green energy source

ACS
Innovative heating and cooling solutions

Shaping the future of sustainable heating technology

Discover the Gree Versati advantage in heating your home

Green Energy Source, a well-established player in the UK market, stands as a leading supplier of air source heat pumps and air conditioning systems. With an extensive track record spanning more than two decades, we have garnered recognition for our commitment to delivering exceptional products and services. Our specialisation lies in offering tailored design and installation solutions, catering to the unique needs of both residential and commercial properties.

At the core of our offerings are cutting edge technologies meticulously crafted to optimise energy consumption, minimise greenhouse gas emissions, and significantly reduce the environmental impact of heating and cooling structures.

Go green at home!

Let’s build a greener future, together

What is an air source heat pump?

Air source heat pumps (ASHPs) are innovative heating systems that absorb heat from the outside air. They work similarly to air conditioning units but in reverse. There are two main types:

Air to Water Heat Pump: This type of pump also absorbs heat energy from the outside air, but it transfers it through a traditional central heating system with radiators and a hot water cylinder, providing both heating and hot water for your entire home. With Air to Water heat pumps, you can claim the RHI incentive, as it heats your entire home.

How does it work?

An ASHP works by extracting heat energy from the air and transferring it into your home. This process involves several key steps:

Heat energy is absorbed from the air and transferred to a refrigerant with a low boiling point in the evaporator.

The refrigerant changes from a liquid to a gas and passes through a compressor, where it is pressurised, increasing its temperature.

The heated refrigerant then delivers heat to water at the condenser, which is distributed to your hot water tank, radiators, or underfloor heating.

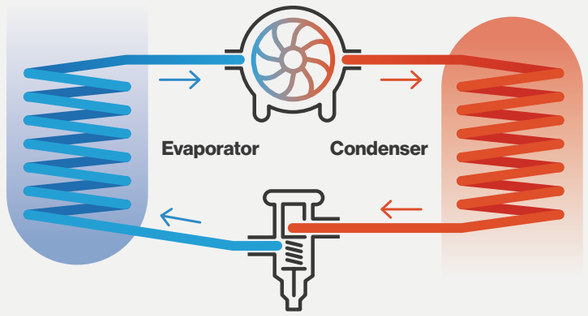
The refrigerant passes through an expansion valve, where it drops in temperature, returning to a liquid state and restarting the process.

Compressor

The pressure of the warmer gas is then increased through a compressor, which makes it hotter.

Heat source

Even low temperatures of outside air, water or ground is enough to evaporate the heat pump liquid into a gas, which gets warmer.



Useful heat

The higher temperature gas is then cooled, changing it back to a liquid, releasing energy which is used to heat water and/or air inside the building.

Expansion valve

The pressure of the liquid is reduced through an expansion valve and it is recirculated back through the outside air, water or ground where the process begins again.

Helping you and the environment, the future is now

Air source heat pumps are highly efficient, with some models exceeding 350% efficiency. They achieve this by transferring heat rather than generating it. Compared to other heating systems, such as electric heaters or traditional boilers, ASHPs offer significant savings on energy costs.

Cost Savings

Installing an air source heat pump for your home offers efficient heating by extracting heat from the air, leading to lower running costs and reduced energy bills.

High Efficiency

With proper usage and depending on various factors, you can use up to 5 times less energy while heating your home compared to any other heating system.

Versatile

Compatible with underfloor heating and low surface temperature radiators, offering flexibility for your home heating

Operates Quietly

Versati is ideal for installation in urban or noise sensitive environments without disruption. The unit keeps the noise level below 59 dB.

Quick Installation

Installation of Versati air source heat pumps is generally quick and straightforward, typically completed within 2-4 days.

Sustainable

Air source heat pumps harness natural energy for sustainable heating and hot water supply.

System Compatibility

Effortlessly blend into home climate systems and can be controlled with a variety of accessories, including smart home technologies.

Extended Lifespan

Versati offers a significantly longer service life than conventional domestic boilers, averaging between 20 to 25 years, ensuring enhanced durability and reliability.

Low Maintenance

The robust design with few moving parts, requiring minimal upkeep. Regular servicing and warranty adherence ensure optimal performance and longevity.

Understanding the basics

How is a heat pump installed?

If you're contemplating upgrading from a fossil fuel boiler to a heat pump, it's essential to understand the process thoroughly. In this comprehensive guide to heat pump installation, we cover everything you need to know before making the decision to switch. From understanding the technology to assessing your specific requirements, we provide valuable insights to help you make an informed choice about replacing your boiler with a heat pump.

How much does it cost to install?

The cost of installing a heat pump can vary significantly depending on various factors, including the type of heat pump and the specific requirements of your property.

As a rough estimate, the Energy Saving Trust suggests that the installation cost for an air source heat pump typically ranges from £7,000 to £13,000, while ground source heat pumps may cost between £14,000 and £19,000.

Moreover, if you're replacing a fossil fuel-powered boiler with a heat pump, you might be eligible for the government's Boiler Upgrade Scheme (BUS), which offers grants of up to £7,500 towards installation costs. This scheme is part of the government's Net Zero strategy and is expected to run until 2028.

It's important to consider potential additional costs associated with switching to a heat pump, such as installing a hot water cylinder and potentially upgrading existing radiators to ensure optimal performance. Consulting with a qualified installer can provide a more accurate cost estimate tailored to your specific circumstances.

How long does it take?

Each system is different and has its own set of requirements, so no two installations are the same. Air source heat pumps are the quickest and easiest to install, as they don't require any groundwork.

A basic installation will take a couple of days whereas more complex systems may require longer to complete. When assessing your home for suitability and providing a quote, your installer will be able to advise you on the expected installation time.

Are there government grants and loans available!

Government incentives are available to assist in acquiring an air source heat pump. In England & Wales, the Boiler Upgrade Scheme (BUS) offers grants of £7,500. Meanwhile, in Scotland, Home Energy Scotland (HES) provides a grant of £7,500 (up to £9,000 for rural homes) and an interest-free loan of up to £7,500.

Home Energy Scotland (HES)

The goal of the Home Energy Scotland (HES) scheme is to assist homeowners in Scotland in enhancing the energy efficiency of their homes.

Through this scheme, homeowners can apply for a grant along with an interest-free loan. Additionally, a rural uplift option is offered to provide supplementary assistance to rural and island homes, where the cost of installing home improvements may be higher.

Heat pump installation steps

1. Initial assessment

To determine if a heat pump is suitable for your home and specify the system needed for effective heating, your installer conducts a heat loss calculation during the quotation process. This calculation assesses your home's heating requirements, guiding recommendations for the heat pump system. Alternatively, you can obtain an energy performance certificate (EPC) from an independent energy assessor to inform your decision on heat pump installation.

2. Choosing your heat pump

After the assessment, our installer will outline the details of the recommended heat pump system. This includes determining the size and power of the heat pump and identifying the initial heat source location. Discussions will also cover optimal component placement to maximise system efficiency while minimising disruption to your home.

3. Pre-installation recommendations

Prior to installation, it's crucial to address any recommendations identified during the initial assessment to enhance the efficiency of your heat pump or ease the installation process.

This may involve enhancing home insulation, upgrading existing radiators to larger ones, or obtaining necessary planning permissions (though not always mandatory for all heat pump types).

4. Installing the outside unit

The process for this step varies depending on the type of heat pump being installed. For air source heat pumps, the outside unit can be swiftly and securely mounted either on the ground using anti-vibration feet or on the exterior wall of the building. However, for ground or water source heat pumps, installation involves extensive excavation and laying of pipes.

5. Connection and Testing

Following the positioning of both components of the heat pump, your installer proceeds to connect them to each other and integrate them with the rest of your heating system. Subsequently, a series of checks are conducted to ensure proper functionality and safety before the system is deemed ready for use.

MCS
CERTIFIED

We have MCS certification. What does that mean?

The Microgeneration Certification Scheme (MCS) is essential for all heating systems. By certifying both products and installation companies, MCS ensures that microgeneration products are installed at a high standard. This scheme was created to enforce the highest standards of practice in the Renewable Energy sector for single renewable appliances under 45kw, with a total installed capacity of 70kw. Your MCS certificate for your heating system acts as evidence that specific standards have been met. Installers must meet four key requirements to become MCS certified: a dedication to quality workmanship, commitment to customer satisfaction, demonstration of competence, and a commitment to continually improving through an effective management system.

Call us today on 01501 825571 or email info@greenenergysource.co for a free no obligation quote and find out how an air source heat pump can help you and the environment.

“I highly recommend ACS to anyone thinking about switching to an Air To Water Heat Pump System. ACS assisted us with the grant application process. The installation went smoothly, and upon completion, they provided a thorough walkthrough on how to operate the system. Our cottage has never felt this cosy before. I am incredibly impressed with the system’s performance and the team’s professionalism.”

– Graeme & Karen Healy

Get in touch with our sales team today to discuss your installation needs! Contact us at info@greenenergysource.co or call 01501 825571

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