



AVIATION WHITE PAPER

TOWARDS 2050



Maximising aviation's contribution to net zero

The Aviation White Paper sets out long-term policies and actions to guide the next generation of growth and innovation across Australian aviation.

We are committed to reducing greenhouse gas emissions to 43% below 2005 levels by 2030 and achieving net zero emissions by 2050. Reducing emissions in Australia's transport sector will require concerted action across government and industry to secure long lasting benefits and the aviation sector has a role to play. With aviation demand expected to grow, emissions from this sector will continue to rise without further emissions reduction policies and efforts.

There are opportunities for emissions reduction in the aviation sector to reach net zero carbon emissions by 2050, including:

- using renewable hydrogen or electric powered aircraft on shorter routes
- adopting sustainable aviation fuel (SAF) to replace traditional jet fuel
- new and more fuel-efficient aircraft
- using airport infrastructure and renewable energy supply to recharge hydrogen or electric powered aircraft and ground vehicles
- increasing electrified ground operations at airports.

An ambitious approach to deliver emissions reduction

We are investing in the domestic production of SAF and other low carbon liquid fuels (LCLF) through our plan for A Future Made in Australia. These fuels will make a significant contribution to decarbonise aviation and other hard to electrify sectors. They will also bring other benefits such as employment, regional development and domestic fuel security.

We are also putting in place measures to establish a domestic LCLF market, including:

- certification arrangements for SAF production
- expanding research and development into emerging LCLF production pathways
- undertaking consideration of a mandate or other measures to encourage LCLF demand
- identifying production incentive options to grow an Australian LCLF production industry
- considering arrangements to increase flexibility in the way SAF is accounted for under emissions inventories

In addition to these measures, we are supporting emerging low and zero emission aviation technologies through grants to encourage research and development. We will continue to work with industry to implement policy and regulatory responses to support the commercial use of these technologies.

These measures complement existing Australian Government initiatives, including the [Safeguard Mechanism](#), the [\\$15 billion National Reconstruction Fund](#), funding available through the [Clean Energy Financing Corporation](#), and developing the [Transport and Infrastructure Net Zero Roadmap](#), the Australian Government's sectoral plan to deliver emissions in the transport sector.

The [Australian Jet Zero Council](#) will continue to coordinate across the aviation sector to provide advice to government on issues related to the aviation industry's transition to net zero.



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Actions from now until 2050

Committing to SAF production and enabling an Australian SAF market through:

- ✓ **Developing a certification scheme for LCLF.** We will extend the Guarantee of Origin scheme to LCLF to provide a robust, internationally aligned framework for tracking and verifying the emissions intensity and production methods of these fuels. This will provide assurance to fuel producers and consumers of the emissions and sustainability credentials of SAF and renewable diesel.
- ✓ **Identifying options for supply and demand-side measures to support a Future Made in Australia LCLF industry.** We have consulted on the optimal policy mix on the design of production incentives and demand-side options and the interaction of these measures. This will ensure Australia has appropriate policy settings to encourage the growth of the LCLF industry in a way that delivers compelling public value while minimising price impacts and promoting competition.
- ✓ **Undertaking further assessment before deciding on a SAF mandate.** We are undertaking an impact analysis process to inform a decision on a SAF or LCLF mandate. The impact analysis will seek feedback on potential impacts of a mandate, such as changes in LCLF demand, ticket price impacts, emissions reductions, aviation competition and specific impacts on regional operations and consumers. The impact analysis will also consider options of creating a target rather than a mandate.
- ✓ **Supporting nascent net zero production technologies.** We will invest \$1.7 billion over the next decade in the Future Made in Australia Innovation Fund, to support the Australian Renewable Energy Agency to commercialise net zero innovations including low carbon liquid fuels.
- ✓ **Considering amendments to emissions accounting arrangements.** The Department of Climate Change, Energy, the Environment and Water is considering new arrangements to provide more flexibility to account for SAF use in emissions inventories.



Supporting development of alternative low emissions technologies through:

- ✓ **Research and development of new low emissions technologies such as electric and hydrogen aircraft through grant programs.** Our **Emerging Aviation Technology Partnership Program** supports research into and development of low or zero emissions technologies with potential applications in conventional aviation. This includes trials of low or zero emissions aircraft (and supporting infrastructure), particularly those that use aviation propulsions other than jet fuel, such as batteries and hydrogen.
- ✓ **Establishing the National Reconstruction Fund Corporation (NRFC) to provide finance for projects that diversify and transform Australia's industry and economy, including for renewables, low emission technologies, and transport.** The NRFC will provide a range of finance options including debt and equity. The NRFC is an independent financier that operates commercially to deliver a positive rate of return. It is governed by a board which will make independent investment decisions guided by an investment mandate.

Encouraging the broader aviation industry to decarbonise through:

- ✓ **Developing advice on measures airports can take to decarbonise through the Australian Jet Zero Council.** The council's work will identify better practices, showcase and promote those practices to encourage uptake across the industry.
- ✓ **Amending the Airports Regulations 2024 to require airport master plans to include information on how long-term planning will address decarbonisation.** The new rules will allow the Minister for Infrastructure, Transport, Regional Development and Local Government to consider the suitability of the airport's sustainability and decarbonisation initiatives when making decisions about master plans and major development plans of leased federal airports.

- ✓ **We will expand the Regional Airports Program to enable funding for infrastructure programs that support aviation's net zero transition.** We will provide an additional \$40 million over the next 3 years to support activities such as the installation or upgrade of infrastructure to enable deployment of new low and zero emission aviation.

Working with international partners to support decarbonisation of international aviation through:

- ✓ **Continued engagement with the International Civil Aviation Organization (ICAO) to support decarbonisation of aviation.** Australia strongly supports ICAO's goal of carbon neutral growth for the international aviation industry (from a 2020 emissions baseline). At ICAO's Third Conference on Aviation Alternative Fuels CAAF/3, held in November 2023, Australia, along with the other member states, agreed a new Global Framework to facilitate the scaling up of SAF, lower carbon aviation fuels and other cleaner energies. This included agreeing to reduce CO₂ emissions in international aviation by 5% by 2030.
- ✓ **Supporting the Carbon Offsetting and Reduction Scheme for International Aviation (CORSA).** Australia has been supporting CORSIA since its commencement in 2019 as the market-based mechanism to address emissions. Australian international airlines have backed this and have been monitoring and reporting emissions under CORSIA since its inception.
- ✓ **Facilitating SAF uptake in the Asia Pacific region with our international partners.** In November 2023, Australia joined its Asia-Pacific Economic Cooperation (APEC) partners in committing to spur the transition to and investment in low and zero emissions transportation in the Asia-Pacific region, including pursuing efforts to accelerate the transition towards SAF.
- ✓ **Committing to the Australia-United States Climate, Critical Minerals, and Clean Energy Transformation Compact.** Under the Compact, Australia and the United States have committed to the sustainable development of high integrity SAF production to support emissions reductions in the aviation sector and intend to establish information-sharing exchanges on economy-wide emission accounting schemes for products like SAF and hydrogen.

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