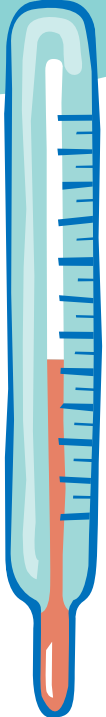
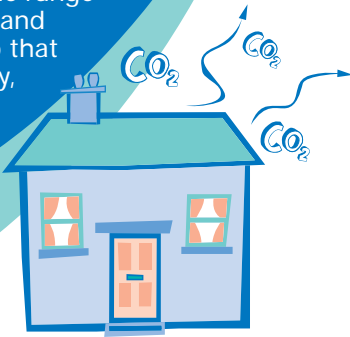


Something to think about...

The UK's carbon dioxide (CO₂) emissions stand at a staggering 536 million tonnes per year, with over a quarter (27%) attributable to the energy used by our homes. The majority of this is caused by the burning of fossil fuels, such as coal, oil and gas, to provide heating and sanitary hot water.

Having the correct heating controls and knowing how to use them properly, is a great way of instantly improving the efficiency of any central heating system and can cut your costs by up to 17%.

This leaflet aims to explain the range of heating controls available and how to use them correctly, so that they can help you save money, energy and even improve the comfort of your home.



What are heating controls?

Heating controls allow you to decide how your home is heated, making it warm when you want it but switching off when you don't. A properly controlled system should have:

- **Programmer.**
- **Room thermostat.**
Programmable room thermostat (instead of separate programmer and room thermostat).
- **Cylinder thermostat (if you have a hot water cylinder).**
- **Thermostatic Radiator Valves (TRVs).**

More advanced controls, such as boiler energy managers, are also available.

Knowing how to get the most out of your current heating controls will benefit you financially and help reduce energy wastage. Read on to find out about each of the different types of heating controls and what they do.

What is a programmer?

Programmers allow you to set 'On' and 'Off' time periods. Some models switch the central heating and domestic hot water on and off at the same time, while others allow the domestic hot water and heating to come on and go off at different times.

Set the 'On' and 'Off' time periods to suit your own lifestyle. On some programmers you may also set whether you want the heating and hot water to run continuously, run under the chosen 'On' and 'Off' heating periods or be permanently off.

The time in the programmer must be correct. Some types have to be adjusted in spring and autumn at the changes between Greenwich Mean Time and British Summer Time.

You may be able to temporarily adjust the heating programme, for example, 'Override', 'Advance', or 'Boost'. These options will be explained in the manufacturer's instructions.

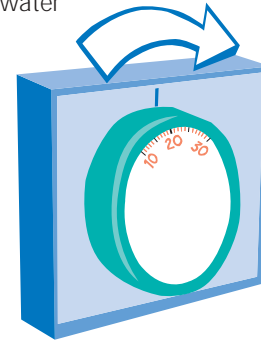
The heating will not come on if the room thermostat setting has been reached. And if you have a hot-water cylinder, the water heating will not come on if the cylinder thermostat detects that the hot water has reached the correct temperature.

What is a room thermostat?

A room thermostat simply switches the heating system on and off as necessary. It works by sensing the air temperature, switching on the heating when the air temperature falls below the thermostat setting and switching it off once this set temperature has been reached.

The way to set and use your room thermostat is to find the lowest temperature setting that you are comfortable with and then leave it alone to do its job. The best way to do this is to set the room temperature to a low temperature – say 18°C – and then turn it up by one degree each day until you are comfortable with the temperature. You won't have to adjust the thermostat further. Any adjustment above this setting will waste energy and cost you more money.

If you are too warm, try reducing your thermostat by 1°C. This can cut up to 10% off heating bills and save energy.



What is a programmable room thermostat?

A programmable room thermostat is both a programmer and a room thermostat. A programmer allows you to set 'on' and 'off' time periods to suit your own lifestyle.

A room thermostat works by sensing the air temperature, switching on the heating when the air temperature falls below the thermostat setting, and switching it off once this set temperature has been reached.

So a programmable room thermostat lets you choose what times you want the heating to be on, and what temperature it should reach while it is on. It will allow you to select different temperatures in your home at different times of the day and days of the week. This means you can save money and energy by not heating your home unnecessarily.

What is a cylinder thermostat?

A cylinder thermostat switches on and off the heat supply from the boiler to the hot-water cylinder. It works by sensing the temperature of the water inside the cylinder, switching on the water heating when the temperature falls below the thermostat setting, and switching it off once the setting has been reached.

Cylinder thermostats should usually be fitted between one quarter and one third of the way up the cylinder. The cylinder thermostat will have a temperature scale marked on it and it should be set at between 60-65°C, then left to do its job. This temperature is high enough to kill off harmful bacteria in the water, but raising the temperature of the stored hot water any higher will result in wasted energy and increase the risk of scalding.

If you have a boiler control thermostat, it should always be set to a higher temperature than that of the cylinder thermostat. In most boilers, a single boiler thermostat controls the temperature of water sent to both the cylinder and radiators, although in some there are two separate boiler thermostats.

What is a thermostatic radiator valve (TRV)?

TRVs sense the air temperature around them and regulate the flow of the water through the radiator to which they are fitted. They do not control the boiler.

They help improve comfort in your home by allowing you to set different temperatures in different rooms. This also helps to save money and energy.

They should be set at a level that gives you the room temperature you want. These settings may have to be different in each room, and you should set the TRVs to suit each room and then leave them to do their job.

TRVs cannot turn off the boiler when the whole house is warm. To do that you will need a room thermostat as well. The radiator in the room with the room thermostat should not normally have a TRV, but, if it does, keep the TRV on the maximum setting and adjust the room thermostat as explained in the instructions.

To make sure you are doing all you can to ensure your heating controls are working efficiently, refer to the manufacturer's user guide for more advice.

* A quick caution – programmable thermostats, room thermostats and TRVs all need a free flow of air to sense the temperature, so they must not be covered by curtains or blocked by furniture. Nearby electric fires, televisions, wall or table lamps may prevent them from working properly.

What about the boiler?

A boiler that is 15 years old or more is sure to be far less efficient than a new one. The most energy-efficient new ones are labelled SEDBUK band A or B. Look for the energy saving recommended logo to make sure you are buying the most energy-efficient boiler available,

whether natural gas, liquid petroleum gas (LPG), or oil.

As part of Government's commitment to reducing carbon emissions, Building Regulations (Part L1) have been changed in England and Wales, and all new or replacement gas boilers fitted must be high efficiency condensing boilers (with a small number of exceptions).

Combining a replacement high efficiency condensing boiler with the correct heating controls can achieve cost savings as much as 35%!

Look for the logo

The energy saving recommended logo is a way of easily identifying the most energy efficient products on the



market. Products with this logo meet strict criteria for energy efficiency so are guaranteed to use less energy, thereby saving you money as well as cutting down on carbon dioxide emissions one of the key gases which contributes towards climate change.

To find out which products apply visit www.est.org.uk/recommended

Save your 20%

The Energy Saving Trust recently launched its new advertising campaign, which is centred around the theme, 'Save Your 20%'. The idea of the campaign is to create a call to action to encourage us all to adopt multiple energy saving measures in our everyday lives. Using heating controls correctly is one of the ways of cutting down on our daily energy use. The Energy Saving Trust is asking each of us to find out what we can do to make a difference.

If you just save 20% of the energy you use everyday you'll help combat climate change.

To find out more visit www.saveyour20percent.co.uk or call 0800 512 012.

How will you save yours?

SAVE
YOUR
20%



Energy Saving Trust, 21 Dartmouth Street, London SW1H 9BP
Tel 0800 512 512 www.saveyour20percent.co.uk
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Printed on Revive Silk which contains 75% de-inked post-consumer waste and a maximum of 25% mill broke.

How to take control

Is your current heating system a drain on your pocket?

Did you know that heating controls are a simple way to save you money, improve your home's comfort and help to reduce your home's impact on the environment?



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