



The Biomass Strategy explained

FAQs

What is the Biomass Strategy?

In the UK, as of 2021, biomass was part of the Government's renewable energy strategy. This is part of the Government's ambitious plan to accelerate the decarbonisation of the economy across all sectors.

Central to achieving net zero by 2050 is the transition to wide-scale adoption of low-carbon technologies.

The [Biomass Strategy](#) considers how biomass can best support decarbonisation across the economy, help create new jobs, tackle climate change, and improve air quality and the environment.

The strategy aims to increase the proportion of energy produced from renewable sources and decrease reliance on fossil fuels.

What is biomass?

Biomass refers to any material of a biological origin, including waste products and residues, that can be used as a renewable and low-carbon energy source, replacing fossil fuels to help reduce greenhouse gas emissions and tackle climate change.

Biomass products can include various feedstocks like crops, forestry and agricultural residues, processing byproducts and marine-based materials. They offer sustainable alternatives for energy production in heat, power, transport and manufacturing.

Why are renewable liquid gases included in the Biomass Strategy?

Renewable liquid gases are considered a form of biomass because they are derived from organic materials - plant or animal matter - which is the definition of biomass in the context of energy production.

What does the Biomass Strategy mean for rural off-grid homeowners?

The inclusion of renewable liquid gases in the [Biomass Strategy](#) gives home and business owners energy security. It diversifies the energy mix and will result in a greater choice enabling them to become less reliant on imported fuel and provides an alternative to the current electrification approach, which may not be suitable for all properties.

What are renewable liquid gases?

Renewable liquid gases (RLGs) are a fuel derived from organic matter. They are made from a diverse mix of sustainable biological feedstocks and processes.

RLGs are pipeline-quality gases, they are a convenient and non-intrusive 'drop-in' solution to decarbonise a variety of rural off-grid homes and businesses.



Examples of RLGs include [bioLPG](#) and renewable dimethyl ether ([rDME](#)).

RLGs are chemically identical to traditional [LPG](#) and produced to a strict sustainability criteria.

They can be used with existing infrastructure, such as your tanks, boilers, fires, cylinders, hobs and ovens, in fact any [LPG](#) appliance, so no expensive home upgrades need to be made in order to start using it.

These RLGs are more environmentally friendly than fossil fuels. They offer up to 90% carbon emissions reductions and carry the same low nitrogen oxides (NOx), sulfur oxides (SOx) and particulate matter as conventional [LPG](#), contributing to cleaner air quality. They also improve energy security by reducing reliance on imported fossil fuels.

Detailed information about [bioLPG](#) and [rDME](#) can be found at liquidgasuk.org.

How are renewable liquid gases produced?

Renewable liquid gases (RLGs) are made from a diverse mix of sustainable biological feedstocks and processes. They are often a co-product of sustainable aviation fuel.

Feedstocks for RLGs include cooking oil, indigenous biomass, vegetable oil, waste, plant dry matter, sugar and starch.

Can I use renewable liquid gases?

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How many homes in the UK are off-grid?

As of 2021, it was estimated that around 4% of the UK's homes, or approximately 1.1 million households, are off the gas grid. These homes rely on other forms of energy for heating, including oil, electricity, [LPG](#), solid fuel and renewable technologies.

What are the options to heat off-grid homes?

As part of their efforts to reduce greenhouse gas emissions and combat climate change, many governments, including the UK, are considering phasing out gas boilers. Instead, homeowners are encouraged to use more energy-efficient and sustainable options for heating their homes. Here are a few alternatives:

- Renewable liquid gases (RLGs): Alternative fuels, such as RLGs, offer a practical and affordable solution to decarbonise rural properties where heat pumps aren't a viable option. They provide on-demand heat and hot water.
- Heat pumps: Heat pumps extract heat from the outside air or ground and increase its temperature to heat your home. They are very efficient and can provide significant savings on heating bills in the long term. There are two main types of



heat pumps: air source heat pumps (ASHPs) and ground source heat pumps (GSHPs).*

- Hybrid systems: hybrid heat pumps can be used alongside another energy source, such as a conventional boiler powered by RLG. Hybrid heat pumps allow customers to control how their heating system operates based on different inputs from electricity costs and the time of day.
- Biomass boilers: These boilers burn organic material, typically wood pellets, to produce heat. They can be a good option for off-grid homes or homes with plenty of space for a pellet store. However, they do produce some emissions and the sustainability can depend on the source of the biomass.
- Solar thermal panels: These panels absorb heat from the sun and use it to heat water, which can be stored in a hot water cylinder. They can provide a significant proportion of your hot water needs, but you will likely need a backup system for cloudy days or in the winter.
- Electric boilers or heaters: These use electricity to generate heat. They can be more expensive to run than gas boilers due to the higher cost of electricity, but they can be a good option for small flats or homes with good insulation.

*Independent research shows that [homeowners could be expected to pay between £15,000 - £30,000 for the installation of a heat pump](#), once energy efficient improvements are considered, for hard-to-treat and hard-to-heat properties. [Liquid Gas UK](#) polling has found that [69% of households would be unable to afford this cost](#).

Who is Liquid Gas UK?

[Liquid Gas UK](#) is the trade association representing the LPG and [bioLPG](#) industry in the UK. Its membership includes [LPG](#) producers, distributors, equipment and appliance manufacturers, as well as professional service providers.

The association's work includes advocating for the interests of its members, promoting the use of [LPG](#) and [bioLPG](#) as clean, efficient and versatile sources of energy, and developing industry standards and training to ensure safety and technical competence within the industry.

[Liquid Gas UK](#) has committed to being [100% renewable by 2040](#) with a credible pathway in place to achieve this. The inclusion within the [Biomass Strategy](#) gives [Liquid Gas UK](#) the long-awaited confidence needed to secure future investment.

The [LPG](#) industry has placed significant investment behind the domestic production and development of RLGs to the tune of £260m, without any Government backing. A further £600m of investment up to 2025 is also forecast.

How do I buy renewable liquid gases?

Switching to [LPG](#) allows a seamless transition to renewable liquid gases (RLG). If you are interested in switching your fuel source to RLG, please visit liquidgasuk.org to [find your local supplier](#).

If you are an existing [LPG](#) customer, please contact your supplier to enquire about RLGs.



Liquid Gas UK

Please note, as a trade body, [Liquid Gas UK](#) is unable to answer individual consumer questions.