

## Delivering success

Long-term policy stability and financial support for the scaling-up and rollout of sustainable fuel production capacity is needed. Industry wishes to continue our work with Government in four key areas:

- 1 Fund flagship SAF plants**  
£500m of Government investment over five years, matched by industry and commencing in 2020 (totalling £1bn), would support flagship commercial SAF plants across the UK, as well as a UK centre of excellence for SAF development.
- 2 Incorporate Recycled Carbon Fuels into the RTFO**  
Recycled carbon fuels should now be included to remove barriers to these ground-breaking technologies.
- 3 Support investment in SAF**  
Through applying at least a 1.2x multiplier within the RTFO incentive for SAF development fuels to provide a signal to fuel producers to invest in aviation fuel production.
- 4 Office for Sustainable Aviation Fuels (OSAF)**  
We need a cross-Government focus on SAF to progress development and commercial deployment, through a new OSAF or similar cross-departmental body with appropriate governance structure, membership and resources.



## Case studies



### British Airways investment in Altair Immingham project

Once operational this planned plant will take hundreds of thousands of tonnes per year of post recycling waste, otherwise destined for landfill or incineration, and convert it into over 60 million litres of clean burning sustainable jet and road fuel each year.



### Virgin Atlantic and LanzaTech Sustainable Aviation Fuel Partnership

LanzaTech uses a novel carbon capture and utilisation (CCU) approach to recycle waste carbon-rich gases from heavy industries into jet fuel. Subject to RTFO reform LanzaTech has committed to provide all Virgin Atlantic's fuel out of the UK as a 50:50 blend, and 70% CO<sub>2</sub> savings compared to fossil jet fuels.



**Sustainable Aviation Fuel (SAF) is the next big breakthrough opportunity for aviation carbon reductions.**

In particular, SAF must become a mainstay of long-haul flights if UK aviation is to get to net zero.

# SUSTAINABLE AVIATION FUELS ROAD-MAP

Fueling the future of UK aviation

[sustainableaviation.co.uk](https://sustainableaviation.co.uk)

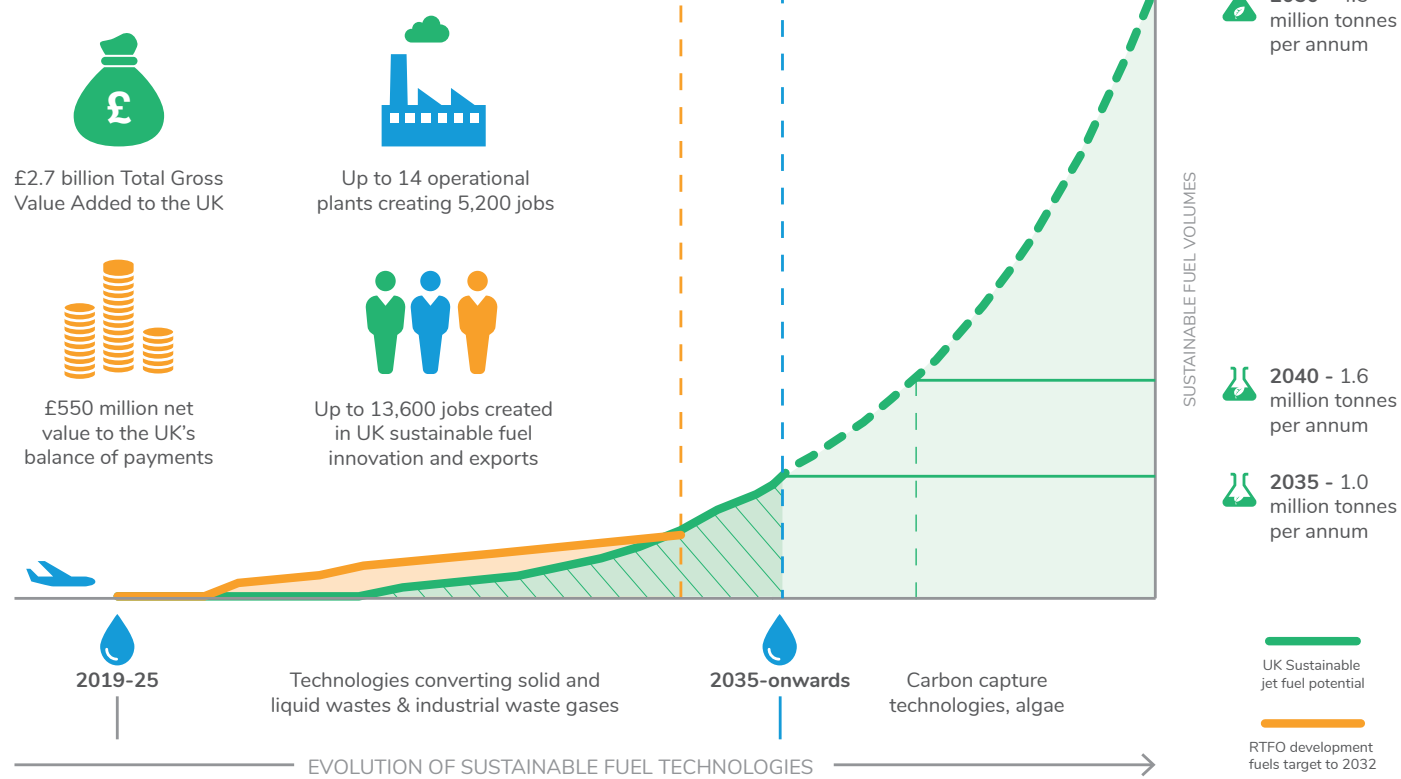
 **SUSTAINABLE AVIATION**  
CLEANER | QUIETER | SMARTER

**Sustainable Aviation wishes to thank the following organisations for leading the work in producing this Road-Map:**



# UK POTENTIAL: SUSTAINABLE FUELS ROAD-MAP

By 2035



## What are SAFs?

SAFs are fuels derived from sustainable feedstocks such as waste oils, agricultural residues or waste carbon rich gases, and generate life cycle carbon savings of upwards of 70% compared to fossil jet fuel.

Critically, they can be used in today's engines without any special equipment.

The Road-Map can be read in full at [sustainableaviation.co.uk](http://sustainableaviation.co.uk)



Globally, SAF is at a tipping point, with projects on the verge of commercial-scale production. In the UK we have seen encouraging progress since the UK government provided more support through the Renewable Transport Fuels Obligation (RTFO) in 2019.

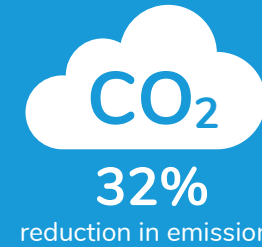


To fully explore the potential of this emerging sector, SA commissioned new independent research by sustainable energy consultants E4tech.

**13,600**  
additional jobs

This would support up to 5,200 jobs in the UK and an additional 13,600 jobs could be generated from the growing market for sustainable aviation fuels through global exports.

We now estimate a **32%** reduction in emissions from UK aviation is possible from the use of SAF in 2050. This represents a CO<sub>2</sub> saving of 14.4Mt.



This export market is worth up to an additional **£1.952bn** to 2035 and bringing the full value to the UK of **£2.7bn** from UK production and global exports.

**£2.7bn**  
Total Gross Value

**£742m**  
Gross Value Added

Work carried out by E4tech highlights that with support, by 2035 the development of a domestic industry to produce sustainable fuels could generate a Gross Value Added (GVA) of up to **£742m** annually.

**£550m**  
Net value to the UK

In addition to this, UK manufactured fuels could add **£550m** per annum benefit to the UK's balance of payments by 2035.

By 2035 between **5-14** SAF plants in the UK could be producing a range of transport fuels and other chemicals.

**5-14**  
SAF plants in the UK

However, realising the full potential for UK production and deployment of sustainable aviation fuels requires Government to develop a co-ordinated UK vision and strategy for their deployment.



The 2035 figures given, show the result from production of SAF in the UK alone.