

An Australian Roadmap for Sustainable Flying: REACHING NET ZERO BY 2050




Australians love to fly – but we also need to fly; our connectivity, our regions, and so much of our national economy depends on it.

As Australia’s aviation sector has grown, so too have its emissions.


While aviation is recognised as one of the most difficult sectors to decarbonise, Australia’s airlines are committed to reaching net zero emissions by 2050.

Supportive government policy will be critical in enabling the aviation industry to transition to low and zero-emissions technologies.


The Roadmap¹ explores the path towards decarbonising flying in Australia, through the potential emissions reductions delivered by four key measures:




Efficiency gains from improvements in engine and aircraft technology, including through fleet modernisation, and the potential use of hydrogen and electric planes



Efficiencies through the optimisation of flight paths and air traffic management operations

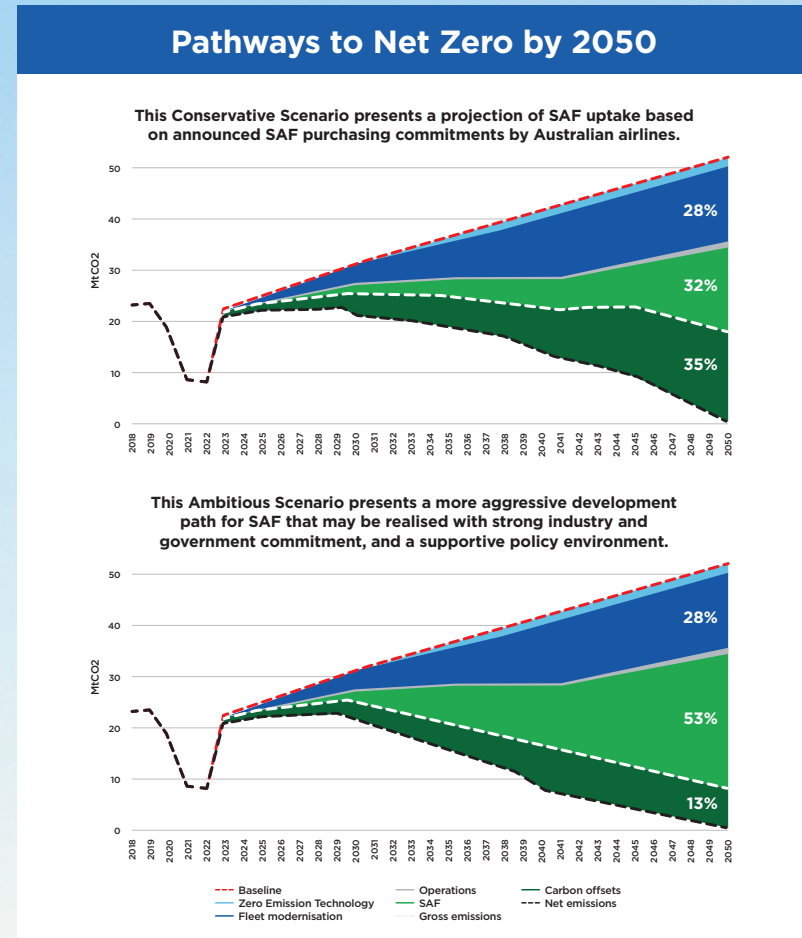


Deployment of Sustainable Aviation Fuels (SAF)




Economic or market-based measures (i.e. carbon offsetting)

These may not be the only pathways to reaching net zero emissions; however, it is clear that the extent to which airlines are able to use SAF – the biggest contributor to reducing emissions – will be directly influenced by Government policies and investment.



What is the potential of an Australian SAF industry?

With industry and Government working together to create a supportive investment and policy environment, an Australian SAF industry could:

 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

1. A4ANZ. Australian Roadmap for Sustainable Flying - Reaching Net Zero by 2050. Available at: www.a4anz.com 2. Frontier Economics analysis on SAF – Prepared for A4ANZ. 3. ARENA. 2021. Australia's Bioenergy Roadmap Report. 4. Frontier Economics. Op cit (2).

Airlines in Australia are committed to working with government and industry to decarbonise aviation by:

Developing a domestic Sustainable Aviation Fuels (SAF) Industry

The primary facilitator of the aviation industry reaching net zero by 2050 – a local SAF industry also has significant benefits for the economy more broadly.

The industry commits to working at pace with governments and other stakeholders to create a robust, sustainable, and viable Australian SAF industry.

Airlines have already committed to:

- ✓ developing voluntary passenger and corporate/government buying programs to facilitate the purchasing of SAF, and
- ✓ investing in the development and uptake of SAF.



Mitigation through high-quality offsets:

While airlines are aiming to reduce gross emissions through new technology, operational efficiencies, and the utilisation of SAF, high-quality carbon offsetting will remain a key lever in achieving the industry's commitment to reach net zero emissions by 2050.

The industry commits to continuing to invest in robust, high-quality, and high-integrity offsetting projects – both domestically, and internationally – with tangible community and biodiversity benefits.



Supportive Government Policy

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. No individual policy will drive SAF growth on its own.

To accelerate the decarbonisation of Australia's aviation sector, a nationally consistent suite of economic and regulatory policy measures will;

- ✓ unlock industry investment,
- ✓ stimulate supply and demand,
- ✓ bridge the price differential, and
- ✓ enable adequate and sustainable feedstocks are required to develop and sustain a strong and viable SAF industry in Australia.



Operational Improvements

Airlines will continue to implement the latest innovations and improvements in flight planning and air traffic management, and will continue to pursue continuous procedural improvements to reduce emissions.

Government agencies should continue to work collaboratively with industry to optimise the flow of air traffic and ensure that Australia's airspace remains safe, secure, and efficient.



Investment in Fleet Modernisation and Implementation of New Technology

Australian airlines will continue to implement new and efficient technologies through investing in fleet modernisation.

Zero-emission aircraft are unlikely to have significant impact on emissions in the Australian market before 2050, however, airlines commit to working with industry and Government to:

- ✓ introduce novel technologies, and ensure that the infrastructure required for these aircraft are fit-for-purpose, and
- ✓ design and implement the necessary supporting policies, infrastructure, and investment required for new aviation technologies to be deployed in the Australian aviation sector.



Flying with net zero emissions by 2050.