

A GREEN RECOVERY FOR AUSTRALIA'S AVIATION SECTOR

THE IMPORTANCE OF A STRONG DOMESTIC INDUSTRY FOR SUSTAINABLE AVIATION FUELS



What are Sustainable Aviation Fuels?



Sustainable Aviation Fuels (SAF) are fuels which are derived from sustainable feedstocks such as waste oils, agricultural residues, or municipal solid waste – that would otherwise go to landfill or incineration.

80% less carbon emissions

SAF produces up to 80% less carbon emissions over its lifecycle compared to conventional jet fuel¹ – and critically, can be used in today's aircraft engines without any special equipment or modifications.

What is Australia's potential?



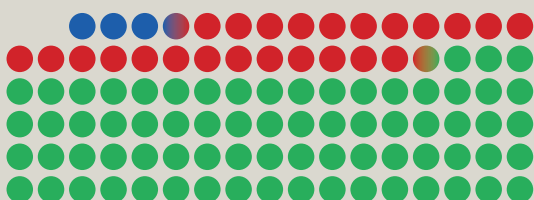
Create more than **7,400 jobs by 2030**, and up to **15,600 jobs by 2050** – most in regional areas²



Secure Australia's domestic fuel security – removing reliance on imported liquid aviation fuel³



Contribute an additional **\$2.8B in GDP per year by 2030**, and up to **\$7.6B per year in 2050**⁴



SAF is critical to aviation decarbonisation

Globally – even assuming highly optimistic use of **electric** and **hydrogen** energy for some operations in 2050 – the vast majority of passenger flights will rely on the use of **sustainable aviation fuel**.

Schematic of potential energy use in 2050: % of operations by source (indicative example). Reproduced from Air Transport Action Group.⁵

Why is SAF important in Australia?

It is well recognised that aviation is one of the most challenging industries to decarbonise. Australia's geography – requiring longer flights and larger planes for critical connectivity – means that SAF must be prioritised in our efforts to reach net zero by 2050, alongside other measures like electrification, operational efficiencies, and offsetting.

Australian airlines currently have no option but to purchase SAF produced in other countries – spending millions of dollars offshore, that could instead flow into the Australian economy.⁶

With the current volatility in both supply and pricing of oil, it has never been more important to invest in building domestic SAF production capability today, so that we will have sufficient supply for the future.

An Australian SAF industry will:



Reduce aviation emissions, enabling Australia to meet our commitments to net zero by 2050.



Produce reliable, secure energy for Australia's aviation and defence sectors.



Support Australian sovereign manufacturing and refining capacity.



Unlock high-paying, highly-skilled, high-technology jobs, particularly in regional areas.

Delivering success

Realising the full potential of Australian production and deployment of SAF requires government and industry working together to develop a coordinated national vision and strategy.

The formation of a national body, like a Jet Zero Council, will bring industry and government (at a state and federal level) together, to consider and develop a policy framework that will work best for the Australian environment. We welcome the Federal Government's commitment to this.⁷

Hundreds of millions of dollars of industry investment will be unlocked if the Federal Government:



Provides early investment in technology, feedstock supply, and commercial refineries for SAF and other biofuels.⁸



Introduces supportive policies to bridge the gap between conventional jet fuel and SAF, including tax credits, exemptions, and subsidies.⁹



Stimulates demand through participation in SAF purchasing programs, and introduces a SAF target for the Department of Defence.

AIR NEW ZEALAND 

Jetstar 

 QANTAS

 rex.
Regional Express

 virgin australia

1. International Air Transport Association. 2021. Sustainable Aviation Fuels: Fact Sheet 5.
2. Frontier Economics analysis on SAF – Prepared for A4ANZ.
3. ARENA. 2021. Australia's Bioenergy Roadmap Report.
4. Frontier Economics. Op cit (2).
5. Air Transport Action Group. 2022. Presentation: Net-zero Aviation Briefing Asia Pacific. [27/06/2022]
6. Hatch, P. Qantas to buy low-carbon jet fuel in US, but no options at home. Sydney Morning Herald [15/03/22].
7. The Hon. Catherine King MP. Address to the Sustainable Aviation Fuels Breakfast. [14/07/2022]
8. World Economic Forum. 2021. Guidelines for a Sustainable Aviation Fuel Blending Mandate in Europe.
9. Ibid.