

**Air source** heat pumps are relatively easy to install but lose some of their efficiency during the winter months as the outside air cools down so auxiliary heating might be needed.

**Ground source** heat pumps are more expensive to install but their efficiency is independent of the outside air temperature and so an additional heating source is not required.

To access the geothermal heat, a horizontal or vertical ground loop is required through which a water/glycol mixture is pumped. In future it is likely that communal bore hole arrays will be able to supply geothermally heated water.

#### **Green homes grant**

If this grant is used to upgrade the insulation level of your home, then the *domestic renewable heating incentive* can be used to recover the cost of converting your heating system to a heat pump.

Leaflets on these measures and other relevant information is available at [www.readingcan.org.uk](http://www.readingcan.org.uk). After deciding what improvement(s) you need, identify a registered local installer or go to [www.simpleenergyadvice.org.uk](http://www.simpleenergyadvice.org.uk). Obtain a quote and download a voucher application form for a grant.

For a limited time, Vexo will supply as free issue inhibitor/descaler for 3 years, email [voucher@vexoint.com](mailto:voucher@vexoint.com).

The work has to be completed by 31/03/2022 but don't delay to prevent available grant funds being drawn down.



## **Low carbon heating – heat pumps**

**Heat pumps** are the most efficient low carbon heating technology as they do *not* produce heat, but concentrate the low grade heat present in the air, ground, rivers or lakes.

They can produce up to 4 units of heat output in the form of space heating or hot water for every unit of electricity they consume.

#### **Reducing conversion cost**

Before installing a heat pump, it is cost effective to increase the insulation level so that the heat loss is no greater than 5.0 kW at -1 C. Also to restore your radiator efficiency by adding a suitable chemical inhibitor/descaler so that the radiators can likely be reused at lower central heating water temperatures.

