

## The advantages of condensing boilers

Condensing boilers are highly efficient. They use less fuel and have lower running costs than other boilers. Higher efficiency levels are made possible by extracting heat contained in the combustion gases, which would otherwise have been lost to the atmosphere.

*Both oil and gas contain hydrogen locked within their chemical structure. When oil or gas is burned, the hydrogen links with oxygen in the air to form H<sub>2</sub>O, (water). This water (as vapour) can be seen from the exhausts of cars on cold days. The vapour (or steam) contains about 8% of the total fuel's energy and capturing it makes energy efficiency sense. This is exactly what condensing boilers do. They "condense" the vapour and capture the energy contained there, making condensing boilers so much more efficient.*

- In general condensing Gas or Oil boilers will deliver up to **25%** more energy for your dollar compared with non-condensing appliances, on the same system.
- Condensing boilers have lower emissions producing lower carbon dioxide emissions.

Step past the local merchant who tries to tell you to go for a standard efficiency model and take a look at the manufacturer's websites, **Baxi, Bosch, Firebird, Mistral, Valiant, Sime, Grant, Vokera, and Warmflow**. You will see they all strongly promote the significant energy saving benefits of condensing technology.

In the UK, since 2005 All Gas boilers sold must be Condensing models, for Oil boilers the same applies since 2007

"So why do some merchants try to steer you away from condensing appliances"

In the case of oil boilers, some condensing models made by big brand manufacturers are not really designed for use with Diesel as the fuel, as a result they are difficult to set up and require more frequent service attention. (*Kerosene is the fuel used in the EU and UK.*)

To get round this an importer might bring in non-condensing models which are no longer able to be sold within the EU or UK, where they do not meet stringent efficiency requirements. They only continue to be produced as a cheap option for sale in uncontrolled markets, unfortunately New Zealand is one such market.

### Quality counts

- ✓ **Warmflow Condensing Boilers** from **Heat IQ** have been, designed and built to burn Diesel efficiently. They require no additional service attention. They are most notably one of the most efficient Oil boilers available anywhere!

The expected lifespan of condensing appliances is just the same as for standard efficiency appliances, maintenance requirements are negligibly different. The savings are Significant.