



Sustainable Aviation Fuel.

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

Feedstock

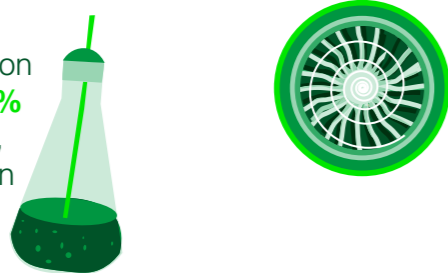
25%

of companies analysed convert municipal solid waste and its fractions



14% companies utilise plastic waste to make fuels

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



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

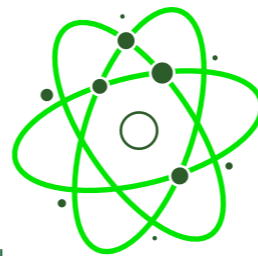
Technology

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



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

www.ktn-uk.org

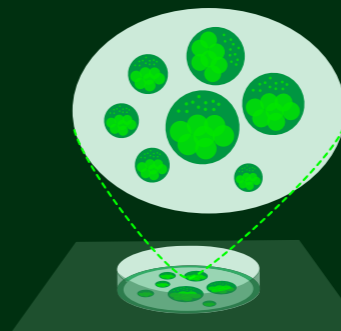
@KTNUK

Policy and Approval

Of the 49 companies, KTN estimates:

46%

of companies may be producing molecules already approved under ASTM D4054

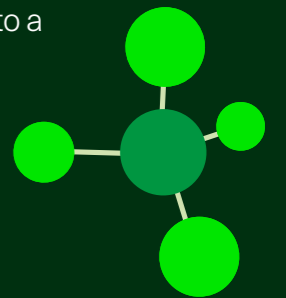


40%

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



Innovate UK

Department for Transport

*Renewable Transport Fuel Obligation



SUSTAINABLE AVIATION