

Home Energy Advice Guide

This information has been put together to help you manage your energy bills and to keep your home warm and healthy.

Finding an energy-efficient home

Check the Energy Performance Certificate (EPC)

All students renting a house or flat on a joint tenancy agreement or renting a self-contained flat should be provided with an Energy Performance Certificate (EPC). The EPC provides information about the energy efficiency of a property. All properties being let must have a minimum energy efficiency rating of 'E' or above – the higher the energy efficiency rating, the lower your fuel bills are likely to be.

The EPC must be provided to prospective tenants free of charge. They include estimated energy costs for the property which can be used to compare how expensive different properties will be to live in. You can find your EPC online here: [Find an energy certificate - GOV.UK](https://www.gov.uk/find-an-energy-certificate)

Things to look out for

Type of home:

- Newer homes are typically better at retaining heat and are less draughty and should therefore have lower heating bills.
- Bigger homes with lots of external walls (e.g., detached or end-terrace houses) are typically more expensive to heat than smaller flats and mid-terraced properties.

Building condition:

- Buildings in poor condition are often less energy efficient and can make for unhealthy places to live.

- Look for homes that are well maintained with modern fixtures, fittings and systems – e.g., central heating, insulation and double glazing. The EPC can help to identify these features.
- Watch out for signs of damp in the house (including any that may have been painted over) and, if possible, ask previous tenants about their experiences of living in the property – you might be able to do this at property viewings.

Heating system:

- Properties with a ‘wet’ central heating system (e.g., radiators filled with water) are typically cheaper to run than individual electric heaters or radiators.
- Ideally, the central heating system should have a thermostat to control the boiler and maintain the desired internal temperatures.
- Most properties with a gas connection are now heated with gas fired combi-boilers, which provide hot water for radiators, as well as instantaneous hot water for taps, etc.
- Electric showers are more expensive to run than ones that use hot water from a gas boiler.
- Newer boilers should be more energy-efficient than older models.
- Some homes are heated with electric Air Source Heat Pumps (ASHPs), usually as part of a wet central heating system. These systems are more complex than gas boilers but can usually be controlled easily with a programmer.
- Well-insulated modern flats with Mechanical Heat Recovery Ventilation (MHRV) systems should benefit from low energy bills.

Windows and doors:

- Look out for loose fitting windows in poor condition, which could be draughty or even allow water to leak in.
- Single-glazed windows allow more heat to escape the building than double or triple glazed windows.
- Modern, well-fitted doors with effective draught seals are better at retaining heat than old, ill-fitting doors.
- Old doors can sometimes be improved with cheap draught seals or thick/heavy lined second-hand curtains to help them to retain heat.

Walls:

- Newer properties typically retain heat better, as the walls provide better insulation.
- Many older properties have been improved with cavity or solid wall insulation. You are able to check with insulation your property has by looking at your EPC.

Understanding your heating system

Programmers

A good programmer lets you efficiently control when your central heating and hot water go on/off. The best ones let you control each element individually, and some are linked to a thermostat.

Room thermostat

A room thermostat will switch off your heating when your room gets to the right temperature.

Cylinder thermostat (if you have a separate hot water tank)

This will switch off your water heater when it gets to the temperature you set. We recommend 60°C as this is hot enough to kill off harmful bacteria, but any hotter will waste energy, and you could be at higher risk of scalding yourself.

Thermostatic radiator valves (TRVs)

These let you control the temperature of each room separately – they sense the air temperature and switch radiators on and off automatically.

Storage heaters

If you have electric storage heaters, it is important to experiment with setting them up correctly to ensure that you can keep your home warm enough when required, and to avoid high bills. This [helpful video from the Energy Saving Trust](#) shows you how to get rid of most of them.

Heating and hot water tips

Just making a few changes can help you to save energy and money. Try these energy saving actions:

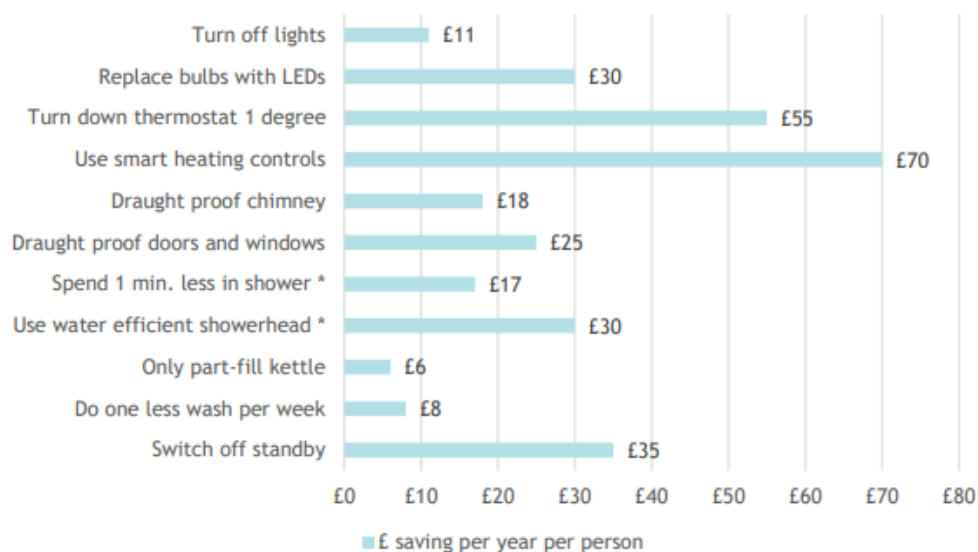
- When indoors, try and keep the living room temperature at a maximum of 21°C (or 70°F), and other rooms at 18°C (64°F).
- 18°C is considered an ideal temperature to sleep for most people.
- Leaving your gas central heating on low all day is not cheaper – only put the heating on when you need it.
- An air-source heat pump should be set to run constantly to keep your home around 18°C, increasing to around 20-21°C at all times when you would like it to be warmer.

- It takes time for your house to warm up and cool down. Keep this in mind when setting your controls.
- TRVs can be set to keep main living spaces warmer than unused rooms.
- Close curtains when it starts to go dark to keep the heat inside the property. Thermal linings for curtains can help to reduce heat loss, and can be bought for as little as £12.
- Try and reduce the use of stand-alone electric heaters – they are expensive to run. Instead, learn to use your heating controls effectively, and only use electric heaters in emergencies or if it is extremely cold.
- Have showers instead of baths to cut water heating costs.
- Fit a water-efficient shower head to reduce your hot water usage whilst retaining the sensation of a powerful shower.

Energy saving tips

How much could you save?

Below is a graph from the Energy Saving Trust to indicate different energy saving measures in the home and how much you could save, based on a four-person household.



Use your curtains effectively

- Open them in the morning to let the sun in during the day, or when outside is warmer than the inside of your home.
- Close them when it gets dark to create a layer of insulating air between the windows and the inside of your home. Look out for the gaps in curtains and make sure no cold air can seep through.

- Heavy or thermal curtains are the best for this purpose – you could also make or buy thermal lining to attach to the curtains that you have already – speak to your landlord first though before you make any changes!

Draught-proofing (where possible)

- If there are gaps in the sealant around your windows, ask the landlord/agency to reseal them.
 - You could also request the installation of draught-proofing strips and door sweeps to the windows and doors, as well as keyhole covers or a draught excluder to your letterbox.
- Put up window insulation film – just bear in mind that you might not be able to open the window without removing the film first!
- Put draught snakes at the bottom of draughty doors to the outside – alternatively, you can use rolled up blankets or towels.
- Close doors to rooms which you don't heat or where you are leaving a window open (e.g., for drying clothes). To keep heat downstairs, close the doors to the hallway/staircase. You can also hang blankets over exterior doors or to close off the staircase.

Use residual heat in the kitchen

- The oven and the stove or hob generate a lot of heat.
 - Leave the oven door open after use so any residual heat can dissipate around the kitchen, or the home if you leave the kitchen door open too.

Lighting

- Switch any old incandescent, spotlight or halogen lightbulbs to LED, which can save around £30 per year on electricity bills. Make sure you take any bulbs that you have bought yourself with you when you move out too!
- Switch lights off when not in use.

Use appliances efficiently

- Turn off appliances when not in use and avoid using any standby functions, as this wastes energy. The small surge in energy created when any electrical product is turned on is much smaller than the energy used in standby when it is not needed, especially with older devices.
- Only boil the water you need in the kettle – you can measure the water in the mug that you plan to use for a hot drink, for example.

- A microwave uses less energy than an electric oven on full power, but don't use it unnecessarily – plan your meals so that you can defrost food throughout the day ready for your evening meal so that you don't need to rely on your microwave to defrost frozen food.
- Defrost your freezer regularly as ice build-up can make it less efficient. If your fridge-freezer isn't filled with food, keep containers filled with water in it to help it run more efficiently.
- When you are replacing appliances, look for the highest energy rating that you can afford. The [Energy Saving Trust](#) have a helpful article to explain how energy ratings work for different appliances.
- Reduce the temperature of your washing machine – many detergents now work well at 30°C.
- Cut back your dishwasher and washing machine use by just one cycle per week and save £8 worth of energy a year on each appliance. Make sure to only run dishwashers and washing machines when they are full.

Energy consumption of appliances

You can reduce your energy usage by cutting back on how much you use certain appliances, but first, you need to understand how energy usage is measured and how different appliances compare.

All household appliances are given a power rating in Watts (W) or kilowatts (kW – 1kW = 1000 Watts). The higher this number, the more electricity the appliance will use.

The amount of energy used by an appliance is measured in kilowatt hours (kWh). For example, an electric heater with a 1kW power rating will use one kWh of electricity in one hour. This is what you are charged for on your energy bill.

You should focus on reducing usage of the most energy-hungry appliances first, here are approximate energy usages of various home appliances.

Appliance / item	Usage	kWh
Fluorescent strip light (40W)	25 hours	1
Incandescent light bulb (60W)	16.5 hours	1
LED light bulb (8W)	125 hours	1
42" LCD TV	6.5 hours	1
Games console	8 hours	1
Microwave (800W)	1.25 hours	1
Cooker	1 week of meals for 4 people	15
Conventional oven	Tray of oven chips	1
Fan oven	1.45kg chicken	3
Toaster	60 slices of toast	1

Kettle	6 litres of boiling water	1
Dishwasher (cold fill)	1 full load	2-3
Automatic washing machine	Weekly wash for 4 people	8-9
Tumble dryer	3.6-5.4kg of sheets / towels	4
Fridge-freezer	24 hours	2
Curling tongs / hair straighteners	1 hour	0.5
Hair dryer (500W)	2 hours	1
Shower (9kW)	5 minutes every day per week	5.25
Vacuum cleaner (upright)	2 hours	1
PC / computer	3-6 hours	1
Mobile phone charger	100 charges	1

Source: SSE / Energy Saving Trust

Energy supply

It is important to understand what energy tariff you are on and what your energy costs you.

Things to do when you move in

- Find your existing energy supplier
 - Find your gas supplier - [Find My Supplier](#)
 - Find your electricity supplier - [Who is my DNO](#)
- Take meter readings from all of your meters and make a note of them somewhere for future reference, should you need them
 - If you change energy supplier or start a new bill, they may ask for a current or new meter reading, so make sure you know where your meter boxes are and take your own readings regularly, even if you have a smart meter.

Check to see if you are getting the best deal for your energy

You could save hundreds of pounds a year on your bills by switching supplier or changing tariffs with your current supplier. Use an ofgem accredited price comparison site, as listed on [Ofgem's website](#). These suppliers should all display the Ofgem Confidence Code logo.



Comparison sites often do not show you the whole market, only the tariffs for suppliers they can switch you to directly. To make sure the other (potentially cheaper) results are not being excluded, check the filter settings on the comparison results.

Estimate annual energy usage

If you have a copy of a previous energy bill or annual statement for your home, this will tell you how much energy you have used in the past year. You can use this information to compare various energy tariffs online. Alternatively, you could use the following estimates (based on Ofgem's Typical Domestic Consumption Values for high consumption households with gas heating, 2020) or consult your EPC.

- Annual electricity use: 4,300 kWh
- Annual gas use: 17,000 kWh

Make sure you compare all energy suppliers

Be aware that comparison sites often do not show the whole market, they only show you the tariffs for suppliers they can switch you to directly. To make sure the other (potentially cheaper) results are not being excluded, check the filter settings on the comparison results. You can switch to these suppliers by contacting them directly.

Get a smart meter

Smart meters automatically measure how much electricity or gas you're using, and show you what it means in pounds and pence on their handy in-home displays in near-real time. They also send the meter readings to your supplier without any extra work from you.

If you pay your bills directly, you are automatically entitled to get a smart meter – just request one from your supplier. Find out more about smart meters from [Smart Energy GB](#).

Your energy bill

Energy bills can be confusing, but understanding them can help you to get to grips with your energy usage at home. This [video from Home Energy Scotland](#) provides a helpful visual guide for this.

If you receive an energy bill that has an 'E' marked against the meter reading, then this means it is 'estimated' by your supplier, and you may not be paying the right amount for your energy. Having several estimated readings can sometimes lead to large unexpected bills. Be sure to regularly submit accurate readings to your supplier to ensure you are being billed accurately for the energy that you use and to avoid estimated bills.

Budgeting

Supply regular meter readings to your supplier if you do not have a smart meter – this ensures that you are being billed accurately for the energy you use. If you pay by direct debit, ensure your payments are set high enough throughout the year to spread the cost and still cover your winter heating energy use without issues. Being on a fixed energy tariff can also help with this, especially if you are sharing the bills with multiple housemates – speak to your energy supplier for more information on this.

If you fall behind on your energy bill payments, get advice as soon as possible. Suppliers should agree an affordable repayment plan with you. The 'ability to pay' under this plan refers to what you, the customer, can afford, not what the supplier deems to be affordable. You can also get advice on energy debt from the Citizens Advice Consumer Helpline on **03454 040506**, or visit your local Citizens Advice Bureau.

Ventilation and condensation

Inadequate ventilation can lead to poor indoor air quality, condensation and mould growth, which in turn can affect occupants' health and damage your belongings, or even the building itself.

During the colder months, condensation becomes a major problem in many British homes. It appears when warm moist air hits a cold surface such as a window or external wall and condenses, forming water droplets. Kitchens and bathrooms are areas most prone to it, and it is exacerbated by poor air movement in areas such as corners of rooms and behind wardrobes and furnishings.

Condensation can cause peeling wallpaper and stained wall surfaces, rotting window frames, and can damage furniture and clothing. It can also encourage mould growth and dust mites, and increase the risk of illnesses like asthma and bronchitis.

It is important to remember that as a tenant, you are responsible for any damage you cause to the property you are renting. Any repair costs could be taken from your security deposit – this could include damage caused by inadequate ventilation or heating.

Condensation is caused by four things:

1. Producing a lot of moisture – steam in the kitchen and bathroom, drying laundry
2. Inadequate ventilation – the moist air cannot escape from the home
3. Inadequate insulation – the home can't retain heat and has cold surfaces
4. Inadequate heating – cold air cannot hold as much water vapour

Areas most prone to condensation include:

- Cold surfaces such as mirrors, windows and window frames
- Kitchens and bathrooms, which produce a lot of moisture
- Outside walls, walls of unheated rooms and cold corners of rooms
- Wardrobes, cupboards and behind furniture against an outside wall.

Tips and advice for condensation and damp reduction:

Reduce the moisture:

- Keep bathroom and kitchen doors closed when cooking and bathing to stop moisture spreading to the rest of the house.
- Dry laundry outside if possible. If drying clothes indoors use an airer, close the door and open a window. If you have space, you could also use a dehumidifier.
- Avoid putting wet items directly on radiators as it prevents the heat from circulating, making the boiler work harder and increasing energy costs.
- Keep lids on saucepans while cooking.

Let the moisture out:

- Leave trickle vents open at all times – these are small vents built into frames of modern windows that help to circulate air, even when windows are closed.
- Air out rooms that people use regularly, especially bedrooms, by opening windows widely for at least 10mins per day. A lot of moisture is produced by just breathing, and this helps to prevent build up.
- Use extractor fans in bathrooms and kitchens when cooking or drying laundry, and open windows when they steam up to prevent build up and mould growth.
- Air cupboards and wardrobes, and avoid putting too much in them as this stops air from circulating.
- Move furniture away from the walls and leave a ventilation gap.

Heat your home

- Try to keep temperatures in all rooms above 15°C. This will cut down the risk of condensation forming on walls and fabrics – it may still form on windows when the temperature outside is cold but make sure to wipe this away when you see it.