



ASSEMBLY — 42ND SESSION

EXECUTIVE COMMITTEE

Agenda Item 16: Environmental Protection – International Aviation and Climate Change

REGIONAL UNITY IN THE FACE OF A GLOBAL CHALLENGE: LACAC’S ROLE IN THE PROMOTION OF SAF IN CONTEXTS OF HIGH ECONOMIC VULNERABILITY

(Presented by Colombia and supported by 17 LACAC Member States²)

EXECUTIVE SUMMARY

Sustainable aviation fuels (SAF) are key to reducing aviation’s carbon footprint and achieving net-zero emissions by 2050. LACAC promotes decarbonization and SAF deployment in Latin America through such initiatives as the Alliance for Sustainable Aviation (ASA), that fosters funding and cooperation. However, the transition to SAF faces financial challenges, particularly for countries with fragile economies that require global financial support, as well as multiple risks perceived by the sector and highlighted by the World Economic Forum.

To contribute to SAF adoption, this paper proposes the establishment of an information observatory and development of a “SAF Outlook”, as well as guidelines for flexible incentives and financial stabilization mechanisms. Despite economic challenges, air transport decarbonization will provide long-term benefits, such as sustainable energy, green jobs and improved environmental outcomes.

Action: The Assembly is invited to:

- (a) encourage civil aviation organizations and other regional bodies, in line with their mandates, to coordinate efforts and ensure fair competition and equal opportunities for all stakeholders within the framework established by ICAO;
- (b) request the Council that ICAO develop supplementary guidance documents on the application of flexible incentives and safeguards related to oil and feedstock prices, and appropriate stabilization instruments for States with financial constraints;
- (c) instruct the Council to explore the creation of an observatory and information repository, including roadmaps, public policies, and relevant data on global progress, as well as the development of an “ICAO SAF Outlook” to provide greater clarity on this aspect of decarbonization; and
- (d) request the Council that ICAO establish mechanisms to monitor the progress of the ACT-SAF (Assistance, Capacity-building and Training for Sustainable Aviation Fuels) programme to adapt its goals to the risks and opportunities identified in the SAF Outlook.

Strategic Goals:

This working paper relates to the Strategic Goals – *Aviation is Environmentally Sustainable and No Country Left Behind.*

¹ Spanish version provided by Colombia.

² Belize, Bolivia (Plurinational State of), Brazil, Chile, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru and Uruguay

<i>Financial implications:</i>	This working paper promotes the creation of a dedicated observatory for the development of a SAF Outlook. This involves the allocation of financial resources, which should be considered by the Council.
<i>References:</i>	World Economic Forum (2025) <i>Financing Sustainable Aviation Fuels: Case Studies and Implications for Investment</i> . https://www.weforum.org/publications/financing-sustainable-aviation-fuels-case-studies-and-implications-for-investment/ World Economic Forum (March 12, 2025). <i>Global Aviation Sustainability Outlook 2025</i> . https://www.weforum.org/publications/global-aviation-sustainability-outlook-2025/

1. INTRODUCTION

1.1 SAF is an environmentally friendly alternative to conventional fuel that reduces carbon footprint and dependence on fossil fuels. It is a safe and efficient substitute that can cut emissions by up to 80 per cent and it is crucial to achieving net-zero aviation emissions by 2050.

1.2 On 7 October 2022, the International Civil Aviation Organization (ICAO) adopted the long-term aspirational goal (LTAG) of achieving net-zero CO₂ emissions by 2050, assuming a leadership role in aligning international technical standards and strategies, thus facilitating their implementation across Member States.

1.3 In June 2022, ICAO launched the ACT-SAF (Assistance, Capacity-building, and Training for Sustainable Aviation Fuels) programme to provide technical assistance and training and to strengthen partnerships between States and industry to accelerate the production and deployment of sustainable aviation fuels. Under this collaborative approach, feasibility studies and public-private partnerships have been developed to build local capacity and regulatory policies and promote SAF use.

1.4 In February 2025, ICAO launched its Finvest Hub, a global platform connecting SAF and clean energy infrastructure projects with international investors and focusing on capital and scalability needs of developing countries.

1.5 In March 2025, the World Economic Forum published the *2025 Global Aviation Sustainability Outlook*, providing an overview of key risks and opportunities for sector decarbonization. The report analyzes future scenarios based on relevant trends that may hinder the progress of sustainable aviation.

1.6 The Latin American Civil Aviation Commission (LACAC) has conducted panel discussions on environmental issues, including SAF coordination and funding. The Alliance for Sustainable Aviation (ASA) was established in response to the need for investment and cooperation, providing a platform for collaboration among States and industry stakeholders. ASA aims to promote air transport decarbonization through funding, technology transfer and the use of clean energy, taking into account the risks and opportunities of SAF deployment in the sector.

1.7 As an active member of LACAC, Colombia has taken significant steps toward SAF implementation and adoption. In 2023, the government designated the Colombian Civil Aviation Authority (Aerocivil) as the lead agency for SAF development. Over 150 stakeholders, including public entities, fuel producers and distributors, feedstock suppliers, industry associations and airlines, joined the so-called “SAF ecosystem”, a collaborative and participatory platform.

1.8 In October 2024, Ecopetrol conducted a test at its Cartagena refinery employing new and used vegetable oils to assess the feasibility of continuous SAF production through co-processing with bleached palm oil partially sourced from used cooking oil (UCO). As a result, 32,000 barrels of co-processed fuel were produced and quality-tested to meet ASTM 1655 standards. This led Ecopetrol and LATAM Airlines Colombia to enter into a strategic partnership to promote aviation energy transition in the country, resulting in more than 700 flights using Jet-A1 co-processed with renewable feedstocks.

1.9 Global trends are exacerbating Volatility, Uncertainty, Complexity, and Ambiguity (VUCA), in a context where investment decisions, financial flows, trade, rising conflicts, trade barriers and tensions affect States' strategic planning for SAF and, consequently, investors' risk considerations, posing challenges to achieving ICAO goals. Understanding these risks and opportunities is therefore essential to assess the viability of the strategy, as it helps determine whether its implementation would be challenging or costly given the risk factors and provides context to all stakeholders.

1.10 Colombia has over 20 years of experience in the production of biofuels for land transport and has learned invaluable lessons applicable to SAF development, such as the critical importance of reducing uncertainty for investment in fuel and feedstocks production.

2. DISCUSSION

2.1 Decarbonization poses a significant economic challenge for States with limited financial resources, as it requires substantial investment in energy transition infrastructure, the implementation of appropriate policies, and the restructuring of the hydrocarbon and agricultural sectors to meet global targets amid resource scarcity and social constraints.

2.2 Air transport, as end-user of SAF, is highly susceptible to economic cycles, inflation, currency volatility, government policies, conflicts, pandemics, technology, insurance, and other factors affecting business viability and growth, which are key to investors.

2.3 Each Member State has its own GDP mix, representing the gross market value of goods and services produced in the country over a given period, with imports and exports as key components. Each State faces its own challenges in regard to SAF production or import that represent the cost to their populations of the energy transition. The larger a State's economic dependence on aviation, the more significant the resulting macroeconomic impact, which must therefore be carefully assessed.

2.4 States with fragile economies often lack the financial resources to invest in such projects without external support. In many cases, project preparation may take over four years, with investments ranging from USD 30 to 45 million even before the Final Investment Decision (FID) is secured, depending on project characteristics.³

2.5 If domestic SAF production is not feasible, States may fail to meet their national decarbonization targets, which would also impact the global goal. The extent of this risk depends on the energy transition costs faced by each country.

2.6 States with weak institutions may struggle to implement and monitor public policies or regulations, incurring costs or imbalances due to the establishment of incentives, quotas, carbon taxes, or grants to promote the transition that, to some extent, impact their GDP.

³ World Economic Forum (2025) *Financing Sustainable Aviation Fuels: Case Studies and Implications for Investment*. <https://www.weforum.org/publications/financing-sustainable-aviation-fuels-case-studies-and-implications-for-investment/>

2.7 In line with the World Economic Forum's recommendations, public funding can help de-risk investments through feasibility studies and public planning that provide reliable technical information for project development while signaling confidence to investors considering SAF projects, potentially including sovereign guarantees to improve those projects' credit profile.

2.8 This highlights the need for global financial support to defer these costs, with multilateral banks, climate investment funds, grants, or private investors helping to alleviate the burden on each State that relates to decarbonizing the sector. The interface between States and financial resources is crucial for States lacking financial might to self-fund their energy transformation in the current VUCA context.

2.9 SAF development faces major challenges, including limited feedstock availability, high production costs, complex global certification, low yields, market risk, oil price volatility, and logistical hurdles for scaling production while maintaining sustainable quality, and immature refining and transport infrastructure.

2.10 The World Economic Forum highlights the following as specific aviation risks: coordination of SAF policies across regions; longevity of incentives, which could create competition imbalances; transparency in CORSIA implementation, which requires environmental traceability; and SAF feedstock criteria (e.g., second crop feedstocks).

2.11 In light of global circumstances and the structural challenges of each State, a "SAF Outlook" will be useful to estimate scenarios and anticipate future events or trends, or conditions based on current data and expert analysis by ICAO, in collaboration with civil aviation organizations and other multilateral bodies. Such an outlook would contribute to informed decision-making, the standardization of the SAF supply system, the development of market tools to optimize SAF production capacity and promote investments.

2.12 Initiatives such as ACT-SAF and Finvest Hub are ideal to help de-risk investments, particularly in VUCA countries that require further analysis and deployment of a variety of investment risk containment tools.

2.13 In line with the 41st Assembly resolution whereby "... ICAO and its Member States are encouraged to work together to strive to achieve a collective long-term global aspirational goal for international aviation (LTAG) of net-zero carbon emissions by 2050, in support of the Paris Agreement's temperature goal...", LACAC Member States will continue to undertake a series of activities to consolidate a SAF industry in Latin America that can meet global decarbonization targets, in cooperation with ICAO and by promoting informed scenarios that contribute to better decision-making.

2.14 Despite risks and economic challenges, air transport decarbonization will deliver long-term benefits, contributing to energy independence, green job creation and public health improvements, which are essential contributions to mitigate climate change. Success can only be achieved through coordinated efforts that take into account the economic context of each State.

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