**Green Ixworth**

**Home Energy Campaign**

**Heat Pumps**

These will form an important part of reducing carbon emissions from home energy, and lowering bills, in the UK.

They use electricity but generate 3 – 4 times as much energy as heat than they use as electricity.

Anything warmer than absolute zero (equivalent to minus 273 Celsius) has thermal energy.

Air source heat pumps (ASHPs) use the heat in the air.

Ground source HPs (GSHPs) use the warmth in the ground.

Water source HPs (WSHPs) use the thermal energy in water.

They work like fridges, which give off heat extracted from things inside them.

They are the opposite of air-conditioners.

The heat is transferred to water, stored in an insulated water tank, for use in heating and/or as hot water.

Heat pumps are a significant investment. The government currently pays £5,000 towards installation. See greenixworth.co.uk for other ways to minimize costs.

They pay back by saving on energy bills.

They might also be expected to increase the value of your home.

www.greenixworth.org