

# Petrogenium.

## SUSTAINABLE AVIATION FUELS ADVICE



**Our Sustainable Aviation Fuels (SAF) Services range from high-level to comprehensive solutions for the development, optimization, and implementation of SAF production processes.**

**We support aviation fuel producers, airlines, investors and related stakeholders seeking to reduce carbon footprint, accelerate the green transition and adhere to changing mandates.**

**Petrogenium.** offers refiners, airlines, major investors, Greentech funds, and top consulting firms comprehensive services. These include technical advice on renewable diesel, routes to SAF, coprocessing and advanced biofuels, conversion of biomass and municipal solid waste to SAF, as well as e-SAF.

Changing EU and USA regulatory mandates drive more focus on SAF production routes. Current commercial routes are HEFA and co-processing using feeds like Used Cooking Oils (UCO) and animal fats. Limited supply of these HEFA feedstocks has been a driver for refiners and others to explore other routes.

### Typical services offered:

**Feedstock Flexibility:** We provide technology solutions and advice for converting various sustainable feedstocks, including waste oils, agricultural residues, algae and alcohols into SAF, and making synthetic aviation fuels (e-SAF).

**Conversion Technologies:** Expertise in HEFA (Hydroprocessed Esters and Fatty Acids), Alcohol-to-Jet (ATJ) and Methanol to Jet (MtJ), gasification/Fischer-Tropsch synthesis including ASTM D7566 and CAAFI routes and timelines.

**Petrogenium's SAF studies assist refiners, airlines, investors and top-5 global consultancy firms. Services include: technology assessment, due diligence and alternative routes to SAF based on own in-depth knowledge and hands-on experience of ASTM D7566 approved pathways, emerging routes in CAAFI, as well as techno-economic and financial due diligence support.**

### Technoeconomic analysis and financing advice:

Detailed economic analysis and financial modeling/due diligence support.

**Accelerating technology maturation:** Benefit from our first-hand experience in technology maturation from lab-scale via pilot and demonstration plants to validate and refine new SAF technologies before full-scale deployment.

**Project Realisation expertise:** Project Realisation is an integrated, decision driven, assurance and stage-gated process for delivering business opportunities. Petrogenium experts will assess the Project and strength of the Owners Team to ensure effective Project delivery.

## Recent successfully completed SAF services:

- 2024 - Technical Due Diligence (DD) on a SAF opportunity in Canada for a major European airline
- 2024 - Technical DD on a HEFA technology route to manufacture SAF for an European airline
- 2024 - Helpdesk advice for SE Asia refiner on HVO and SAF production
- 2023 - Technical Due Diligence on a route to manufacture SAF for an European airline
- 2023 - Technology Assurance Review for an European airline
- 2022 - International airline, advising on future SAF plans, SAF developments and projects
- 2022 - Southern European refiner, technical due diligence on future SAF strategy and opportunities
- 2021 - Large integrated Oil & Gas Company, Middle East, Comprehensive techno-economic benchmarking of biofuels

## SAF Services and Advice Benefits:

- Accelerate commercialisation of SAF processes and ensure compliance with changing mandates.
- Reduce uncertainty in investment decisions by providing expert technology assessments and technical due diligence to airlines, private equity funds and top consultancy firms.
- Ensure informed technology selection by robust comparisons of competing technologies based on deep process technology and economic evaluations.
- Leverage multi-disciplinary expertise in biofuels, Renewable Refining, refining technologies, and operational excellence.
- Avoid surprises in Project delivery by benefiting from the combination of technology assessment, Project Realisation and Project financial modeling reviews.



## Why select Petrogenium.?

Every step of the way, you can lean with confidence on the 30-year world-class experience and hands-on know-how of our consultants in energy efficiency technologies and refinery operations.

***Because Experience Matters***

[www.petrogenium.com](http://www.petrogenium.com)

## Contact Petrogenium.:

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