

# Sustainable Aviation Fuel

Special Interest Group

Analysis of 49 companies producing carbon molecules of potential value to a UK sustainable aviation fuel (SAF) industry

[www.safsig.co.uk](http://www.safsig.co.uk) @ktn\_safsig



## Feedstock

**25%**

of companies analysed convert municipal solid waste and its fractions

24% of companies utilise 2nd generation biomass, whilst 35% utilise waste gases, tyres, 1st generation biomass or algae.

14% companies utilise plastic waste to make fuels

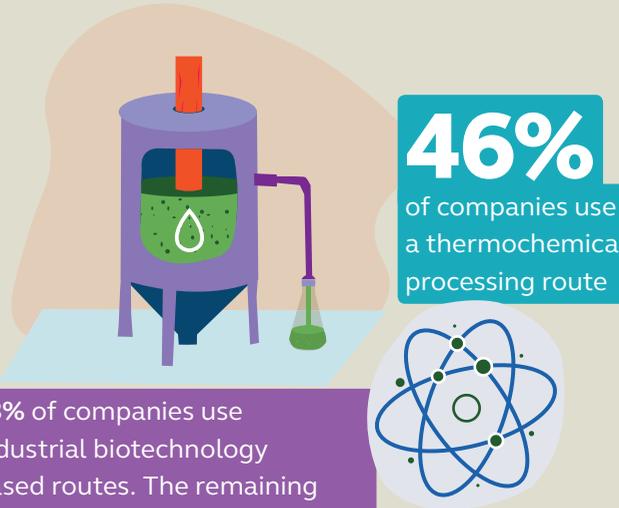


## Technology

**46%**

of companies use a thermochemical processing route

18% of companies use industrial biotechnology based routes. The remaining 36% use transesterification, chemocatalytic, electrochemical or hydrocracking processes



## Product

**55%**

of companies produce high-octane fuels like diesel or Jet A1

**45%**

of companies are developing simpler, less-energy dense fuel products (e.g. syngas, hydrogen, methanol, ethanol) for non-aviation fuel markets



## Scale

**31%**

of companies operate at TRL 7-8, 31% at TRL 4-6 and 14% at TRL 1-3

**24%**

of companies are operating at commercial scale



## Policy and Approval

Of the 49 companies, KTN estimates:

**45%**

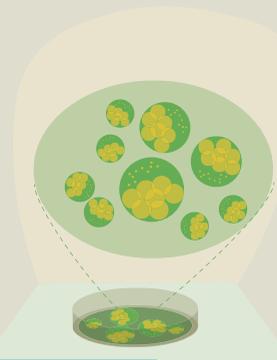
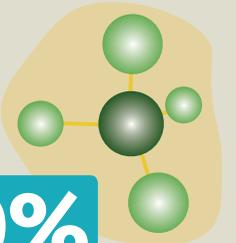
of companies may be producing molecules already approved under ASTM D4054

**40%**

of companies may be producing molecules, if subjected to further refining, could meet ASTM D4054 approval or be fed into a conversion process

**81%**

of companies are using feedstocks that meet RTFO\* conditions but only 43% are working to an ASTM approved route and a RTFO approved feedstock



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Department for Transport

**SUSTAINABLE AVIATION**  
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\*Renewable Transport Fuel Obligation