

# HEAT PUMP SOLUTIONS

Heating your home with oil? The LOGICal way to make huge savings on your fuel bill is to switch to a heat pump!

Heat pumps are energy efficient heating systems that take free, renewable heat energy from the ground, rock or water (ground source heat pumps), from the outside air (air source heat pumps) and from ventilation air inside a building (exhaust air heat pumps).

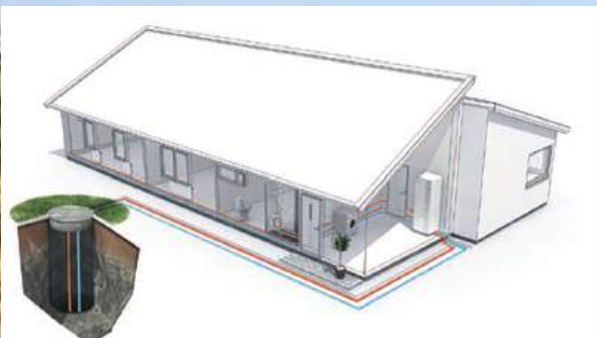
For 1 unit of electricity required to run the compressor inside the heat pump, it delivers between 3 and 4 units of heat to the heating system.

In other words, up to 400% efficient\* compared to oil and gas boilers which are typically somewhere between 80% and 90% efficient. Heat pumps replace conventional boilers and deliver space heating, (cooling where required) and hot water. Heat pumps can be used in homes, shared community heating systems and commercial, industrial and public buildings.

(\* eg Ground Source in accordance with EN 255 for heat source entry at 0°C/hot water flow at 35°C)







### GROUND SOURCE HEAT PUMPS

Drawing heat from surface soil, bedrock or the water in a nearby lake, this is a great option for heating houses, multiple-unit properties and other larger buildings. Available with or without an integrated water heater.



### AIR/WATER HEAT PUMPS

These pumps extract heat from the ambient outside air. In contrast to simpler types of air-to-air heat pumps, they are connected to the building's heating system and are able to produce both heat and hot water.



### EXHAUST AIR HEAT PUMPS

Ideal for heating domestic premises and tap water. An exhaust air heat pump ventilates the building and recovers the energy in the warm air, reusing it to warm up water and supply the central heating system.

Gone are the days of blasting the heating on for a couple of hours in the morning and again early evening! You can now enjoy a comfortable indoor temperature 24/7 and save on heating bills.

Because heat pumps are energy efficient and work on the principle of low temperature heating (35 - 55°C as opposed to 70-80°C for traditional boilers) they maintain the desired room temperature 24 hours a day. Controlled by the outdoor temperature the heat

pump knows when and how much heat is required; the effect is a much more comfortable indoor climate, healthier for us and much better for the fabric of the building.

With a design life of 20 years on the Swedish heat pumps Logic installs, this represents a low lifecycle cost compared to fossil fuel boilers.

### RENEWABLE HEAT INCENTIVE (RHI):

The Renewable Heat Incentive is a government scheme designed to encourage the use of heat producing micro-renewable systems e.g. heat pumps, biomass and solar thermal. The scheme will run from November 2012, (the domestic scheme runs from summer 2013) offering payments for every kilowatt hour of energy produced. In the meantime, installations in off gas areas can benefit from the RHI Premium Payment. For details visit [www.logic-group.co.uk](http://www.logic-group.co.uk)

### WHAT IS NEEDED FOR QUOTATION:

Total floor area, new build or existing property (age of property), radiators or underfloor heating (or both). Alternatively log on to our website and complete the quotation request form.