



Thinking of Getting a Heat Pump?

A Guide for Homeowners





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About this Guide

If you're thinking about getting a new heating system, or you're just curious about heat pumps and want to know more, this guide is for you. It covers how heat pumps work, the installation process, things to consider, and common questions about heat pumps.

The guide has been created by Our Power, Norwich's community energy company, as part of our Heat Pump Buddy programme. It has been funded by Innovate UK's Net Zero Living project.

The guide focuses on air source heat pumps (ASHPs) as part of a wet central heating system (i.e. with radiators or underfloor heating). These are best for most average-sized homes where hot water is needed.



Request a Heat Pump Buddy

Heat pumps are a tried-and-tested technology, but they are still unfamiliar to most people in the UK. Lots of people want to modernise their heating system and help end our reliance on oil and gas, but there is a lot of confusing information out there and it can be hard to know where to start.

That's where our Heat Pump Buddies come in. Buddies are heat pump owners who volunteer to share their knowledge and experience with others, to help them with the process of getting a heat pump.

A buddy can:

- Invite you to visit their heat pump and see it in action.
- Tell you about their experience of the installation (and maybe recommend an installer).
- Tell you what they wish they'd known at the start, and help you think about what questions to ask.

Some buddies may also:

- Help you understand and compare quotes.
- Help you make sure your heat pump is running efficiently once it is installed.





It's an informal, voluntary arrangement between you and your buddy – they can only speak from their own experience, and they won't give formal advice.

If you're interested in being matched with a buddy, fill in the form at ourpower.org.uk/requestbuddy or email heatpumps@ourpower.org.uk. Where possible, we will match you with someone who has a similar type of house or who lives nearby.

Why Heat Pumps?

Most of us in cities have gas central heating, put in at a time when gas was seen as a cheap and clean option. But those days are gone, and we know we need to shift to a different way of heating our homes – one that doesn't pollute our air or make the climate crisis worse. Home heating is responsible for about 18% of the UK's contribution to climate change.

It's now clear that heat pumps are the future of home heating – researchers, the government and the Climate Change Committee all agree. With a gas boiler, for every unit of energy you put in, you get about 0.9 of a unit of heat. With a heat pump, it's about 3-4 units for every unit you put in – making them about four times more efficient. This is because a heat pump moves heat rather than generating it.





Heat pumps are extremely safe because they don't burn fuel – eliminating the risk of gas leaks and carbon monoxide poisoning. Removing gas appliances from your home also improves air quality, so it's good for the health of people in your household and for the wider environment.

Heat pumps run on electricity – and with renewable energy powering more and more of the UK grid, that electricity is getting cleaner every year.

To learn more about how heat pumps work, visit energysavingtrust.org.uk/advice/in-depth-guide-to-heat-pumps/.

Up until now, ASHPs have typically cost about the same to run as a gas boiler, even though they are so much more efficient. This is because electricity is much more expensive than gas (because of a combination of government policy choices and the way wholesale electricity pricing works).

In its Autumn Budget 2025, the government announced it would shift some policy costs away from electricity bills. This should make a heat pump cheaper to run than a gas boiler (if set up and used correctly). Many of the heat pump owners we speak to say their bills are already significantly lower than when they had a gas boiler.



Where to Start

When it comes to new technology, it can be hard to know where to start. If you request a buddy through our Heat Pump Buddy scheme, they can help with this.

It's a good idea to get three quotes from different installers. You should look for installers who are certified under the Microgeneration Certification Scheme (MCS). This means they are qualified to uphold industry standards. You'll need to use an MCS-certified installer to access the Boiler Upgrade Scheme grant (see page 14).

You can search for installers near you at mcscertified.com/find-an-installer/

Installers will come and do an assessment of your home before providing a comprehensive quote. This is a good opportunity for you to get a feel for whether they are someone you want to work with. Because installing a heat pump is a bit more complicated than just swapping in a new gas boiler, it's important to find an installer you trust to get it right.

During their visit, the installer will carry out a heat loss assessment to estimate how much energy your home needs for heating. They will then recommend what size of heat pump you need, and advise on whether any other changes, such as new radiators, are needed.

Once you've had a heat loss assessment carried out by one installer, other installers may be happy to use it to provide their own quote. This might be useful if you don't have time to be around for multiple installers to visit. However, you might prefer to meet installers in person to help you make a decision.

Make sure the quotes you are comparing include all the necessary works, such as any replacement pipework. Your Heat Pump Buddy may be able to help you understand and compare what you have been quoted.

Did you know?

The UK's first heat pump was developed in Norwich in 1945. John Sumner, the City Electrical Engineer, installed a water-source pump which used heat from the River Wensum to heat the city council electrical department buildings on Duke Street.



Things to Consider



Where will the heat pump and cylinder go?

You'll need some outdoor space to site the heat pump. Sizes vary depending on the amount of heat it needs to generate – a larger or poorly insulated home will need a larger heat pump. Very roughly, you're looking at 1.2m x 1m x 0.5m (think two washing machines side by side). You'll also need at least 30cm of space all around the heat pump, and 1m of space in front of it so that the airflow isn't blocked.

Ideally, the heat pump should be close to the house. It is possible to site it further down the garden, but this will result in some heat loss from the pipework. Some types of ASHP can be mounted on a wall or a flat roof.

You'll also need some space indoors for the hot water cylinder – roughly equivalent to a full-size fridge-freezer. This might fit in the space where your boiler used to be. If not, and if you don't have a utility space or garage, the loft could be an option. We know at least one person who put theirs in the small utility space between kitchen and bathroom that's common in Norwich terraced houses. Someone else put theirs in a corner of their living room (boxed in so it just looks like a cupboard)!

Should I improve my home's insulation?

The size of your ASHP will be based on your home's heat loss as it is now, so if you're planning any fabric improvements, do them first or let the installer know. You might be able to get a smaller heat pump and run it more efficiently if you fit insulation or new doors and windows so that more heat stays in your home.

The first thing to look at is loft insulation – if you haven't got a room in the roof, you should aim for at least 270mm depth of insulation. Many lofts were insulated a long time ago to much lower standards, so it's worth checking. Installers should be able to advise on this.

Any heating system will work better in a well-insulated home. However, it's a myth that heat pumps are only suitable for homes with very high levels of insulation. A well-designed system will be able to keep you warm whatever type of home you're in.

Our Power may be able to offer a free home visit to look at how you can retain more heat in your home, whether or not you're considering a heat pump – email energyhelp@ourpower.org.uk to request a visit.



Do I need planning permission?

Most households do not need planning permission to install an ASHP. If you live in a conservation area, you may need permission and will not be able to site the heat pump in front of your house. If your home is listed, you will need to apply for Listed Building Consent. An installer will be able to advise.

Noise regulations require the sound of a heat pump to be no louder than 42dB when measured from the nearest property boundary. This is similar to the level of noise from a fridge. Your installer will advise on this when they carry out a survey.

If your heat pump would exceed these noise levels, the installer should suggest an alternative location or noise mitigation measures such as a screen.



Did you know?

94% of UK heat pump owners report being satisfied with their heat pump. This compares to 85% for gas boilers. (Source: Electrify Research's Homeowner Electrification Tracker Study, 2025)

Will the installation disrupt my routine?

Installing an ASHP typically takes 4-5 days, and you will be without heating and hot water for some of this time. You may want to avoid scheduling the installation over the winter (or find somewhere else to stay for a few days).

The main elements of the installation will be:

- Installing the ASHP unit outside on a suitable base.
- Connecting the electrical supply from your consumer unit to the ASHP outside.
- Installing the hot water cylinder (if not already present) and connecting the pipework.
- Upgrading any radiators which are not large enough to work at the lower water temperatures that ASHPs use to maximise efficiency.

If you're considering other renovations or redecoration, it might be worth scheduling it all together to minimise disruption and make sure the changes are made in a logical order. If you're planning multiple measures to improve your home's energy efficiency, you should consider a whole-house retrofit plan, which will help you sequence measures correctly and ensure they work well together. A retrofit coordinator or retrofit assessor can assess your home and produce a plan.

Some national installers offer 'low disruption' options, such as a higher-temperature heat pump which will work with existing pipework and radiators. This will be a less bespoke option and will mean your system is less efficient than it could be, so it might not be the right choice if you're planning for the long term. However, if lower upfront cost is a priority or the thought of disruption is very off-putting to you, this could be a suitable option.





Grants and Finance

The main grant for heat pumps is the government's Boiler Upgrade Scheme. This offers £7,500 off the cost of a heat pump installation, provided you don't already have a low-carbon heating system. You must use an MCS-certified installer to access this grant – they will claim it on your behalf and subtract the £7,500 from your bill.

Other government grants for energy efficiency measures have much narrower criteria, usually based on having a household income of below £36,000 and/or being in receipt of certain benefits. However, people in certain Norwich postcodes can apply for the Warm Homes: Local Grant regardless of income. It's worth noting that while this scheme is a 100% grant and can in theory cover ASHPs, you don't get much choice about what measures are installed, and heat pumps are not typically a measure that is chosen for older homes under this scheme.

If you have a mortgage, ask your provider if they offer any cash back for heat pumps – at the time of writing, some offer up to £2,000.

Your mortgage provider may also offer a 0% loan for making green improvements to your home. Schemes like this will be expanding, as the government has pledged to introduce low-cost loans for green home upgrades as part of its Warm Homes Plan. Details of this are expected later in 2026.

Getting the Best from your Heat Pump

Heat pumps are an incredibly efficient technology which is transforming the way we heat our homes. Here are a few tips for getting the best out of yours:

1. Make sure it's set up correctly

As the final, vital step in the installation process, your installer will commission your ASHP. This means checking the system is working correctly, and adjusting the controls so it keeps your home warm as efficiently as possible. If this part of the process is rushed or overlooked, you'll be spending more than you need to on heating.

Renewable Heating Hub has a useful checklist you can go through with your installer to ensure everything has been covered. renewableheatinghub.co.uk/heat-pump-commissioning-checklist-for-homeowners/

If you've got a Heat Pump Buddy, you could ask them if they can be present at this stage, to help with asking questions.

If you're interested in the detail, ask your installer to explain the weather compensation curve – this is key to a really efficient system and a stable internal temperature (this is true for boilers too!).

If you find your new heat pump isn't heating some rooms enough, or your bills are higher than expected, it's probably because it hasn't been fine-tuned to suit the conditions of your home. Ask your installer to come back and address this.



2. Run it lower, for longer

To get the most benefit from a heat pump, you'll need to unlearn some of the habits you're used to from the gas boiler years. The lower the temperature of the water in your pipes (flow temperature), the more efficient your system will be. Heat pumps run at lower flow temperatures than gas boilers – which means a pleasant, consistent warmth rather than bursts of heat. They'll still heat your home to the same temperature, but it will take longer to warm up again if you let it get cold.

In general, it's better to keep the thermostat at a constant temperature all the time, as lots of fluctuation means the heat pump has to work harder. This should mean your house is much more comfortable – and if you've got the settings right, it shouldn't cost more. If your home loses heat quickly or you're on a time-of-use tariff, you may still want to schedule different temperatures for different times of day; but don't turn the system off completely. Talk to your buddy to find out what has worked for them!

3. Find the right tariff

Quite a few energy suppliers now offer tariffs with cheaper electricity at certain times of day. This can generate significant savings. You can compare heat pump tariffs on any of the usual comparison websites such as MoneySupermarket or Uswitch.

4. Combine it with other green tech

The ultimate way to revolutionise your heating system is to combine an ASHP with solar panels and a battery. That way, you can store the free electricity generated by your panels to use in the evening, and use electricity from the grid at times when it's cheap.

A home set up like this can reduce its electricity bills to close to zero – and low-cost loans will hopefully soon bring it within reach for many more people.



Further Information

You can find local people's heat pump stories on our website. ourpower.org.uk/heat-pumps-in-norwich

Information in this guide is taken from the following sources, which we recommend if you are looking for further information about heat pumps:

Get A Heat Pump – a website set up by Nesta and MCS Foundation to provide information and guidance about heat pumps and the installation process. www.getaheatpump.org.uk/

Energy Saving Trust – an independent organisation providing information and advice on saving energy to households, government and businesses. energysavingtrust.org.uk/

Renewable Heating Hub – resources and discussion forums about heat pumps. renewableheatinghub.co.uk/

Find MCS-certified installers at mcscertified.com/find-an-installer/

Information about the £7,500 heat pump grant: www.gov.uk/government/publications/warm-homes-plan

Find out if you're eligible for the Warm Homes: Local Grant: www.gov.uk/apply-warm-homes-local-grant

The government's Warm Homes Plan sets out how it will support households to upgrade their homes and save money on energy. www.gov.uk/government/publications/warm-homes-plan

Air-to-air heat pumps

The government recently expanded its Boiler Upgrade Scheme grant to cover air-to-air heat pumps, which may be a lower-cost solution if you only need space heating, not hot water. Air-to-air pumps can also provide cooling. They work particularly well in open-plan spaces. You can find more information about them at energysavingtrust.org.uk/advice/air-to-air-heat-pumps/

About Our Power

Our Power is a not-for-profit community interest company offering energy advice to households, and helping communities in the Norwich area explore possibilities for a more people-powered energy system. We don't sell heat pumps, or anything else!

People often tell us that when it comes to home energy upgrades, they don't know where to start, who to trust, or what will work for their home. Fixing that requires trusted relationships, not just mass marketing campaigns. Our Energy Champions and Heat Pump Buddies are local people who want to help others have a warmer home and lower bills, and do their bit to build a world beyond fossil fuels.

To request a Heat Pump Buddy, fill in the form at ourpower.org.uk/requestbuddy or email heatpumps@ourpower.org.uk.

If you have any questions or would like to get involved with our work, please email info@ourpower.org.uk.





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