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Department of Infrastructure, Transport, Regional Development, Communications and the Arts
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Via email: lclfconsultation@infrastructure.gov.au

Consultation: A Future Made in Australia: Unlocking Australia's low carbon liquid fuel opportunity

Thank you for the opportunity to provide comments on the development of Australia's low carbon liquid fuel (LCLF) industry. Virgin Australia has committed to targeting net zero emissions from our operations by 2050, in line with the ambition set by the global aviation industry in 2021 and welcome the opportunity to engage with the Australian Government as it considers aviation decarbonisation policies.

We acknowledge that climate change will have an effect on our operations, and we continue to build our capacity to identify, assess, and manage the risks and opportunities it presents to our business. Our priority is to provide a safe, sustainable, and reliable air transport network – at an affordable price.

Sustainable Aviation Fuel (SAF) is a key lever for aviation decarbonisation. It does, however, remain economically challenged with current global prices between two and five times higher than conventional jet fuel. With aviation fuel typically representing up to 30% of an airline's cost base, even small increases in fuel costs can have substantial commercial - and air fare - impacts.

Virgin Australia supports an incentives-based approach to environmental management as it provides greatest flexibility and uptake. Accordingly, our key overarching principles on this issue are:

- Any mandate or legislated targets need to be accompanied by a suite of other incentives and measures to drive an economically viable choice.
- SAF represents the greatest opportunity for aviation decarbonisation on long-haul flights given that this is where emissions are highest. Consideration should be given to a focus on international routes in the first instance.
- The National Greenhouse and Energy Reporting (NGER) Act should be expanded to include SAF procured and consumed under a robust national 'book and claim' system (with international reach). 'Book and claim' is the most efficient and cost-effective way for airlines to access SAF, especially given the significant cost differential between SAF and conventional jet fuel.

More information is outlined in our position paper attached. [REDACTED]

Thank you once again for the opportunity to contribute to this consultation and we look forward to your feedback.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Fiona Walmsley".

Fiona Walmsley
General Manager, Sustainability



In its response to the Government's Aviation Green Paper, Virgin Australia outlined a number of key messages regarding decarbonisation and SAF. In particular:

- Prioritise policy development and initiatives, like SAF accounting (book and claim), to allow airlines and customers to procure SAF without geographical constraints.
- Careful consideration is needed to ensure any policy measures – including any potential SAF mandate – preserve a level playing field for all domestic airlines.
- Appropriate levels of government funding opportunities to support emissions reduction in the production, uptake, and deployment of SAF in Australia.
- The Government and the aviation/SAF industry should view aviation and decarbonisation as a global concern that requires global solutions, alongside domestic efforts.
- There must be globally available standards to address concerns over the quality and sustainability of SAF produced from different feedstocks through approved technology pathways.

SAF accounting – a national 'book and claim' system

The National Greenhouse and Energy Reporting Act should be expanded to include SAF procured and consumed under a robust national 'book and claim' system. Under this chain-of-custody approach, the physical delivery, and environmental attributes of SAF are de-coupled. The key benefits of this approach are:

- Reducing unnecessary logistics costs and unfavourable environmental outcomes from having to move fuel from where it is produced to where a customer requires it (instead, delivering SAF into the nearest aviation fuel supply chain).
- Airline operators can procure the environmental attributes of SAF regardless of whether they operate to an airport where SAF is either currently available or likely to be available in the future.
- SAF producers are provided with access to a larger customer base to sell to (helping to aggregate demand and production); and airlines have a larger supplier base to procure from. This facilitates competition, resulting in optimal outcomes for both the supplier and the airline.

As a natural evolution to a national 'book and claim' framework, Virgin Australia strongly encourages the Government to consider extra-jurisdictional book and claim capabilities whereby the environmental benefits of SAF produced and consumed in offshore countries can be traded and used by Australian airlines under a carbon-crediting framework. This will ultimately result in the lowest cost outcomes for Australian consumers and, through existing bilateral agreements, provide significant support to future Australian SAF production. The ability for Australian SAF producers to sell the environmental benefits of SAF into a global market will significantly incentivise production, unlocking additional onshore economic opportunity.

Focus on where the biggest impact can be made

SAF represents the greatest opportunity for aviation decarbonisation on long-haul flights given their relatively high emissions, and the low likelihood of other technologies (such as electrification and hydrogen) being available in the near to medium term.

If a demand-side signal (mandate) is being considered, Virgin Australia suggests consideration be given to a focus on international routes. There are several advantages for this position, including:

- Simple alignment to CORSIA, making the process easier especially since international airlines are already familiar with CORSIA requirements.
- There are a greater number of international airlines to spread the cost over, and with a greater proportion of premium cabins, international travellers are more likely to bear the additional costs.
- The additional cost of SAF would likely make up a smaller portion of the ticket price.



- Creates green corridors between countries (such as Singapore and Japan as they introduce similar policies), supporting carbon-conscious travel.
- Acknowledges that international emissions are growing faster than domestic emissions.
- Provides for gradual ramping-up of domestic SAF supply capability without potentially constraining the domestic market.
- Enables opportunity for government to reflect on international experiences and adjust incentives or mandates to protect the domestic market from price shocks in the event that a domestic SAF supply is unsustainable.

Customers are cost sensitive

According to the June 2024 Ipsos Issues Monitor¹, 'cost of living' remains the issue of greatest concern to Australians. With travel, particularly in regional communities, seen as a necessity rather than a luxury, the costs of flights should be seen as a cost-of-living measure. Virgin Australia is extremely conscious of the economics of a value carrier airline passing on the costs of SAF requirements to the public until the price of SAF is more economically viable.

Value and low-cost carriers would be more heavily impacted by SAF mandates compared to full-service carriers, as fuel costs make up a larger portion of their operating expenses. Increases in fuel prices would likely result in airlines having to raise airfares, with value carriers being less effective at doing so due to the price sensitivity of their customer base. This has the potential to reduce or limit competition in the industry.

Policy measures must be considered holistically to preserve competition

A system that is well thought out and builds on the experiences in the international sector is more likely to be sustainable in the long-term. Supply and demand-side policy mechanisms cannot, and should not, be considered in isolation. Rather these need to complement each other in the design and delivery of a broader national strategic objective. Careful consideration is needed to avoid unintended consequences, including but not limited to, economic demand destruction, LCLF supply destruction, picking technology winners, de-optimised decarbonisation outcomes and increased cost of living for Australians.

The Australian Government should view aviation decarbonisation as a global concern that requires global solutions, alongside domestic efforts. It is thus important to reflect on the experiences globally of SAF mandates and their early challenges. Data collected by Virgin Australia indicates that SAF prices in mandated markets are higher than those in non-mandated markets². Furthermore, in instances where a mandate includes a penalty for non-compliance, customers may end up paying more without receiving corresponding environmental benefits as obligated parties are unable to obtain SAF below the non-compliance penalty cost. IATA in its submissions has highlighted some of the challenges experienced internationally, including an insufficient supply of SAF to meet first stage mandate requirements, which has the potential to lead to the watering-down of policy and create uncertainty for the industry.

Unlocking economic opportunities

LCLF's (including SAF) represent a significant economic opportunity for Australia. In Bioenergy Australia's 2021 Roadmap³, investment in LCLF's represents an opportunity to unlock more than A\$10 billion of GDP including the creation of over 26,000 jobs. Australia is uniquely positioned to become a global producer of LCLF's as identified in the Boeing and CSIRO Sustainable Aviation Fuel Roadmap given its abundance of feedstock potential and world class agricultural processes.

Domestic production of LCLF's also represents a significant opportunity to enhance Australia's liquid fuel security. Currently, Australia is reliant on importing >90% of its refined liquid fuel requirement⁴. This

¹ Ipsos Issues Monitor, June 2024 results released on 15 July 2024, accessed: <https://www.ipsos.com/en-au/issuesmonitor>

² Impact on the Australian Macro and Micro Economies of SAF Usage Mandates; Dr Tony Webber; October 2023

³ Bioenergy Australia's 2021 Roadmap: <https://arena.gov.au/assets/2021/11/australia-bioenergy-roadmap-report.pdf>



requirement has increased from 50% in 2018 following the closure of two refineries during the COVID-19 pandemic leaving Australia with just two functioning refineries. The recent Defence Strategic Review identified access to liquid fuels as a strategic risk. Investment by the Federal Government (supported by state governments) in LCLF's could provide Australia with a natural hedge against disrupted supply chains using locally produced LCLF from feedstock grown by Australian producers.

Despite these opportunities, global evidence suggests that without strong support from policy makers, uptake of LCLF's including SAF will continue to be constrained due to the significant price difference. Therefore, any actions taken by the Australian Government to increase efficiency as well as close the price gap are welcomed.

Government procurement

Consideration should be given to the government procuring a volume of LCLF to support its broader decarbonisation objectives as well as enhancing access to liquid fuels for the Australian Defence Force. Pursuing a strategy of securing a sovereign supply of LCLF would send a strong demand signal to producers, feedstock providers and other industry participants that would be far more powerful than the market could achieve on its own, even with a supportive policy framework. This recognises that policy risk remains a key challenge for LCLF producers and users globally, even in jurisdictions where supportive policy has existed for some time. Embedding the acquisition of LCLFs into a government procurement process removes this policy risk. Further, the Australian Government will likely be able to enter into longer-term agreements with LCLF producers than market participants could, which reduces counter-party risk and potentially translates into lower SAF prices.

Conclusion

Both growth and scaling up of the local LCLF industry need to be accelerated, but not at the expense of good long-term, system-wide, planning and mitigation of impacts on the environment, food production, communities, and tourism. Adverse impacts and poor planning could hamper the development of the longer-term sustainable SAF industry, resilient supply chains and social licence. The potential competition for resources and funding highlights the need for planning and selection of the SAF pathways that may alleviate or avoid this competition over time.

The scale up of SAF will be critical to ensuring that aviation is able to meet its decarbonisation objectives. However, care must be taken to introduce policy mechanisms that do not place aviation at a distinct disadvantage relative to other industries or challenge the long-term availability of affordable aviation services for the Australian community. While the Safeguard Mechanism sets out the decarbonisation trajectory required, the sector is likely to need to combine several measures to achieve it – including energy efficiency improvements, the use of high-integrity carbon offsets and SAF. Appropriate action by government will help ensure that SAF makes up a larger portion of the trajectory than the other levers.

