

Oil versus gas – the business argument ...

Businesses are constantly having to grapple with staying competitive to survive, as well as adhere to being 'green'.

Climate change is an issue for governments and businesses alike, with energy usage a major consideration, and the need to minimise carbon footprints, and costs.

This debate is pertinent to the 16% of the UK not serviced by the main gas grid, which relies on alternative fuels to meet its energy needs. For the majority of off-grid operations, this means a choice between oil, LPG (liquefied petroleum gas) or LNG (liquefied natural gas) for high-volume commercial applications. But what exactly are the differences between these fuels – and what should off-grid users consider when making decisions about their energy supply?

Below, [commercial gas supplier](#) Flogas, offer some thoughts:

Oil – an outdated fuel?

With the Committee on Climate Change urging the UK government to legislate as soon as possible to reach net zero emissions by 2050, the pressure is on all industries to adopt greener energy policies. What this means for off-grid businesses in practical terms is moving away from conventional, carbon-heavy fossil fuels. When considering the key features of oil, it's not hard to see why it's becoming an outdated off-grid option:

- **Increased carbon emissions:** As a major contributor to climate change, the burning of oil for heating and cooking purposes releases far higher levels of carbon into the atmosphere than more efficient off-grid fuels like LPG.
- **Cost:** Through a combination of factors such as dwindling oil reserves, environmental pressures and strained international relations, the price of oil remains volatile. This makes it difficult for businesses to forecast the cost of fuel and can cast doubts over the future of their supply chain.
- **Maintenance:** Due to its viscous nature, machines that operate on oil often take a large amount of maintenance to ensure they are running at optimum performance. This can also mean messy repairs if anything goes wrong.

Time to consider LPG and LNG?

With so many factors now working against businesses that are still using oil, it's no surprise that many are now looking for an alternative fuel supply. The good news is that there are viable off-grid alternatives that offer compelling economic, environmental and logistical benefits. LPG and LNG are two such fuels. So, what are they, and how do they compare to oil?

- **Chemical makeup** – LPG is a blanket term for two types of natural gas (Propane and Butane) and is a natural by-product of gas and oil extraction (66%) and oil refining (34%). LNG is composed primarily of methane and is created by cooling natural gas to an extremely low temperature (-162°C).
- **Finance:** Businesses can make immediate savings when switching to LPG or LNG through a reduction in energy usage.

- Carbon emissions: LPG and LNG have the lowest CO2 emissions of any Off-grid fossil fuels: LPG emits 36% fewer than gas oil, 22% fewer than kerosene and 17% fewer than heating oil. It also emits no black carbon (a significant contributor to climate change).
- Cleaner air: LPG and LNG are clean, smoke-free burning fuels, that emit fewer pollutant emissions, including NOx, Sox and particulate matter (PM).
- Compliant: Because they're cleaner, LPG and LNG help businesses to meet carbon and pollutant reduction targets set out in the Clean Growth Strategy, ULEZ, Marpol and Medium Combustion Plant Directive.
- Efficiency: With a higher calorific value per tonne than other liquid fuels, an LPG and LNG flame can burn hotter, releasing energy quicker. When used in conjunction with the likes of a steam boiler this can produce even greater efficiencies.
- Extensive supply: LPG and LNG are in global abundance, so business owners can rest assured that they will have a dependable source of energy when they need it most. Flogas will be significantly increasing the UK's total LPG storage capability with its new Avonmouth storage facility – the largest of its kind.
- Easy Installation: If a business is considering [switching from oil to gas](#) then this isn't a convoluted procedure. Specialist LPG companies can design and install a replacement heating system to meet your business' needs. From the initial brief process to installation and even the removal of your old oil tank, with the right supplier there's the option to have everything taken care of with minimal downtime.
- Versatility: One of the main attractions of LPG is its versatility. From leisure and hospitality to agriculture and industrial heating, and even fuel for forklift trucks and fleet vehicles, LPG can be used as an energy supply for all manner of industries.

In conclusion

As the cleanest, most efficient and effective fuel compared to conventional off-grid fuels like coal, oil and electricity, switching from oil to LPG (or LNG) could help businesses energy savings, ensuring compliance with government energy policies, and cutting down on maintenance time.

Sources

<https://www.uklpg.org/uploads/DOC5A5F2DC5A7907.pdf>

<https://theenergyst.com/breaking-ties-with-oil-the-case-for-lpg/>

<https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/>

<https://www.uklpg.org/uploads/DOC5A5F2DC5A7907.pdf>