

A4E'S VISION FOR GLOBAL SUSTAINABLE AVIATION FUEL (SAF) DEPLOYMENT AND MID-TERM TARGET

Summary

Europe's airlines have committed to decarbonising air transport and accelerating their efforts to make Europe the world's first carbon-neutral continent by 2050. The reduction of CO₂ emissions in absolute terms, and through CO₂ mitigation will significantly contribute to achieving the ambitions of the EU Green Deal and the ICAO Long Term Aspirational Goals (LTAG). Accelerating the take-up of Sustainable Aviation Fuels (SAF) over the next decade is key to enabling the transition towards a carbon-neutral economy and meeting the sector's climate objectives.

The European aviation industry was the first in the world to commit to the realisation of a net-zero goal for all departing flights by 2050 through the "**Destination 2050 – A route to net zero European aviation**" roadmap¹. This will be achieved through a combination of four key pillars including improvements in aircraft and engine technologies, the use of SAF, economic measures and improvements to air traffic management (ATM) and aircraft operations in Europe.

Some regions of the world, like Europe, are expected to decarbonise faster than others. The search for global agreements should not limit, delay or hinder action on all flights in and from Europe today. However, global decarbonisation efforts are urgently needed in parallel to achieve the sector's global climate goals. Given the international nature of aviation, a robust global framework should be established and implemented to facilitate worldwide progress. It should raise global ambitions as close as possible to those, like the European framework, that are designed to reach the targets of the Paris Agreement such

¹ Destination 2050 – A route to net zero European aviation, A4E, ACI Europe, ASD, ERA, CANSO, February 2021.

Launched in 2016, Airlines for Europe (A4E) is Europe's largest airline association, based in Brussels. The organisation advocates on behalf of its members to help shape EU aviation policy to the benefit of consumers, ensuring a continued safe and competitive air transport market. With more than 720 million passengers carried each year, A4E members account for more than 70 per cent of the continent's journeys, operating more than 3,000 aircraft and generating more than EUR 130 billion in annual turnover. Members with air cargo and mail activities transport more than 5 million tons of goods each year to more than 360 destinations either by freighters or passenger aircraft. Current members include Aegean, airBaltic, Air France-KLM Group, Cargolux, easyJet, Finnair, Icelandair, International Airlines Group (IAG), Jet2.com, Lufthansa Group, Norwegian, Ryanair Holdings, Smartwings, TAP Air Portugal, TUI and Volotea.

as the European Destination 2050 Roadmap. At the same time, it should preserve a level playing field to protect Europe's international competitiveness, without disrupting the integrity of the EU internal market.

The upcoming ICAO Conference on Aviation Alternative Fuels (CAAF/3) in November 2023 represents a unique opportunity to unify efforts around ambitious and credible mid-term objectives. This is important in the context of the LTAG and Net Zero 2050 implementation roadmaps. Achieving an ambitious agreement on goals among states, coupled with a 'toolbox' of measures, would send a strong signal to the market, emphasising the pivotal role of SAFs. Such a consensus would foster market certainty for financiers and fuel producers, stimulating SAF production, increasing SAF volumes and eventually driving down their price for the benefit of consumers.

ICAO's role in providing certainty and confidence in the SAF market

The CAAF/3 meeting positions ICAO to demonstrate leadership in facilitating significant increases in SAF production and availability worldwide. Maximising the volumes of SAF available to airlines is key to the rapid decarbonisation of aviation.

More than 40 Airlines worldwide, consuming over 50% of the jet fuel used in 2019, have already initiated actions, pledging to use 10% or more SAF in their fuel mix by 2030. They are doing this either individually or through coalitions or collective initiatives. A total of 50 off-takers (including 37 airlines and fuels brokers/distributors) have accounted for a cumulative volume over 44 Mtons of SAF offtakes since 2016. As per the latest industry forecast, the SAF production planned for **2030 is close to 24 Mtons.**

ICAO has projected² potential global volumes of SAF ranging from 44 to 70 Mtons by 2030 under a medium traffic demand scenario and aligning with the LTAG goal of achieving net zero carbon emissions by 2050

² ICAO LTAG report (<https://www.icao.int/environmental-protection/LTAG/Pages/LTAG-data-spreadsheet.aspx>) – Data for F2 and F3 scenario.

According to this analysis, the corresponding CO₂ emission reductions resulting from the uptake of SAF and Lower Carbon Aviation Fuel (LCAF), could range from **10% to 17%** in 2030.

Recommendations

Targets

The international race for SAF leadership has started and EU investors and industrial partners are waiting for a strong policy signal from legislators to unleash their investments.

Establishing a quantified and collective ICAO vision, such as a 4-5% CO₂ emission reduction from the use of sustainable aviation fuels by 2030, consistent with the ICAO CAEP projections, anticipated production volumes and the effort level required for LTAG, would represent an **ambitious yet realistic goal**. Additionally, a **separate LCAF emission reduction of 1% in 2030** should be considered.

Policies

Securing **global political support for a net-zero future in aviation is paramount**. Every state should implement policies encouraging SAF development within their territory, thereby contributing to the global objective. ICAO can also facilitate the creation of fair, non-distortive policies to foster SAF uplift, benefitting all operators in a non-discriminatory manner.

ICAO will guide Member States to implement the right policies and take the relevant actions to ensure SAF will be available to the aviation sector while harmonising SAF production and use, allowing consistent results from diverse stakeholders.

Definitions

The discussion on objectives should include the role of **renewable fuels of non-biological origin (RFNBOs)**, leveraging emerging Power-to-Liquid technologies and longer-term synergies with the increasing production of green hydrogen.

Feedstock Eligibility and Scarcity

For SAFs to be deemed legitimate, they must be truly sustainable and adhere to **stringent sustainability criteria**. It is imperative that SAF **production does not compromise food supplies for humans and animals or damage the environment** through, for example, incentivising deforestation.

ICAO should contribute to the development of a dynamic, harmonised approach towards establishing feedstock sustainability criteria, along with fuel approval and equipment certification schemes that adhere to stringent sustainability criteria. It is essential to anticipate maximum global harmonisation of rules and regulations.

International accounting framework

The development of comprehensive and harmonised guidance for a **global accounting framework** is essential. Such a **simplification of chain of custody** would enable airlines pursuing greater CO₂ emission reductions to purchase larger quantities of SAF and distribute it optimally across their fleet, whilst at the same time not distorting the European aviation single market due to divergences in GHG schemes or sustainability standards. This mechanism would enhance the competitiveness of the SAF market, leading to better and more affordable SAF options.