



WORKING PAPER

**THIRD CONFERENCE ON AVIATION AND ALTERNATIVE FUELS
(CAAF/3)**

Dubai, United Arab Emirates, 20 to 24 November 2023

Agenda Item 3: Assistance and capacity building for cleaner energy

**CENTRAL AMERICAN PERSPECTIVE OF SAF AND LCAF
FOR DEVELOPING COUNTRIES**

(Presented by Guatemala on behalf of the Central American States, members of the Central American Corporation for Air Navigation Services (COCESNA²))

SUMMARY

The Third Conference on Aviation and Alternative Fuels (CAAF/3) next November has the challenge to deliver a statement related to the deployment of SAF in support of the Aspirational Long-Term Goal (LTAG) of Net Zero Emissions by 2050 adopted at the 41st ICAO Assembly. The declaration will focus on establishing an ICAO global framework for the usage of cleaner aviation fuels, such as sustainable aviation fuels (SAF) and low-carbon aviation fuels (LCAF).

This declaration is consequential for developing States such as the Central American States, as its essential declaration components should include elements such as policy and planning, the regulatory framework, implementation assistance, and particularly regarding financing to increase production and improve the competitiveness of clean energy prices.

To date, sustainable aviation fuels considered the prominent means of CO₂ emissions reduction, considering their reduced production; effective coordination between States is necessary to ensure that this measure generates the results to maintain the intention to achieve the established objectives. Without distorting the market, especially weighing the differentiated potentials of each region.

Therefore, there is an urgent need to formulate a global vision that focuses on quantifying the application of cleaner energy use by 2030 and 2050. Seeking to achieve net zero CO₂ emissions by 2050, a commitment of the international aviation sector, in line with the Paris Agreement's goal of not exceeding a temperature increase of 1.5°C.

Action by the Conference is in paragraph 4.

¹ English and Spanish versions provided by COCESNA.

² Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua

1. INTRODUCTION

1.1 The international aviation sector has been characterized by a resolute dedication to efficiency, safety, and environmental protection in its operations and supply chain, as set out in the energy transformation or migration scenario embodied in the Long-Term Aspirational Goal (LTAG) of Net Zero Emissions by 2050 adopted at the 41st ICAO Assembly.

1.2 To achieve this objective, ICAO and other multilateral organizations involved in this subject must promote regional public policies that foster SAF and LCAF. This will facilitate the creation of investment plans aligned with the capacities of Country-States. As a result, renewable energies will have a production volume that allows them to be competitive with fossil fuels. Delivering bio-economies of scale focused on the transformation of surplus raw materials existing in Central American countries. Only in this way can the sector decarbonization be achieved at the lowest cost to society.

1.3 In this regard, and with its customary collaborative spirit, ICAO has held high-level meetings in preparation for the ICAO Conference on Alternative Aviation Fuels (CAAF/3). The conference will make decisions on policy directions and global objectives for the development and implementation of SAFs. The Pre-CAAF/3 calls held in July and September have highlighted the different levels of collaboration needed from developing countries to meet the environmental objectives set.

1.4 Based on the above, it is worth evoking the hypothesis raised in Document 66 derived from the 77th Annual General Assembly of the International Air Transport Association, in which the industry rightly states that the combination of measures necessary to achieve net zero emissions for aviation by 2050, which will evolve based on the most cost-effective technology available at any given time. On the current approach, IATA considers the following possibilities.

- **2025:** With appropriate government policy support, production of SAF could reach 7.9 billion liters (2% of total fuel consumption).
- **2030:** SAF production is 23 billion liters (5.2% of total fuel consumption). ANSPs have fully implemented ICAO's Aviation System Block Improvements and regional programmes, like the Single European Sky.
- **2035:** SAF production is 91 billion liters (17% of total fuel consumption). Electric and hydrogen aircraft are headed for the regional market (50 to 100 seats on flights of 30 to 90 minutes).
- **2040:** SAF production is 229 billion liters (39% of total fuel requirement). Hydrogen aircraft are fated for the short-haul market (100 to 150 seats, flights 45 to 120 minutes).
- **2045:** SAF production is 346 billion liters (54% of total fuel requirement).
- **2050:** SAF production reaches 449 billion liters (65% of total fuel requirement).

1.5 The energy transition can drive broad socioeconomic development, guided by comprehensive policies that foster the transformative decarbonization of societies. This global approach would align energy decarbonization with economic, environmental, and social goals.

2. ANALYSIS

2.1 From the Central American States, the collaborative work of the aviation regulatory body and the airline industry, in this case, ICAO and IATA, which have decidedly set challenging objectives in the application of sustainable, low-carbon and climate-safe measures with a view to stable long-term economic development, is weighed in its proper dimension, particularly with the impetus of SAF and LCAF.

2.2 The so-called Pre-CAAF/3 has highlighted the different levels of collaboration needed from developing countries, such as in this case, Central America, for the energy transition, which involves SAF and LCAF, which can promote broad socioeconomic development, guided by comprehensive policies that align the energy decarbonization of the international aviation sector, with economic, environmental, and social objectives within a framework of genuine Sustainable Development.

2.3 The seasonality scenarios proposed by IATA concerning the production of SAF and LCAF determine an exponential need to produce these fuels, for which it is necessary to promote mechanisms of access to technology, research, and legal certainty, particularly for countries such as Central America, in which there is a wide variety of raw materials, but with varying levels of difficulty that allow financing for its industrialization.

2.4 According to reports, about 90% of the supply of SAF and CAF projected for 2030 will come from Europe and North America. This is not solely due to the wide availability of raw materials, but rather because these regions have access to sources of funding for research and development of appropriate technologies.

2.5 The Central American States express their full support for IATA's position regarding CAF/3 regarding the need for a robust and comprehensive policy framework that allows a rapid expansion of the supply of SAF at competitive prices and thus access the benefits of less polluting energies, for which it is necessary:

- a) Governments push for **early and effective political support** to promote the production of SAF and enable markets to function.
- b) The adaptation of a **SAF accounting mechanism** based on CORSIA Standards and Recommended Practices (SARPs).
- c) Implementation of efforts **to expand SAF production by diversifying raw materials in all regions**.
- d) Strengthen ICAO's role in facilitating **knowledge sharing** for increased SAF production.

3. CONCLUSIONS

3.1 It is necessary to make a resolute promotion to the international community regarding the firm commitment, as well as the actions carried out by the global aviation sector, in terms of reduction, mitigation, and compensation of emissions resulting from its operations and service chain, as well as the scenario of energy transformation or migration embodied in the Aspirational Long-Term Goal (LTAG) of Net Zero Emissions for 2050 voluntarily accepted.

3.2 The Central American States that make up the Central American Corporation for Air Navigation Services, COCESNA, support any decisive action aimed at achieving the environmental objectives set at the 41st ICAO Assembly, as well as support IATA's position on CAF/3, considering that the ICAO declaration derived from this conference must have structural elements such as the following.

3.2.1 **A comprehensive regulatory framework:** This must be firm, but at the same time flexible, for its appropriation in the different States, based on the need for legal certainty as a basis to stimulate governments or subregions to carry out strategic plans that involve different stakeholders, particularly in the promotion of public-private partnerships.

3.2.2 **Raw materials:** It is necessary to expand the levels of research and access to technology through sources of financing. This will help identify potential in various regions and diversify various raw materials sources for a larger supply to meet the growing demand for SAF and LCAF in the aviation sector.

3.2.3 **Development of metrics:** The international aviation sector should have the capacity to develop its metrics, which include, among others, the costs associated with the research and development of technologies, such as SAF and LCAF, estimating the differentials of avoided pollution for the due correspondence in the emission reduction certificates, that make it possible to achieve the environmental objectives set.

3.2.4 **Access to financing:** It is imperative to facilitate funding for research, development, and acquisition of the necessary technology for the implementation of SAF and LCAF production plants in developing countries, particularly regions with a diversity of raw materials needed for this type of fuel, such as the Central American isthmus. Only in this way will it be possible to reverse the scenario projected for 2030 on the territorial origin of 90% of SAF and LCAF.

3.2.5 **Beyond regulation:** For the energy decarbonization of the international aviation sector, it is necessary for its highest regulatory body at a global level, as well as the States that make it up, to take a step beyond the regulatory and capacity-building part. To meet the Aspirational Long-Term Goal (LTAG) of Net Zero Emissions by 2050, TCB/ICAO must intervene and facilitate the management of various global funds related to the promotion of low-carbon programs and other bilateral and multilateral funds that financially leverage the efforts of States or subregions with potential for the development of SAF and LCAF.

4. ACTION BY THE CAAF/3

4.1 The CAAF/3 is invited to:

- a) encourage the participation of their States in the different regional commissions and working groups related to the promotion of SAF and LCAF to establish ownership strategies for the financing and application of these technologies individually or sub regionally;
- b) ponder the need for cooperation and collaboration among Regulatory Bodies, Industry, States, and other sectors to achieve the long-term aspirational goal (LTAG) to Net Zero emissions by 2050 in international aviation; and

- c) request the timely intervention of the TCB/ICAO for the establishment of mechanisms for the coordination of bilateral, multilateral, and south-south cooperation in technical and financial resources for the implementation of initiatives aimed at the research and development of SAF and LCAF in States with high potential to produce this type of fuel.

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