

UK rural energy solution



Did you know?

- In **the UK country living is becoming more and more popular** with people moving to the English countryside from towns and cities.
- Many of these homes are out of the reaches of major networks, with around 2 million rural homes and **4.6 million people in Britain being off mains gas**.
- This rural population contains around twice the percentage of retired people than the general population.
- The DCLG English House Condition Survey (updated Nov 2008) also concluded that **there are nearly three times as many households in rural areas in fuel poverty** and that the numbers are increasing compared to urban areas.
- Rural standing buildings tend to be older and possibly stone-built, very often with solid floors and located in relatively isolated communities. **The nature of the building stock, and the fuel options available in rural areas, limit the range of low carbon energy technologies that can be employed.**
- Rural Britain therefore needs **efficient, cost-effective** home energy systems.

“LPG provides energy to some of the remotest parts of the UK.”



What are we doing?

- With approximately **2 million households off the mains gas network**, reducing the emissions of rural homes can play a significant part in overall targets to tackle climate change.
- **LPG has the lowest carbon emissions** of any fossil fuel available in rural areas, and, working hand-in-hand with renewable technologies, can help reduce energy bills while improving sustainability.
- **LPG is convenient and versatile** - it can fuel central heating, water heating, fires and cookers with a real and controllable flame for gas hobs, ovens and fires.
- **Storage options for LPG are very flexible** and include underground tank storage so that only the tank's lid is visible. It is **perfectly safe to store** LPG underground, as in the unlikely event of a leak the fuel would vaporise – so it wouldn't contaminate any soil or fresh water that might be nearby.
- Supplier offers **automatic fuel top-ups**, so the property owner should never be without fuel.
- The storage tank remains the property and responsibility of the supplier, so there's **no need to worry about insurance or maintenance**.

What is the result?

- Due to LPGs extreme versatility and portability it **provides energy to some of the remotest parts of the UK**.
- **LPG is the lowest carbon-emitting fossil fuel** available in rural areas (0.265 Kg CO₂/kWh) and LPG technology continues to develop quickly in response to UK low-carbon requirements.
- One company, Calor is working with the UK company Ceres Power, to bring **the next generation of boilers** to the UK rural market. The Calor LPG Fuel Cell Boiler will heat the rural property with a high efficiency condensing boiler, but **will also generate around 80% of the electricity required** in a domestic rural property. Generating electricity at the point of use avoids the wasted energy associated with power stations and transmission systems.
- The Calor LPG Fuel Cell Boiler will be able to **cut the CO₂ emissions** of an average property by up to 50%.