

## **New energy technology to see homeowners £1,000 a year better off**

- First fuel cell system for domestic heat and power is installed in the UK
- By generating their own electricity, homeowners can save up to £400 on energy bills and make £600 by selling excess power to the grid
- CO<sub>2</sub> emissions are cut by half; it's roughly twice as efficient as taking energy from power stations
- Unit is the same size as a fridge freezer – yet generates as much electricity as a whole roof of solar panels

A new fuel cell technology that provides domestic heat and power could save homeowners up to £400 a year on electricity bills and gain them a further £600 by selling excess power they've generated to the grid. In the UK's first installation at a four-bed house in Wolverhampton, 36 per cent of the family's total energy spend will be saved because they are generating electricity themselves. This translates into a 50 per cent reduction in CO<sub>2</sub>.

The Viessmann Vitovalor 300-P system is easy to install into existing properties with a gas supply – as an alternative to a regular boiler replacement for example – as well as for new builds. It would take both sides of a large roof of solar panels to generate the same electricity, yet it only takes up the additional space (to a boiler with integral cylinder) of a fridge freezer, without any impact on the

external aesthetics of the property. Homeowners can track the savings they are making, in real time, via a Smartphone app.

Comprising of a Panasonic fuel cell unit, a Viessmann peak load boiler (for use on only the coldest days of the year) and hot water tank, the system requires the same connections as a gas boiler.

The system is MCS-approved, meaning it has been rigorously tested to comply with industry standards and qualifies for the Feed-in-Tariff.

Darren McMahon, marketing director says, "To continue to reduce CO<sub>2</sub> emissions and make ourselves more energy efficient, we need to develop solutions for gas. Generating our own electricity at home is about twice as efficient as relying on centralised power stations. The Vitocalor 300-P is a technology available today, that reduces CO<sub>2</sub> by 50 per cent. This first installation into a domestic dwelling in the UK is a significant moment."

Home owner, Clare Engelke said, "In addition to being able to do something for the environment, this system will allow me to generate as much electricity as I use, as well as guard against perpetually rising utility costs. As a family, we're really excited about monitoring our energy use and production."

### Notes to editors

The Vitocalor 300-P is the first mass produced, commercially available domestic fuel cell heating appliance on sale in Europe.

There are many types of fuel cell: this is a polymer electrolyte fuel cell (PEFC)-based micro combined heat and power (mCHP) system.

The energy created by the Vitocalor 300-P – approximately 4,500 kWh per year – is equivalent to that generated by 30 m<sup>2</sup> of solar PV panels; which in practice would involve covering both sides of a large roof in its entirety.

Excess electricity that is created can be exported to the grid. Based on a Feed-in-Tariff of 15p per kWh, this would create an income of upwards of £600 per year for the Wolverhampton household.

Viessmann jointly developed the Vitocalor 300-P with Panasonic. It is a union that takes the technology of Panasonic's fuel cell, proven in thousands of electricity-dependent homes in Japan, and combines it with German manufacturer, Viessmann's heating and control technology.

## Images



The 1910 family home in Codshall, Wolverhampton, is the site of the first fuel cell system installation in the UK.



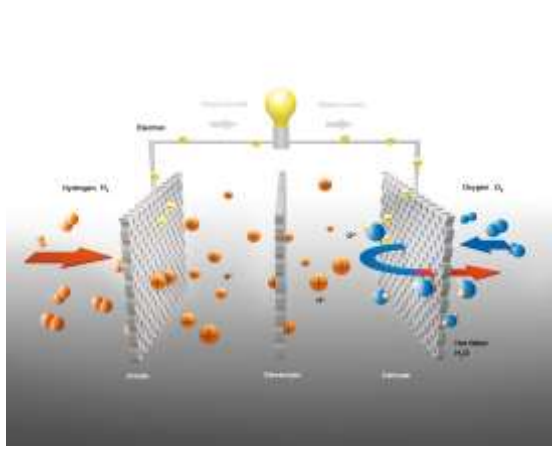
The arrival of the Vitocalor 300-P on site.



The fuel cell system can be operated via a Smartphone app.



The Engelke family are excited about monitoring their energy use and production after the installation of the Vitovalor 300-P.

	<p>The Viessmann Vitovvalor 300-P converts natural gas into hydrogen; a process that generates both heat and power.</p>
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## About Viessmann Ltd.

Viessmann Limited is part of the Viessmann Group of Companies which is one of the leading international manufacturers of heating systems. Founded in 1917, the family business is overseen by the chairmanship of Managing Partner Dr. Martin Viessmann. The Group has annual turnover of EUR 2.1 billion and employs a staff of approximately 11,400. Viessmann's comprehensive product range encompasses all fuel types and applications, allowing it to deliver high quality, efficient and fully integrated solutions. With an output range of 1.5 to 120,000 kW, Viessmann offers oil and gas-fired boilers, solar thermal and photovoltaics, combined heat and power modules (CHP), ground, air and water sourced heat pumps and biomass boilers.

## Press Enquiries

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