

# Heat Pumps

Replacing your boiler with a Heat Pump can be one of the most effective ways to de-carbonise your heating system. The savings you could make depend on your home and your current heating system.

## Is a Heat Pump is right for your home?

### 1. Is your home well insulated?

Heat pumps are most efficient when operating at low temperatures, so your house needs to be well insulated for the system to work well. If you are keen to reduce your energy usage, look at insulation options before changing your heating system.

### 2. Do you have space for the unit?

Air Source Heat Pumps need to be installed in an outdoor space where air can flow freely around them - an external wall in a sunny spot is ideal. Ground Source Heat Pumps require more outdoor space, both for the unit and the pipes.

### 3. What is your existing heat source?

Replacing an Electric or Solid fuel boiler with a Heat Pump will not only reduce your carbon emissions, but could also save you a lot on your energy bills. Replacing a Gas Boiler with a Heat Pump can also reduce your carbon emissions, but you are likely to see less of a financial benefit.

### 4. What is your existing heating system?

Heat Pumps work best with low temperature heating systems, so installing underfloor heating or larger radiators will allow you to make the most of your Heat Pump. If you do not currently have a 'wet' central heating system, you may need to have one installed, or consider an air-to-air heat pump instead.



## \*Typical Costs and Savings...



**1900 - 4400kgCO<sub>2</sub>e**  
Annual Carbon Savings



**£295 - £1,100\***

\*Annual Bill Savings depend on existing fuel type, based on fuel prices as of October 2023.



**£13,047**  
Typical cost (with-out a grant)

## Keep it Renewable

Heat Pumps use renewable heat from solar energy absorbed by the air or the ground; but they also require some electricity to function.

Make sure that you are on a 100% renewable electricity tariff to maximise the impact of your low carbon heating - or even better, team a heat pump with Solar PV panels to generate the electricity yourself!



\*Figures are taken from Energy Saving Trust and are based on fuel prices as of October 2023. Estimates are based on an insulated, three bed, semi-detached home with radiator upgrades. The average professional installation cost is unsubsidised, prices will vary and the running cost depends on the size of home and fuel type replaced.

# Heat Pumps



Heat Pumps transfer heat from the air or ground via a fluid, even when temperatures are as low as  $-15^{\circ}\text{C}$ . This fluid passes through an electrically powered heat exchanger into the heat pump, which increases the temperature, allowing it to heat your home and water via radiators.

## Low Temperature Heating

Heating systems powered by heat pumps operate at lower temperatures than traditional heating systems, so although your radiators may not feel hot to the touch, they will be providing background heating to keep your home at a constant temperature.

## The Benefits of Heat

- Highly efficient, reducing your energy usage
- Potential financial savings on heating bills
- Low maintenance heating system

## Air Source Heat Pumps

Unit is positioned on the outside of the property -

it is similar in size and look as an air-conditioning unit

It may require mounting on an external wall with free air movement.

Access will be required for installation & maintenance

Up to 350% efficient

## Next steps...

If you live in England and Wales you can get a government grant of **£7,500** towards an air source heat pump through the **Boiler Upgrade Scheme**. Find out more at **[www.gov.uk/apply-boiler-upgrade-scheme](http://www.gov.uk/apply-boiler-upgrade-scheme)**

If you are interested in an Air Source Heat Pump, please complete our online form at:

**[www.nottenergy.com/self-referral-form](http://www.nottenergy.com/self-referral-form)**

If you're offline, please call us on:

**0115 947 2207**