

10 THINGS TO KNOW ABOUT COMMERCIAL HEAT PUMPS



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HEAT PUMPS ARE THE FUTURE OF COMMERCIAL HEATING. GAS BOILERS STILL REIGN SUPREME BUT WITH NET ZERO REQUIRING DRAMATIC CARBON REDUCTION, MOVING AWAY FROM FOSSIL FUEL APPLIANCES IS ESSENTIAL IN THE COMING YEARS.

HEAT PUMPS HAVE RECEIVED LOTS OF ATTENTION OVER RECENT YEARS. HERE ARE TEN KEY POINTS TO TAKE AWAY ABOUT HEAT PUMPS, SOME OF WHICH YOU MAY KNOW ALREADY, SOME OF WHICH MAY COME AS A PLEASANT SURPRISE!

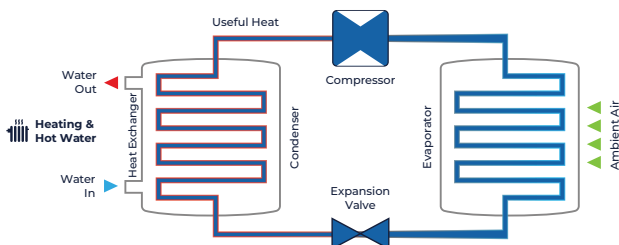
Heat pumps do not burn fossil fuel to generate heat. Instead, they utilise the free energy in the air (even when air temperature is as low as -20°C), the heat of which is captured via a refrigerant and transferred to the heating and hot water system through a heat exchanger. When heat pumps are partnered with a renewable electricity supplier, heat generation is 100% carbon neutral.

NO. 1 HEAT PUMPS AREN'T NEW, BUT A TRIED & TESTED TECHNOLOGY!

Heat pumps are a proven technology. They are highly popular in many countries and have been satisfactorily heating properties for decades, even in many of the colder climates of our European neighbours. Did you know, the Nordic countries – Norway, Finland and Sweden - are among those with the most heat pumps per capita? In the UK, many thousands of properties are also successfully heated by these energy efficient systems.

NO. 2 HEAT PUMPS ARE HIGHLY ENERGY EFFICIENT

When it comes to energy efficiency, since heat is transferred rather than generated, heat pumps can operate up to four times more efficiently than traditional methods, i.e. they have the potential to produce four units of heat for every one unit of electricity that they use.



NO. 3 HEAT PUMPS ARE A LOW CARBON SOLUTION

Compared with direct electric appliances or gas appliances, heat pumps use no combustion and a very small amount of electricity which powers the transfer of heat from the environment to the building. Hence heat pumps have a much smaller carbon footprint for heat generation compared to direct electric or traditional gas heating systems.

When heat pumps are partnered with a renewable electricity supplier, heat generation can be 100% carbon neutral.

Furthermore, the latest heat pumps use refrigerants with a low Global Warming Potential (GWP). Our ECOMOD natural refrigerant heat pumps use either R290 or CO2 with a GWP at 3 and 1 respectively.



ECOMOD CO2 & CO2Q COMMERCIAL HEAT PUMPS PROVIDE ULTRA-LOW GWP OF 1 DUE TO THE USE OF R744 (CO2) NATURAL REFRIGERANT.

NO. 4 HEAT PUMPS OPERATE AT LOWER TEMPERATURES

One of the main questions is: will a heat pump deliver enough heat? Older gas boilers are frequently set up to output at 80°C and return at 60°C, whereas heat pumps operate more efficiently at lower temperatures, around 55°C. On the face of it, this disparity seems quite large, yet many buildings can work at these lower flow temperatures and still achieve a comfortable temperature.

The key is to change the way the heating system operates (and the way the user operates their heating system) to suit the heat pump, typically operating the heating for longer periods to maintain the correct level of background heat, and ensure the property is well insulated to keep the heat in. Larger radiators may be required to better convey the heat in the property.

NO. 5 COSTS NEEDS TO BE CAREFULLY CONSIDERED

Cost is always going to be an important consideration in any building services and heating is no different. There's no escaping the fact that heat pumps have a higher capital cost than comparable gas boilers and, despite their efficiency, running costs can be higher due to the price of electricity compared to gas in this country. Furthermore, insulation, larger radiators or underfloor heating may be required, adding to the overall cost. However, heat pumps have a long lifespan so there are plus points to be had on the cost front.



NO. 6 HEAT PUMPS AREN'T NOISY

Heat pumps aren't noisy, yet this can be a concern primarily as a new background sound has been introduced that, even though low, wasn't there previously. However, if correctly installed, a heat pump is generally quieter than a gas boiler, emitting the same sound as an air conditioning unit.

NO. 7 HEAT PUMPS ARE MORE VISIBLE



A heat pump is a box on the outside of a building. A gas boiler, on the other hand, is hidden away in a plant room never to be seen by the building occupants. The reality is a heat pump has to be external to a building, but it could go on a roof if suitable. The units themselves are no different in looks to an air conditioning unit and, in many cases, are now available in unobtrusive, modern designs. Take a look at our range of ECOMOD air source commercial heat pumps, with their sleek design, if you are yet to be convinced!

NO. 8 HEAT PUMPS AREN'T FOR EVERYONE

Most commercial properties can be refurbished to be suitable for heat pumps. For customers currently using oil, LPG or direct electric based heating, heat pumps can be the perfect alternative.

However, not every property you come across will be suitable for a heat pump maybe because, for example, they do not have adequate insulation or the budget to upgrade that insulation, or the electricity supply on site is not suitable.

NO. 9 CONSIDER A HYBRID SOLUTION



For customers who want to reduce their building's carbon footprint, but may not be able to decarbonise totally by switching to a heat pump, you can offer a hybrid solution. This involves installing a heat pump as the primary heating system, but with the addition of a gas boiler as the 'top up' at times when there is high demand, or even when electricity prices are too high. Our wall hung commercial condensing boilers, such as Evomax 2 or the floor standing Imax Xtra 2, when operating in cascade, are ideally suited to a hybrid system, and have been designed to work seamlessly with our ECOMOD heat pumps.

NO. 10 TRAINING IS VITAL

It's important to get to grips with heat pumps if you are to continue to service your customers well. If heat pump installation takes you out of your comfort zone? Then with the right training you will find that heat pumps aren't a world apart from gas boilers, and you are setting your business up with a focus towards the future.

Ideal Heating Commercial offers a range of hands-on product training, to provide installers with the knowledge needed to successfully specify and design commercial heat pump systems. Commercial product courses are delivered by dedicated Expert Academy training managers whose extensive experience and qualifications provide you with invaluable insight and technical knowledge. Training is available nationwide through Ideal Heating's recently refurbished Centres of Excellence at Bridgehead in Hesse, Leeds, Dalgety Bay and Luton.



EMBRACE CHANGE!

Whilst heat pumps are a tried and tested technology and used across Europe, in the UK the industry is less familiar with them due to our reliance on gas fuelled heating. Introducing a seemingly new technology to a customer is not easy, we know. By ensuring you understand heat pumps and have sufficient training to design and install heat pumps, demonstrating your knowledge and expertise to the customer will reassure them that they are making the best choice for their heating provision now and for the future.



To discuss Ideal Heating Commercial products, get in touch

idealcommercialheating.com/contact-us