

How to make your home energy efficient

Want to cut your carbon footprint, or just want to save a little money? Either way, there are a few things you can do to make your home more energy efficient.



Making some simple changes around the home can make a world of difference to both the planet and your monthly gas and electricity bills.

But it can sometimes be a little confusing to figure out where to start - do you have to install solar panels everywhere, or can you start smaller?

These tips should be relatively easy to do and, on the whole, shouldn't cost the earth.

How to be more energy efficient at home

Changing your habits when it comes to gas, water and electricity can help reduce your bills and carbon footprint. Make these simple changes around the house and see what a difference they make each month:

Turn down your thermostat

The first thing to try is to keep your heating low. This can be tricky, especially in winter, but the lower your thermostat, the lower your energy bill.

This doesn't have to be a dramatic change - even a couple of degrees lower than your usual number could save you money. If the house gets a bit too chilly for you, close your curtains to retain heat or invest in thermal curtains for winter.

A 2012 paper published by the Department of Energy & Climate Change revealed that lowering your thermostat from 20°C to 18°C was the top recommended energy-saving behaviour.

Also, installing a smart thermostat could also help save you hundreds of pounds a year. These work by only heating the rooms you are using and are controlled through your phone, so you can heat your home more efficiently and save money in the long run.

Never leave appliances on standby

Similarly effective to turning off light bulbs for energy conservation, you should also turn off appliances after use. This includes laptops, TVs, printers and washing machines. Switching these items off at the plug allows you to save roughly £30 a year according to the Energy Saving Trust.

Wash clothes at a lower temperature

Washing your clothes at 30 degrees, instead of higher temperatures, uses roughly 40% less energy, which can save at least £50 a year. Just ensure you have a laundry detergent that works at lower temperatures – having to wash your clothes multiple times will defeat the purpose.

Speaking of detergent, you could save yourself even more by getting an Ecoegg, which replaces your detergent completely and lasts for up to 720 washes.

Wash full loads

When washing your clothes, remember to do it in full loads rather than several smaller loads, as this again uses less energy. So, rally around the house and collect everyone's washing. This also applies to the dishwasher - you should always ensure it is full before turning it on.

Defrost your freezer

Regularly defrosting both your fridge and your freezer helps them to run more efficiently in the future. Also, it's helpful to pack your fridge full. Surprisingly the more food you stock, the less time the fridge has to run to remain cool. If you have a lot of empty space in your freezer, you could fill it with bottles of tap water.

Avoid wasting water

Small actions such as showering instead of taking a bath or turning the taps off while you brush your teeth can make all the difference. In short, try to avoid water running for a long period of time. Also, when using the kettle, ensure you only fill it to the amount you need, rather than filling it to the maximum every time.

How to make your home more energy efficient

As well as altering your habits, there are many energy saving changes you can make to your home. While the following may come at a cost, they all make up for it in terms of the money you save on heating bills. Not to mention they have the potential to make your home more valuable.

It's worth letting your home insurance provider know if you make any home improvements that could increase your home's rebuild cost.

Install loft insulation

Properly insulating your loft can help keep the heat in your home and the energy bills down. In fact, having your loft insulated could save you hundreds of pounds each year.

This doesn't have to apply exclusively to your loft. Insulating any cavity walls around the house can also drastically reduce carbon emissions and your heating bill.

Get a new boiler

Although investing in a new boiler may be pricey, it can make the biggest difference to your home, as heating accounts for roughly 55% of your energy bills.

Therefore, upgrading from a G-rated boiler to one with an A-rating can save you around £300 a year.

Try energy-efficient appliances

As well as energy-efficient light bulbs, switching other appliances can make a world of difference. For example, an electric oven with an A+ efficiency rating uses roughly 40% less energy than a B rated oven, according to the Energy Savings Trust. Also consider energy-efficient dishwashers, fridge-freezers and even eco-kettles to keep your energy consumption down.

Opt for a water-saving shower head

Energy efficient shower heads work by reducing the amount of water used. They do this by mixing the water with air or lowering the flow rate of the water. If you don't want to spend money on a new shower head, simply try and reduce the amount of time you spend in the shower, if you can stick to five minutes this will help lower your bill.

The 2012 paper from the Department for Energy & Climate Change listed water-efficient shower heads as one of the top six things you can do to lower your energy usage.

[Check prices for water-efficient shower heads on Amazon](#)

Install double glazing

Double-glazed windows use two sheets of glass to trap more heat inside your house, allowing you to lower the thermostat and consequently, your bills. Installing double glazed windows with a rating of A++ could produce annual savings of £115.

Try solar energy

An important thing to consider when it comes to increasing your energy efficiency is solar energy. Installing solar panels on your roof allows you to generate your own power instead of paying for it. The Energy Saving Trust estimates that you can provide 40% of your home's energy with these cells. On top of that you can even sell excess energy back to the National Grid.

However, these systems don't come cheap and can cost you roughly £12,000. Although this is pricey, they will also result in the most savings. It's important to check with your provider first, as some companies even offer free solar panels if you return any income made through selling the energy back.

What if you work from home?

If you work from home, you'll naturally use more gas and electricity than if you were out at work all day, which makes it even more important to be mindful of your energy usage. If at least half of the energy you use is for business purposes, it's worth comparing business energy deals to see if you could save money with a commercial energy tariff.

£5,000 grant announced to help households replace gas boilers

The new scheme aims to encourage households to make the switch to a more efficient, low-carbon heating system.



The government has announced that in April 2022, it will offer a [£5,000 grant](#) to replace your gas boiler with a low-carbon heating system.

This is part of a £3.9 billion scheme to decarbonise heating and buildings, with £450 million being set aside for the boiler replacement scheme.

The scheme could help the UK reach its target of net zero emissions by 2050. It could also support the new target of all-new heating systems in UK homes by 2035.

Heat pumps are an example of a low-carbon heating system. These run on electricity and extract heat from either the air or the ground.

The price of the pumps ranges from £6000 to £30,000. So, is a £5000 grant enough to make them affordable?

What are the benefits of heat pumps?

The government hopes that the heat pump system will reduce the dependency on fossil fuels and exposure to global energy price hikes.

This has been a problem for the UK over the last few months, with many energy providers going bust.

Business and Energy Secretary Kwasi Kwarteng said:

“Recent volatile global gas prices have highlighted the need to double down on our efforts to reduce Britain’s reliance on fossil fuels and move away from gas boilers over the coming decade to protect consumers in long term.”

The government also claims that the new heat pump systems will support 240,000 jobs across the UK by 2035.

What are heat pumps?

There are two types of heat pump:

Air source heat pumps

Air source heat pumps use air to heat your home.

The pump absorbs heat from the air outside. The air circulates the pump and is compressed to a high temperature.

The system can extract heat from air temperatures as low as -15 degrees Celsius.

Once the air has been compressed it’s transferred to your home and can be used for heating and hot water.

Ground source heat pumps

Instead of heating up the air, these types of pumps draw the heat from underground.

Ground source heat pumps use a network of pipes that are buried underground. The heat pump itself sits above ground level.

A mixture of water and anti-freeze is pumped around the pipes. This absorbs the naturally-occurring heat that’s stored in the ground.

This is compressed and transferred to your home for heating and hot water.

Both types of pump use electricity. The amount of electricity used should be less than the heat the pumps produce.

How much do heat pumps cost?

According to the [Energy Saving Trust](#), an air heat pump costs between £7,000 to £13,000, and a ground heat pump costs around £20,000 to £30,000.

But these prices could vary depending on what type of house you have and the type of heat pump you choose.

The government claims that low-carbon heating systems such as heat pumps will be no more expensive than gas boilers. They could also end up being cheaper to run.

Do I have to replace my boiler with a heat pump?

It's not mandatory to replace your boiler with a low-carbon heating system yet - you can still use your gas boiler.

Are there any alternatives to heat pumps?

Hydrogen-ready boilers could be a possible alternative to heat pumps. The only by-product hydrogen produces is water.

Now, boilers use a mixture of gas and hydrogen. According to Worcester Bosch, it's around 80% gas and 20% hydrogen.

If the government increases the amount of 'green gases' it uses, there may not be a need for people to switch their heating systems to electric.

This could be an option in the future when the government is confident that it can supply clean, green fuel to this type of boiler.

Is there anything I can do now to make my home more energy efficient?

There are a couple of things you can do to save energy in your home:

- Turn down your thermostat, even if it's just by a degree
- Wash your clothes at lower temperatures
- Install loft insulation
- Never leave appliances on standby.

And if you want to make your home feel warmer, take a look at our home warming hacks.

Home warming hacks: stay toasty and save money

These easy tips could make your heating go further and potentially save you some dosh.



It's the time of year when there's a chill in the air. But the last thing you want is a chill in your house.

Stop Jack Frost making himself comfortable on your sofa with our heating hacks. They'll keep your home toasty and you might save on your heating bills too.

Our top tips for keeping your home warm:

- Use a draught excluder
- Shut your curtains in the colder parts of the day
- Shut the doors to the rooms you aren't using
- Cook some hot food
- Invest in some rugs if you have tiles or floorboards
- If your sofa is in front of the radiator, move it
- Turn the heating on 30 minutes before you need it
- Turn the dial down by one or two degrees

Get rid of draughts

If there's a gap under your door, try covering it with a draught excluder. This'll stop any cold air creeping in.

You can make one yourself quite easily. Cut a leg off an old pair of jeans, stuff it, and sew up each end. You can get even more crafty and use different materials or designs if you like.

Or you can get one on Amazon relatively cheaply.

Check prices for draught excluders on Amazon

You can check for any other draughts simply using a candle. Hold it up to your window frames and if it flickers you may have a draught.

You can fix these using draught excluder strips which you apply to the window frame. Make sure you follow the instructions on the pack before you apply them though.

Check prices for draught excluder strips on Amazon

Or you can fill in the gaps using a paste known as caulk. This hardens in the gaps and seals them. Again, check the manufacturer's instructions before you start using it.

Check prices for Caulk on Amazon

Shut your curtains

Leaving your curtains open during the day when it's sunny will keep a room warm without you having to turn on the heating.

When night falls, close your curtains. They'll add an extra layer of insulation which will make your central heating go a bit further.

Shut your doors

If you aren't using a room, shut the door and turn off the radiators. Heat can escape into these rooms, which is a waste if no one is using them.

Shut the doors to the rooms you're using too, this will keep the heat in.

Cook hot food

One way to warm up your home – especially if it's on the smaller side – is to cook hot food.

Any steam, frying or oven-cooking will create heat, making your space warmer. So wait until after you've cooked to see if you need to turn up the heat.

Buy some rugs

If you have a tiled floor or floorboards, it's likely you'll lose some heat through it.

A rug will keep some of the extra heat in. And it'll feel cosier on your feet.

Move your sofa

Move any furniture that's in front of the radiator. The heat will be able to circulate more effectively.

If you can't move the furniture, try a radiator reflector or fan.

Radiator fans sit on top of your radiator and start up when the radiator comes on. It helps the heat to circulate around the room.

[Check prices for radiator fans on Amazon](#)

Whereas reflectors sit behind the radiator. Heat often gets lost here, but the reflector reflects heat into the room creating a warmth.

[Check prices for radiator reflectors on Amazon](#)

Turn on the heating 30 minutes before you need it

Some people may think an effective way to heat the home is leaving the heating on low all day. Generally, this isn't a great option for money saving.

The best way is to put on the heating as and when you need it.

Set a timer for 30 minutes before you want the heating on. This is how long it usually takes to heat up a home.

Set the timer to switch off 30 minutes before you want to turn off the heating. It'll still emit heat when it's cooling down.

More of us are working from home now, so you'll get to know the chilly times of day and when you need your heating. Usually this will be first thing in the morning and the evening.

Take a look at our guide on saving energy while working from home for more information. And while you're working from home, it could be worth comparing broadband providers too.

Turn down the thermostat dial

Turning the dial down on your heating by one or two degrees could save you hundreds per year too.

And if you follow our other tips, you may not even notice the drop in temperature.

How to reduce your energy costs while working from home

From showers to sweaters, here's how you keep your energy usage down.



We're all spending more time at home than we used to. This means we might see a rise in our energy use.

So how do you keep your energy costs down while you're using more energy in general? Here are our top tips.

Change your energy provider

The best way to cut back on your energy bills is to compare energy prices so you're on the best deal.

By comparing energy prices, you can see if your current supplier is competitive or not. If they aren't why not try someone else?

By switching energy providers, you could save money at a time when saving the pennies matters. It's one way to help your bank balance gain some breathing room.

Get smart, get warm

Before you reach for that thermostat or switch the boiler on, try wearing another layer. Grab a jumper, scarf or cardigan and see if that warms you up. At least until the heating is due to come on.

Failing that, make yourself a cuppa to wrap your hands around or fill up a hot water bottle to put on your lap.

While working from home, you'll learn when the cooler times of day are. When it's much cooler, you could set your heating to come on for around half an hour.

Often that's enough to blast some heat into the house, taking the edge off the cold.

If your boiler runs off a thermostat rather than a timer, try increasing the temperature by half a degree. A small change like that might be enough to keep the temperature more bearable.

And without loosening the purse strings too much.

It might be challenging, but it's worth considering getting your boiler serviced. Ideally, you should service your boiler once a year to make sure it's running well.

An efficient boiler is a cost-effective boiler.

Simple swaps and changes around the home

Make sure all your light bulbs are either LED or energy saving ones, not incandescent. LED bulbs tend to be the most energy efficient and are immediately bright.

And make sure you turn off the lights in the rooms you're not using.

When you're able to, investing in insulation is also important. If you're paying for the heating to be on, you don't want to lose it straight up and out of your roof.

Having a good layer of insulation in the loft will help keep the heat in your home where it should be.

You can also help by closing your curtains and using draught excluders to trap the heat where it's needed.

If you're more of a bath person, consider switching to showers.

Not only does this save energy in the amount of water you're heating up, but it also uses less water. A double whammy saving!

Beware of vampire appliances!

Our research reveals plugged-in devices drain 135,000 hours of electricity. That's per household, per year. This costs Brits £68 a year on average – 6% of their total energy bill.

Devices such as TVs, games consoles and PC monitors use up a lot of energy while on standby. Turning these off at the plug when you go to bed will help save on your energy bill.

Phone chargers and smart home tech (think Alexa and Google Home) that are 'always on' are also a drain.

If these don't need to be on all the time, either unplug them or switch them off at the socket. You don't need Alexa listening to you sleep.

Go Nordic

Following the lead of our Scandi friends, why not embrace the hygge trend. Hygge is all about embracing the cozy comforts in our home, things like:

- Lighting the fire, if you have one
- Snuggling up under a blanket
- Making a hot chocolate
- Reading a good book
- Knitting or crochet
- Board games

Crochet and knitting are both known for their therapeutic qualities. They're hobbies are said to have mental health benefits.

There's also something very nice about snuggling up with a cuppa and crocheting a blanket.

There are lots of online tutorials and books to help you learn from the safety of your home. What's more, your creations can help keep you warm too, saving on those heating bills.