Supporting businesses in the energy transition: the role of LPG and bioLPG in Europe

FAQ

1. **Why did you conduct this research?**
   As the global voice of the LPG industry, WLPGA is keenly aware of emerging challenges in European markets and how these challenges could eventually impact other regions and markets. Europe is setting the pace in terms of environmental legislation and aggressive decarbonisation objectives and these political trends will increasingly impact the competitiveness of energy technologies, products and indeed national economies over the coming years in Europe and beyond. This research was created to ensure that LPG and bioLPG are recognised for the role they can play as a pathway from high-carbon fossil fuels to lower emission alternatives such as LPG and eventually to renewable fuels such as (bio)LPG.

2. **What is the outcome of this research telling us?**
   The research in this study demonstrates that switching to LPG can present an immediate win for commercial, industrial and agricultural businesses across Europe. LPG is a lower-carbon alternative to high-carbon fossil fuels such as oil and coal, with a lower emission intensity of approximately 20% and 50% respectively. Business investment in LPG appliances today creates a seamless pathway to bioLPG use in the medium term, a chemically indistinct yet renewable form of conventional LPG.

3. **Why do the country chapters of this research focus on the UK, France & Italy?**
   The report focuses on these three countries because each are European countries at a different stage in terms of their energy transition, mix of fuels in energy generation and climate ambitions. The benefits of switching to LPG and bioLPG are succinctly described for each of these countries and highlights the versatility of LPG and bioLPG as a fuel source and decarbonisation driver.

4. **What is the difference between bioLPG and renewable LPG?**
   LPG is a portable, clean and efficient energy source that is primarily obtained from natural gas and oil production. LPG's unique properties make it a versatile energy source which can be used in more than 1,000 different applications. BioLPG is a renewable form of LPG that is made from a blend of waste and residues. BioLPG is identical in appearance, performance and application to conventional LPG and is transported and stored in the same tanks and used for the same applications and equipment making the transition from LPG to BioLPG totally seamless.

5. **Why is it important for businesses in the agricultural, commercial and industrial sector to switch to LPG or bioLPG?**
   The Paris Agreement recognises the need for the energy transition within its ambition to fight climate change, by keeping a global temperature rise this century well below 2 degrees Celsius. In order to meet this ambition, governments, businesses, associations and consumers have to start reducing their carbon footprint now. LPG and bioLPG are significantly lower in carbon than other fossil fuels and they can directly replace oil. LPG and bioPLG can help businesses in the agricultural, commercial and industrial sectors, that currently use oil, that are off-the-gas grid or that are located in rural areas, start their decarbonisation.

6. **Looking at today's global climate crisis and the need for decarbonisation, isn't it better to switch to zero-carbon energy solutions right away?**
   While there are no officially known 'zero-carbon' solutions yet, it is important that we transition to an energy system which pursues zero-carbon as soon as we can. This is in line with the European Commission's long-term vision for a prosperous, modern, competitive and climate-neutral economy by 2050. However, it takes time before electric or hydro solutions are available to all. WLPGA promotes the use of LPG and bioLPG, that in turn can help businesses in agricultural, commercial and industrial sectors replace oil, whilst significantly reducing carbon emissions and costs. LPG and bioLPG offer an immediate solution for businesses that want to easily decarbonise today.

7. **Doesn't switching to LPG and bioLPG discourage innovation and the speed of switching to a zero-carbon energy system?**
   In line with the Paris Agreement objective to keep the global temperature increase to well below 2 degrees Celsius, the European Commission aims to have a prosperous, modern, competitive and climate-neutral economy by 2050. An energy transition is needed immediately. As a fully renewable energy system is not available or cost-efficient yet for each business sector, the transition will have to consist of a broad mix of solutions that are lower in carbon than coal and oil and therefore already realize significant decarbonization. The LPG industry has presented a credible pathway to low-emission fuels which is backed by public commitments. (Bio)LPG is an excellent lower-carbon alternative in the industrial, commercial, and agricultural sectors, specifically for businesses in rural, off-grid areas, lowering carbon emissions by up to 80%. Because of its unique qualities, (bio)LPG is a cornerstone of a clean energy future, thus driving decarbonization.

8. **How can LPG and bioLPG enable businesses to emit less carbon?**
   Currently, many businesses in rural areas are reliant on off-grid fuel sources, mainly oil or diesel. These fossil fuels emit high levels of carbon when heated. LPG and bioLPG is a clean-burning, low carbon fossil fuel. LPG can be considered a green form of energy as it emits almost no soot and produces extremely low levels of carbon dioxide compared to other fuels.

9. **How come LPG and bioLPG cost businesses less than oil?**
   The implementation of LPG and bioLPG require no expensive changes to heating systems and are affordably priced fuels. This offers a non-intrusive option for businesses to reduce their carbon footprint.

10. **How can bioLPG be a renewable energy form, if it is identical in use and performance to LPG?**
    BioLPG is a 100% renewable fuel as it is made from a mix of wastes and residues, and sustainably sourced vegetable oils. It is chemically indistinct from LPG but has the same physiochemical properties and can therefore be delivered, stored and used in exactly the same way as LPG is.

11. **Do LPG and bioLPG emit carbon?**
    Yes, LPG is however a lower-carbon alternative to oil and coal, with an emission intensity approximately 20%[1] and 30-40% lower respectively. As well as lowering carbon emissions, LPG can improve local air pollution since it is a clean burning fuel that produces almost zero particulate matter (PM) when combusted.

    Already available on the market, bioLPG is an affordable, convenient and non-intrusive 'drop-in' solution to decarbonisation for a variety of rural off-grid homes and businesses. Made from a diverse mix of biological feedstocks and processes, bioLPG can deliver up to 90% carbon emissions reduction and carries the same low NOx, SOx and PM as conventional LPG.

12. **Are LPG and bioLPG a temporary or long-term solution in terms of decarbonising sectors?**
    As emission reductions of 90% or above can be achieved through fuel switching, it can be used as a medium to long-term solution.

    The LPG industry has presented a credible pathway to low-emission fuels which is backed by public commitments. (Bio)LPG is an excellent lower-carbon alternative in the industrial, commercial, and agricultural sectors, specifically for businesses in rural, off-grid areas, lowering carbon emissions up to 80%. BioLPG is chemically indistinct from LPG and can be dropped into existing equipment and appliances, making it an easy switch without inflicting any costs. The fuel can also be blended with normal LPG, enabling a phased and secure transition to 100% bioLPG. Because of these unique qualities, (bio)LPG is a cornerstone of a clean energy future, thus driving decarbonisation.

[1] Greenhouse gas reporting: conversion factors 2019 - BEIS