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## Information Sheet No. 34

### **ELECTRIC BOILERS**

With ever increasing electricity costs and more people seeking a lower carbon form of heating their homes, manufacturers of *electric boilers* are seeking a higher profile and are advertising hard.

*What is an electric boiler?*

Simply, it is a replacement for a gas or oil boiler, using electricity to heat hot water and radiators.

What might the advantages be?

- Much cheaper to buy than a heat pump.
- Quicker and easier to install, often able to use existing gas/oil boiler pipework.
- Takes up less space than a heat pump and is installed indoors.
- Virtually silent
- Very low maintenance
- Up to 99% efficient
- No flue required
- Can take advantage of off-peak tariffs to heat stored hot water
- A less polluting form of heating than gas or oil.

Possible disadvantages.

- Electric heating, even at today's price cap is more expensive than gas, something like 5 times greater and that difference could in future become even greater irrespective of the fact that electric boilers are near 100% efficient.
- Even using a totally green electricity supply, all electricity consumed has a carbon footprint and from certain suppliers generating electricity from oil or gas will have as high or higher carbon intensity than gas.
- In simple terms one unit of electricity for an electric boiler = one unit of heat.

- One unit of electricity consumed by a heat pump = between 3 and 5 units of heat output. If price differences between gas and electricity increase further this running cost difference will become even more marked. It was for this reason the government banned this form of heating under the proposals to improve the Building Regulations for new properties from 2025 and are encouraging heat pumps.
- Generally, electric boilers are only suitable for smaller properties that do not require a high heat output.
- As gas boilers are phased out (no new gas heating from 2025,) if all electric heating were from electric boilers, this would put tremendous strain on our electricity supply and generation system.

From April 2022, a Government grant of £5,000 will become available towards the cost of installing a heat pump.

N.B. Some advertising suggests electric boilers can be run from domestic P.V. generated electricity. True BUT, especially in winter when heating is required, home P.V. is generating very little electricity, certainly not sufficient to run even the smallest of these boilers.

Please contact us for further advice.

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