



International SAF Markets and Policies



Rainer Janssen, WIP Renewable Energies, Germany

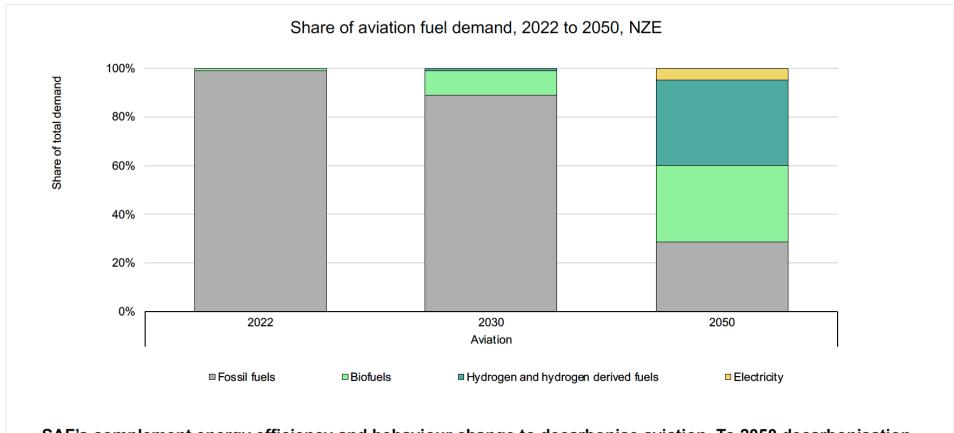


Kyriakos Maniatis, Independent Consultant – Biomass, bioenergy and low-carbon fuels



SAF's are crucial to decarbonising aviation on a net zero pathway

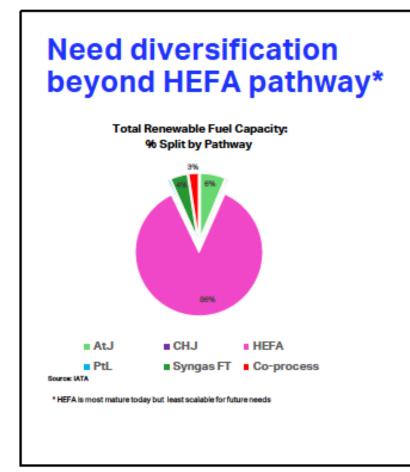




SAF's complement energy efficiency and behaviour change to decarbonise aviation. To 2050 decarbonisation depends on commercializing and scaling new biofuel technologies and hydrogen-based fuels.

SAF Markets





Airline Offtakes starting to address this Number of agreements 24 HEFA Co-HEFA AtJ Syngas-FT processing Source: IATA

- HEFA accounts for 85% of future (5 years) SAF volume
- Dependence on feedstock (waste fat, oil and grease) with limited availability
- Need for diversification

SAF Policies



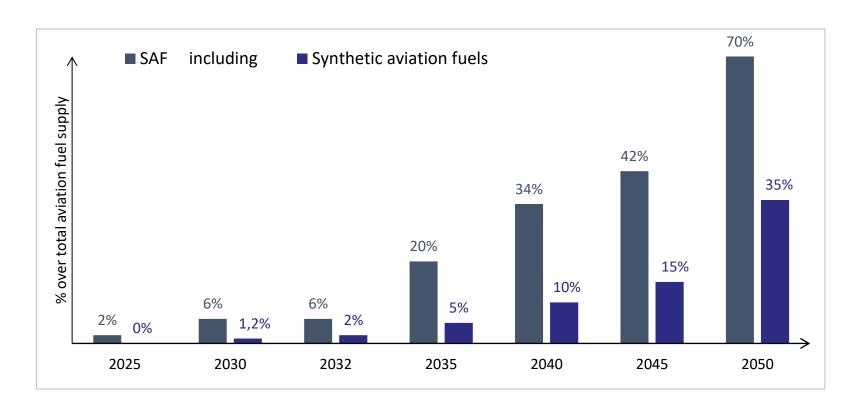
Region/Country	Key initiatives	Туре	Comments
EU	ReFuelEU Aviation Regulation, legislation	Legislation & Mandates	Complex legislation in relation to feedstocks Mandate targets very ambitious and in short time High GHG minimum targets Obligation is upon the fuel suppliers Mandate targets also on eSAF; nuclear included
Brazil	Policy on forthcoming mandate	Mandate	Forthcoming mandate set for 2027 aiming to reduce Brazil's aviation emissions by 1% of the sector's total emissions in 2026 Strong relationship to the ethanol route for SAF
Canada	Policy on targets	Target	1 billion litres of SAF by 2030 By 2035, Canada should be ready to produce SAF to meet 25% of total jet fuel demand
China	Short term goal for biofuel uses in aviation	Target	Cumulatively consuming 50,000 tons of SAF by 2025 No reference yet to sustainability certification No relationship to ASTM, thus need to develop own standards
India	Policy on forthcoming mandate	Mandate	Use of 1% SAF for domestic airlines by 2025 The policy also aims to support farmers and rural job creation
USA	Sustainable Aviation Fuel tax credit, legislation	Production Target	Expand production to achieve 3 billion gallons (11.4 billion litres) per year of domestic SAF production that achieve a minimum of a 50% reduction in life cycle GHG emission compared to conventional fuel by 2030 Strong support for new types of feedstock development Loan guarantees
UK	Policy on forthcoming mandate	Mandate	Plans unveiled (25/04/2024) for world leading sustainable aviation fuel mandate, with 10% of all jet fuel set to go green by 2030 Needs parliamentary approval, will come into force in January 2025

RefuelEU Aviation in the EU





Ewa OneyTeam Leader for Sustainable Aviation Aviation Policy Unit, DG MOVE



• Twin objectives:

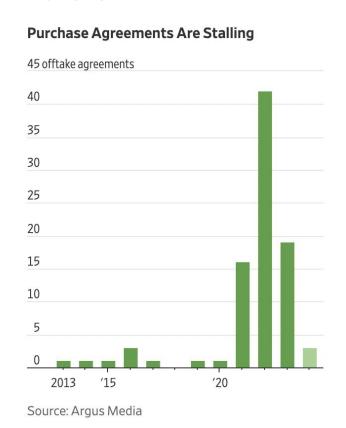
- Ramp up SAF deployment
- Level playing field through EU uniform rules
- Supply obligation: Aviation fuel suppliers to supply SAF-blends at EU airports

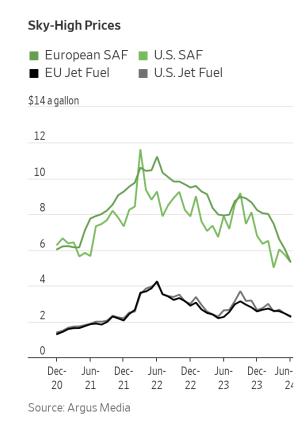
Indicative conclusions – Strong policies, but...



The U.S. and Europe Can't Agree on What Counts as Sustainable
Aviation Fuel. That's Leaving Investors in a Bind.
Confusion swirling against a backdrop of failed investment in the
alternative fuel industry

WSJ, 24/06/2024





- Significant interest and work to promote SAF with policy, market and technology measures in all Mission Innovation countries
- Strong reference to develop new crops in India and USA to ensure availability of biomass resources
- Several failed investments (Fulcrum, Shell, Vattenfall)
- Investors remain largely hesitant to ramp up SAF production

Thank you for your attention

Stay tuned....

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Partners















































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