



## 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 the 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  $-1\text{ C}$ . Also, you can restore your radiator efficiency by adding a suitable chemical inhibitor/descaler so that the radiators can be used at lower central heating water temperatures characteristic of heat pumps.



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.

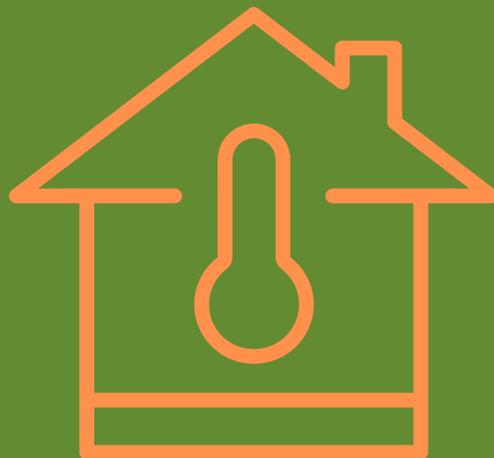
To access the geothermal heat, a horizontal or vertical ground loop is required through which a water/glycol mixture is pumped. In future, it is likely that communal bore hole arrays will be able to supply geothermally heated water to heat pumps located in each dwelling.

Boiler upgrade scheme:

Capital grant scheme to assist in converting gas boilers to low carbon heating like heat pumps. Value depends upon type of heating system installed.

Leaflets on these measures and other relevant information is available at [www.yateleycan.org.uk](http://www.yateleycan.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)

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



For more information, visit <https://yateleycan.org.uk>