energy saving trust

WARM HOME HACKS

Your guide to staying warm and saving money this winter

Contents

Introduction

Looking for ways to stay warm and save money on your energy bills this winter?

You're not alone.

With typical energy bills almost doubling since this time last year, more people than ever are looking for the best ways to stay warm at home for less.

It can be hard to know where to start or know what really works. That's why we've made this guide.

Millions of people are already using our simple, tried and tested hacks, and we want you to feel the benefits too.

In this one-stop guide, we'll cover:

01 The best ways to keep the heat in your home.

02 How to make best use of your boiler.

03 How to take care of your heating system.

These three essentials explain everything you need to know to help you stay warm and save money with confidence this winter.

We'll provide our top tips and advice on low-cost changes you can make around your home to help you save extra on your bills.

Along with our warm home hacks, we'll share other simple things you can do all year round to save hundreds of pounds.

You'll also find information on what funding and support is available where you live, whether you're looking for funding to help cover the cost of your bills or get advice if you're worried about your finances.

Taking small actions to stay warm and save money is easier than you might think.

We're with you each step of the way.

Joanna O'Loan
Energy saving expert
Energy Saving Trust

WARM HOME HACKS

01

What's going on with energy bills?

Energy bills can be confusing. Before we get started with our warm home hacks, here are the top things you need to know.

Why are energy bills so high?

The current energy crisis began in 2021. Demand for gas increased during the pandemic and short supply caused a rise in gas prices. Russia's invasion of Ukraine has since threatened gas supplies and driven prices even higher.

What is the energy price cap?

Ofgem introduced the price cap in January 2019 following concerns that many people were paying too much for their energy.

The cap set the maximum amount that energy suppliers could charge for each unit of energy you use.

These units are called kilowatt hours (kWhs). The cap also set the maximum standing charge. This is the fixed daily amount you pay for your energy, no matter how many kWhs you use.

Does this cap your energy bill?

You might have heard the cap is the maximum you can pay for your energy bills – this is not true.

Remember, the cap only limits the cost of a single until of energy and the daily standing charge.

Your final bill is based on how many kWhs you use. The more you use, the more you pay.

What happened to the energy price cap?

The energy price cap set by Ofgem was due to go up by 80% from 1 October 2022.

To help make bills more affordable, the UK Government replaced it with the energy price guarantee.

The guarantee set the maximum price of a single kWh of gas and electricity at a lower rate.

However, even with this intervention, bills have almost doubled since this time last year.

The UK Government estimates a typical household with average energy use, is now paying around £2,500 a year on their energy bills.

How much is a kWh now?

From 1 October 2022, if you're on a standard variable tariff paying by direct debit in Britain, the average unit price has been frozen at 34p/kWh for electricity and 10.3p/kWh for gas (including VAT). There are some regional variations to this across Britain.

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What about the standing charge?

The price guarantee only applies to the price of a kWh of gas and electricity and not the standing charge. This is still set by Ofgem and is based on its October 2022 price cap.

For energy customers paying for variable tariffs by direct debit, standing charges are around 46p a day for electricity and 28p a day for gas.

How long will the energy price guarantee last?

Originally, the guarantee was due to freeze bills until October 2024. Then recently, the UK Government said it would only remain in place for all households until the end of March 2023. From April 2023 onwards support will only target people who need it most.

We're expecting more details from the UK Government soon. In the meantime, sign up to our newsletter, or follow us on Facebook, Instagram or Twitter for updates.

What could happen to energy bills next?

Energy bills will rise again in April 2023. The costs will revert to being set by Ofgem's price cap. We should find out how much this is in February 2023. It's predicted that a typical three bedroom household with average energy use might then pay around £3,700 a year on gas and electricity.

How many kWhs do things use?

Activity	kWh*	Cost
One load of washing in the washing machine	0.5 kWh	**17p**
One load of washing in the tumble dryer	3 kWhs	**£1.02**
One dishwasher cycle	0.9 kWh	**31p**
Boiling a full kettle (seven cups)	0.2 kWh	**7p**
Running a fridge freezer for a year	292 kWhs	**£99.28**
Watching and leaving on standby a 60inch TV across a year	286 kWhs	**£97.24**

Top tip from our energy expert Joanna

"To make sure your energy bills are accurate, submit regular meter readings to your supplier. If you have a smart meter, this will automatically send a meter reading to your supplier at least once a month. This means your bills will be based on your actual energy use, rather than an estimate."

*The exact kWhs and costs many vary depending on the age of the item and its energy efficiency rating.

02

Keep the heat in

While your heating system is working hard to keep your home warm this winter, you'll want to make sure you're keeping the heat in and the cold out. Draught-proofing and insulation are some of the most effective ways to save energy and money at home. By blocking unwanted gaps you'll use less energy, save on your bills and keep your home cosy.

Start by draught-proofing windows and doors

Fitting draught-proofing strips to windows and doors is a relatively quick and easy job that can make a big difference. Cutting out draughts stops heat escaping and prevents cold air from entering your home. You'll feel warmer and might even be able to turn your heating down.

You could save up to £125 a year if you have a professional come in and draught-proof your home, but you can easily fit draught-proofing strips yourself.

If your windows are new, you might not need to do any draught-proofing. But remember, if you have trickle vents at the top of your windows, keep them open to stop condensation and damp.

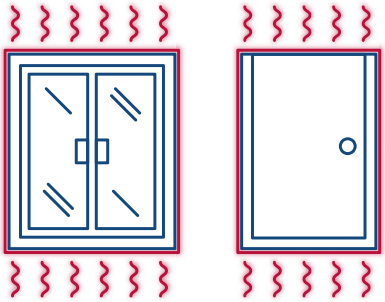
Add warmth and comfort

It might sound simple, but rugs and curtains are a good way to add extra warmth and comfort to your home, especially if you've got draughty windows or gaps in floorboards.

Choose thick or thermally lined curtains and close them at night, but don't block your radiators with them as the heat won't get into your room. There are lots of second-hand options available, and this can be more environmentally friendly too. Ideally, the curtains should stop between the edge of the windowsill and above radiators.

Closing internal doors and using draught excluders reduces the amount of heat moving into colder areas of your home, such as the hall. This helps keep the heat in the rooms you use most often, making them feel more comfortable.

If you have an open chimney that you don't use very often, you can buy a removable chimney draught-proofer to keep your room even warmer. This can save you up to £90 a year on your energy bills.



02

Don't forget your hot water tank and pipes

If you have a hot water tank, make sure it's well insulated. Adding extra insulation to your tank keeps the water warmer for longer, and it'll cost you less to heat this water up.

Most modern cylinders have factory insulation. However, if you have an older cylinder, it may only have 25mm thick foam insulation. By spending £16 to top this up with an 80mm insulation jacket, a typical home can save £70 each year on energy bills. You can buy these jackets from DIY shops and fit them yourself.

It should be relatively easy for you to put on the jacket and they're easy to take off too. If you rent, talk to your landlord before you put extra insulation on your water tank.

If you're waiting a long time for your water to heat up, this could be a sign you also need to top up the insulation on your hot water pipes. This will reduce heat loss and can be a DIY job: you can buy foam insulation collars for around £1.50 a meter, cut these to size, and fit to any exposed hot water pipes.

Insulating all the exposed hot water pipes in a typical semi-detached house will cost around £15 and save you £9 every year in the future on your bills. It sounds small, but all the small things add up to much bigger savings.

Think about topping up your insulation

There are lots of low cost DIY things you can do to draught-proof your home, but if you've got a bit more money to spend, it's worth thinking about your home's insulation.

Around a third of heat in an uninsulated home is lost through the walls. Most homes in the UK have a cavity wall which can be filled with insulation, saving you money by reducing your heating bill.

Depending on the size of your home, cavity wall insulation should pay for itself within two to three years, meaning it's a good option if you're looking to invest in your home. Check out the table below for typical costs and savings.

Type of home	Cost estimate	Annual saving	Payback time
Semi-detached house	£1,000	£395	2.5 years
Detached house	£1,800	£690	2.6 years
Mid-floor flat	£395	£180	2 years
Mid-terrace house	£580	£235	2.5 years

Top tip from our energy expert Joanna

"Make sure you don't block or seal any intentional ventilation when draught-proofing your home. Extractor fans, underfloor grilles or airbricks, wall vents and trickle vents are essential for letting damp air out and fresh air in, keeping the air in your home dry and healthy."

03

Make best use of your boiler

Heating and hot water account for over half of the average household's energy bills, so making the best use of your boiler is key to staying warm and managing your bills.

Boilers are the most common type of central heating system in the UK, with around 23 million homes getting their heating and hot water from gas boilers. Getting to know your boiler and heating controls will pay off over the winter months.

If you've got electric heating or a heat pump, check our website for advice on how to make the most of these heating systems.

Get to know your heating controls

Installing and using a full set of heating controls means that you can just warm the rooms you're in when you need it.

If you don't have any controls, installing and correctly using a programmer, room thermostat and thermostatic radiator valves saves you £180 a year. It typically costs £580 to install a full set of controls, with payback in four years.

Your room thermostat should be set to the lowest comfortable temperature, which for most people is between 18 degrees and 21 degrees. Turning your thermostat down by just one degree could typically save you £145 a year on energy bills.

Turn your heating on when you need it

It's better to turn your gas boiler off and on when you need it, or just use it to heat the rooms you're in rather than having it on low all the time. If you leave the house for a few hours, turn your heating off. It's cheaper to reheat your home than it is to keep it on low all day when you're not there.

Smart heating controls can help you do this, with more functionality than conventional heating controls. Often these allow you to control your heating from your smartphone, even when you're not home, which is handy if you realise you've left the heating on. The user-friendly interfaces make it easier to check and change the on/off periods for heating and hot water, and the system can even learn your habits and adjust controls to match.

There's an exception to this rule though. If you have a heat pump, it's more efficient to leave it running continuously at a low level.

03

Check your flow temperature

You might have heard some discussion about boiler flow temperature. This is the temperature of the water that is pumped from your boiler to your radiators. Combi boilers work most efficiently when this water is heated to 60 degrees or below, but most combi boilers in the UK are set between 70 and 80 degrees. Reducing the flow temperature on a combi boiler won't affect the temperature of the hot water from your taps and showers, but it can save you money. Regular boilers with a separate hot water cylinder must not be set lower than 65 degrees to prevent harmful bacteria. The charity Nesta has more information about adjusting the flow temperature on its website.

Supplement your heating system for extra warmth

Bedrooms are typically cooler rooms in the home, so using an electric blanket or hot water bottle can be a cost effective way to get some added warmth for a short period of time. Just remember to follow all safety instructions and take care when handling hot water.

Gas is still a cheaper fuel than standard rate electricity, so if you have gas central heating, it's generally advisable to use this over individual electric heaters. The exception may be if you only want to heat one room for a short period of time.

Some plug-in heaters are available with a thermostat, and some have a timer – you can use these to avoid using more electricity than you need. Make sure you always turn them off when leaving the room. If you're heating more than one room with electric heaters, you'll probably be better off using the central heating.

Top tip from our energy expert Joanna

"Using foil panels as insulation behind radiators that are in front of uninsulated external walls can reduce heat lost. This means you'll spend less money heating the radiator up, and it'll stay hotter for longer. Buying reflective panels for five radiators will cost around £30, but you could save £40 every year in the future on your bills."

04

Take care of your heating

Taking care of your heating system will help it run efficiently, reducing wasted energy and keeping your home warm for less. Giving your system a health check is a great way to help it take care of you this winter.

Bleed your radiators

When was the last time you bled your radiators? If it's been a while, you're not alone – less than 30% of people regularly bleed their radiators and this leads to cold spots that are caused by trapped air.

Bleeding a radiator is simple. All you need is a radiator bleed key (available from most DIY shops), an old towel and something to collect any water in.

- Turn your heating off for a few hours to let the radiators cool down.
- Lay out the old towel under the pipes, place a bowl or jug under the bleed valve and open the valve slowly with your radiator key. Be careful not to open it too far, a quarter or half turn is usually enough.
- As air escapes, you'll hear a hissing sound.
- Once that sound stops or water begins to pour out, close the valve.

Make sure you check the pressure of your heating system afterwards. There's usually a pressure gauge on a pipe close to the boiler. If it's too low, you can increase it using the filling valve/ tap connected to your boiler until the pressure is back in the 'green'. This is usually somewhere between 1.0 and 1.5 bar. If you're unsure, there should be instructions in your boiler's manual.

Get your boiler serviced

Look after your boiler and it will look after you. Get your boiler routinely serviced, usually once a year. It costs around £90 and it's money well spent. If a boiler isn't maintained, it can become less efficient, and a build-up of sludge can make it harder for the boiler to heat the whole house.

If you rent, remember it's the landlord's responsibility to arrange an annual gas safety check for all gas appliances, including the boiler, by a gas safe engineer. If you're worried that your boiler isn't working as it should, or that it could benefit from a service, contact your landlord.

Top tip from our energy expert Joanna

"To keep your rooms as warm as possible, don't block radiators with furniture, otherwise it makes your heating system less effective. Move sofas and other heavy furniture away from radiators and remove radiator covers."

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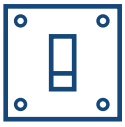
Other ways you can save energy and money

There are lots of other things you can do to save energy and money all year round.

Try our quick tips to save energy as a starter. Putting these tips into action could save you £369 a year on your bills.

Switch off standby – you can save around £65 a year just by remembering to turn your appliances off standby mode. Almost all electrical appliances can be turned off at the plug without upsetting their programming. You may want to think about getting a standby saver or smart plug which allows you to turn all your appliances off standby in one go.

Turn off lights – you can save around £25 a year by turning lights off when you're not using them or when you leave a room. Replacing all the lights in your home with LED bulbs can help you save even more.



Careful with your washing – use your washing machine on a 30 degree cycle instead of higher temperatures and reduce your washing machine use by one run per week for a year to **save around £34 a year.**

Avoid the tumble dryer – dry clothes on racks inside or outside in warmer weather to **save £70 a year.**

Spend less time in the shower – keeping your shower time to just four minutes could **save a typical household £95 a year** on their energy bills.

Swap your bath for a shower – some of us might enjoy a long soak in the bath, but swapping just one bath a week with a four minute shower could **save you £20 a year on your bills.**

Be savvy in the kitchen – kettles are one of the most used appliances in the kitchen, but many of us occasionally boil more water than we need. Avoid overfilling the kettle to **save £13 a year on your electricity bill.** You could **save another £30** by fitting an aerator to your kitchen tap. This will reduce the amount of water coming out without affecting how it washes or rinses.

Fill your dishwasher – only run your dishwasher when it's full to reduce the amount of water you use. Reducing your dishwasher use by one run per week for a year could **save you £17.**

06

Be smart with your energy use

The in-home digital display on your smart meter shows you what energy you're using, when you use it and how much it costs. Seeing and understanding how you're using energy can help you make changes to reduce your energy use and lower your bills.

Smart meters also mean an end to inaccurate bills. As your energy supplier will have an accurate reading of your energy use, you'll only ever have to pay for your precise usage rather than working with estimates.

If you don't have a smart meter yet, contact your energy provider. They should be able to arrange an appointment or let you know when they'll will be installing them in your area. This won't cost you anything.

Where we get our savings figures

Unless otherwise stated, all savings in this guide are for a typical three bedroom, gas-heated home in Great Britain, using a gas price of 10.3p/kWh and electricity price of 34p/kWh (based on energy price guarantee October 2022). Water savings are based on average occupancy. Find out more about our data on our website. If you live in Northern Ireland, savings will be different. Find out about energy efficiency in Northern Ireland here.

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What funding and support is available?

Our hacks can help you stay warm and save money. We appreciate they won't cover the full cost of rising energy prices, so it's worth knowing what other support is out there.

Support from the UK Government

Every household in England, Scotland and Wales with a domestic connection to the electricity grid is eligible for a £400 discount on their energy bills through the UK Government's energy bills support scheme.

You should receive a discount of £66 a month in October and November 2022, rising to £67 a month between December 2022 and March 2023.

This is being applied automatically for most people. If you haven't received this, you should contact your energy supplier. If you're on a traditional prepayment meter, you may receive the discount in vouchers from your energy supplier.

In addition to the £400 discount, you may receive additional cost of living payments from the UK Government if you get a qualifying low income benefit, disability benefit or winter fuel payment.

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Advice and funding where you live

England

In England, visit the UK Government website to find out if you're eligible for financial support, including the Warm Homes Discount, Cold Weather Payment or Winter Fuel Payment. For advice on everything from taking a meter reading to what to do if your supplier goes bust, Citizens Advice can help.

Wales

In Wales, please call the Nest scheme on 0808 808 2244 or visit the Welsh Government's Nest website.

Scotland

If you live in Scotland, please get in touch with Home Energy Scotland online or by calling 0808 808 2282.

Northern Ireland

The Northern Ireland Sustainable Energy Programme can help eligible households install energy efficiency measures. You could also be eligible for the Affordable Warmth scheme.

How to spot an energy scam

As more people are worried about paying their bills right now, more people are at risk of being scammed. We're aware of a number of scams related to energy, including scammers claiming to be from Ofgem or using the £400 government energy bill support scheme to trick people into handing over their details.

If a deal looks too good to be true, you're being pressured to transfer money quickly or have been asked to give away personal information like passwords or PINs, you may be dealing with a scammer.

Find out more about how to spot and deal with energy scams on our website.

energy saving trust

Energy Saving Trust is an independent organisation dedicated to promoting energy efficiency, low carbon transport and sustainable energy use. We aim to address the climate emergency and deliver the wider benefits of clean energy as we transition to net zero.

We empower householders to make better choices, deliver transformative programmes for governments and support businesses with strategy, research and assurance – enabling everyone to play their part in building a sustainable future.

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