

## REA Bioenergy Strategy

### Phase 1: Bioenergy in the UK – State of Play

Bioenergy, which uses sustainable biomass and biofuels produced from wood, crops and food wastes, is already the UK's leading source of renewable energy, meeting 7.4% of our total energy needs.

The Renewable Energy Association has brought together civil servants, industry experts and academics to produce a new industry-led Bioenergy Strategy for the UK. Making clear what the sector delivers now, what it could achieve in the future and how we can get there.

In March, the REA released the project's first report of three, analysing the current role of the sector. The next report will set out its full potential.

- **Bioenergy is fundamental to delivering a secure, affordable decarbonised energy system fit for the future.**

Bioenergy is the UK's largest source of renewable energy. Without bioenergy, the UK's impressive progress in cutting emissions so far would have been more expensive and far more difficult.

The sector makes a significant contribution to the UK economy with an annual turnover of £6.5bn to the UK economy – sustaining up to 46,000 jobs.

In particular, investment in bioenergy has had a beneficial impact on rural economies, creating jobs and helping further diversify markets for agricultural and forestry products.

In terms of energy security, the use of Bioenergy in 2017 displaced fossil fuel expenditure in the UK by an estimated £21bn. It also has the potential to address the 'generation hole' left following the shelving of several new UK nuclear plants.

Bioenergy has a crucial role to play in the UK's future. The Committee on Climate Change believes biomass can sustainably double to provide 15% of UK energy demand with the right governance. Combined with Carbon Capture technologies, it is the only route we have to secure net negative emissions in energy.

- **Bioenergy enables a dispatchable renewable flexible power system.**

11% of UK electricity currently comes from Bioenergy, predominantly in the form of Biomass Power - equivalent to the output of four Sizewell B nuclear plants, or around 1.5 times the anticipated output from the Hinkley Point C.

Furthermore Bioenergy provides dispatchable power – providing flexibility to the grid to match demand and production, supporting the deployment of decentralised renewable generation.

- **Bioenergy is currently the primary source of renewable heat, helping to decarbonise the largest source of carbon emissions the UK**

Bioenergy, including biomass boilers and green gas, has provided 96% of non-domestic renewable heat in the UK – the biggest contributor to heat decarbonisation to date.

Bioenergy represents the most affordable and immediate technology for the decarbonisation of heat, crucial to meeting the UK's legally binding carbon budgets.

- Renewable transport fuels produced from crops and waste-based sources are reducing emissions from our roads.

The use of biofuels saved 2.7 MTCO<sub>2</sub>e in 2016/17, about 2% of total UK emission from transport and equivalent to taking about 1.3 million cars off the road.

Renewable Transport fuels like bioethanol and Biomethane, produced from waste feedstocks, will be a key technology for the decarbonisation of road transport, particularly in relation to Heavy Goods Vehicles and even aviation.

- Sustainability is central to the future growth of the sector

Over the last ten years the understanding of sustainability issues has evolved and advanced both internationally and in the UK.

Industry and government have worked together to develop comprehensive standards and processes across supply chains in order to account for full life cycle analysis of emissions from bioenergy feedstocks. The industry continues to place sustainability at the centre of future growth ambitions, with UK leading the way in the development of future Governance regimes to continue to ensure sustainability as the sector grows.

- The sector is being allowed to drift and policy gaps are growing. The REA *Bioenergy Strategy* project is designed to address this.

A lack of a supportive policy framework is currently constraining the delivery of future bioenergy projects across power, heat and transport. A hiatus in new bioenergy projects entering the pipeline risks the loss of the expertise and supply chains needed to meet the Government's carbon budgets.

The final report will both examine the sector's full potential and what policy and regulatory requirements will be needed to get there.

### Find Out More and Support the Sector

The first phase report of the Bioenergy Strategy can be read here:  
<https://www.bioenergy-strategy.com/>

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The full report is expected to be published in Summer 2019.

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