to radiators and run on specially-prepared pellets. This latter type are usually considered to be a form of renewable heating and are often fitted as a replacement to an oil or gas boiler, although running costs may be higher. Biomass boilers tend to be large appliances and their fuel can also take up a lot of space, so they are best suited to larger properties. An automatic fuel feed such as an auger is also needed unless you're happy to undertake the refuelling task yourself. By contrast, room heating using an open fire or stove is a great way to supplement an existing central heating system, and nothing quite beats the pleasures of a real fire.

