### SUSTAINABLE AVIATION FUEL

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## **AUSTRALIAN AVIATION FUEL**



#### What is Sustainable Aviation Fuel?

Sustainable Aviation Fuel (SAF) is a **low-carbon alternative to fossil jet fuel** that reduces lifecycle greenhouse gas emissions by up to 80% compared to fossil kerosene.

SAF is **produced from renewable and waste resources** - such as agricultural residues, municipal solid waste, or purpose-grown energy crops.

It is a certified, "drop-in" fuel that works safely with today's aircraft engines and airport infrastructure. By displacing fossil jet fuels without requiring new planes or airports, SAF is the most effective near-term solution to decarbonise aviation.

- SAF is certified under ASTM D7566 and, when blended, is re-certified as Jet A-1 under ASTM D1655 – meaning no modifications are needed to aircraft or airports
- Airlines worldwide have already completed over 600,000 commercial flights using SAF blends, with multiple 100% SAF demonstration flights proving full compatibility.
- Depending on the feedstock and pathway, SAF delivers up to 80% lifecycle emissions reductions compared to fossil iet fuel.
- SAF has lower sulphur and aromatics than fossil jet fuel, reducing particulate matter and improving local air quality around airports.
- SAF is available now: in May 2025, Sydney received nearly 2 million litres of imported SAF, and the RAAF East Sale base is trialling a 5% SAF blend across its fleet.
- Governments in the EU, UK, US, Singapore, and Japan have adopted mandates or incentives, while Australia currently has no commercial-scale production - despite abundant feedstock potential and project pipelines.

# Australia's SAF Opportunity in numbers...

4-5%

...contribution of the aviation sector to Australia's total CO2 emissions

**≈100%** 

...of commercial aircraft flown today that are SAF-certified

~A\$2.00

...direct cost to consumers on the average Australian airfare from a 2% SAF mandate

90%+

...of Australia's jet fuel is imported from overseas, primarily from Asia

~16

...number of SAF projects in Australia as of September 2025 70-80%

...lower lifecycle emissions than fossil jet fuel (pathway/feedstock dependent)

23/38

...OECD countries that have set SAF mandate / other SAF-specific demand-side policy

~A\$15.00

...net economy-wide benefit per ticket from a 2% SAF mandate (supply chain stimulus and productivity effects)

### 1 Month

...Australia's jet fuel supply on hand under normal demand, despite a 90-day IEA obligation

0 ML

...amount of SAF produced in Australia today

# Five reasons to implement Government policy support for SAF in Australia...

#### Sovereign fuel supply urgency.



Australia imports 90%+ of transport fuels, including fossil jet fuel, with ~25% of jet fuel coming from China. With only two refineries left, any shock hits civil aviation and Defence - domestic SAF is a practical resilience hedge across an ~8-billion-litre jet fuel market.

## Strong advocacy and support across the supply chain.



A broad coalition across the value chain supports SAF policy to scale domestic supply. Jet Zero's first Townsville project alone is estimated to benefit ~350,000 Australians.

## DBIOENERGY CANEGRO





# Catch up to world leaders (and unlock demand signals).



The EU mandates 2% (2025)  $\rightarrow$  6% (2030)  $\rightarrow$  70% (2050); the UK goes 2% (2025)  $\rightarrow$  10% (2030)  $\rightarrow$  22% (2040); Singapore introduces a SAF levy from 2026 toward 3–5% by 2030. Australia has no mandate. Even the US - under President Trump - expanded producer credits, and European airlines already price SAF (e.g., Lufthansa "Green Fares").

#### Safe, high-standard, drop-in fuel (already in use).



SAF is certified under ASTM D7566 and, once blended, is re-identified as Jet A-1 (ASTM D1655) - no aircraft or airport changes required and lower aromatics/sulphur. Proof points at home: nearly 2 ML arrived into Sydney (May 2025) and RAAF East Sale is running a 12-month ~5% trial; all ADF fixed- and rotary-wing aircraft are SAF-certified.

#### Net cost impact is modest with predictable policy.



On a standard blended basis, the ticket impact from early SAF uptake is modest, while the broader economic uplift outweighs the cost. Analysis by Barrenjoey Barclays shows a 2% SAF blend by 2028 adds about \$2.20 per ticket, yet delivers a net economy-wide benefit of ~\$15.20 per ticket (\$\$1.1bn), given supply-chain stimulus and productivity effects.