



WORKING PAPER

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

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Agenda Item 4: Financing cleaner energy

FINANCING CLEANER ENERGY

(Presented by the ICAO Secretariat)

SUMMARY

This paper presents information on the ICAO's work to facilitate access to financing to aviation cleaner energy, including through the dialogues with financial institutions, energy producers and States and their key findings, and relevant ICAO resources to support financing.

Action by the Conference is in paragraph 5.

1. INTRODUCTION

1.1 The 41st Session of the ICAO Assembly recognized that “means of implementation commensurate to the level of ambition, including financing, will promote the achievement of the LTAG. It requires substantial investments for States, according to their national circumstances, and that various possible modalities and/or funding mechanisms could be used by ICAO to facilitate financing and investment support for implementation of specific aviation CO₂ emissions reduction measures” (Resolution A41-21, paragraph 17 refers).

1.2 In this regard, ICAO has been working to facilitate, in particular for developing countries and States having particular needs, better access to public and private investment capacities, as well as funding from financial institutions, such as development banks. This effort is ongoing in the context of the LTAG implementation and under the ICAO Assistance, Capacity-building and Training for Sustainable Aviation Fuels (ACT-SAF) programme.

1.3 Access to financial resources is particularly crucial for the deployment of SAF and other cleaner energies for aviation, as the scaling-up of fuels in support of the LTAG would require investments of around USD 3,200 billion by 2050¹.

¹ According to ICAO LTAG report, available at <https://www.icao.int/environmental-protection/LTAG/Pages/LTAGreport.aspx>

2. DIALOGUES WITH FINANCING INSTITUTIONS AND STATES

2.1 ICAO activities to dialogue with financing institutions and energy producers

2.1.1 From September to November 2022 (even prior to the 41st Assembly), the ICAO Secretariat organized initial exchanges on financing, as online meetings, with public and private financing institutions in the following regions: EURNAT, ESAF and WACAF (12 September 2022); NACC and SAM (12 September 2022); APAC (13 September 2022); and MID (29 November 2022), where these meetings gathered the 8 public financial institutions², 9 private institutions³, and ClimateWorks Foundation.

2.1.2 On 28 March 2023, the ICAO Council held an informal meeting with high-level representatives from the following international financing institutions (IFIs): African Development Bank, Emirates Development Bank, European Bank for Reconstruction and Development, European Investment Bank, Inter-American Development Bank, and World Bank, with contributions from Air Transport Action Group (ATAG). On 15 June 2023, the ICAO Council held a high-level exchange of views with the following private banks and investment companies: BNP Paribas, Caisse de Dépôt et Placement du Québec, Bank of America, Breakthrough Energy, GenZero, Meridiam, Impact on Sustainable Aviation, with contributions from the ATAG. On 20 June 2023, the ICAO Council held another high-level exchange of views with the following energy producers: ARAMCO, ENI, ExxonMobil, Gevo, Indian Oil Corporation, Neste, Petrobras, Shell, and TotalEnergies.

2.1.3 The objectives of these informal Council meetings were to:

- a) highlight the importance on the deployment and scale up of SAF, LCAF and other cleaner energies for aviation, in view of reaching the LTAG of Net-Zero by 2050;
- b) discuss the importance of unlocking significant investments to support a massive scale-up of cleaner energies in aviation, commensurate with the LTAG objective;
- c) exchange on financing and partnership opportunities for banks and investors supporting aviation decarbonization; and
- d) explore the role of ICAO to support financing in view of reaching the LTAG.

2.1.4 During the 2023 ICAO Stocktaking in July 2023, a full day was dedicated to presentations and discussions on financing the achievement of the LTAG, where two discussion panels involved financing institutions, States and stakeholders active on financing SAF, LCAF and cleaner energies for aviation. The first panel⁴ provided insights into the most recent developments on the financing of SAF, including the investment in new SAF production facilities, estimates of SAF financing needs to scale up the industry, and activities to build strategic regional and global alliances between stakeholders and investors. The second panel⁵ provided insights into how means of implementation such as the adoption of strategic roadmaps, capacity building programmes and the funding of feasibility studies for SAF development could support to unlock financing.

² Brazil Development Bank (BNDES), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Emirates Development Bank (EDB), Arab Bank for Economic Development in Africa (BADEA), African Development Bank (AfDB), Asian Development Bank (ADB), World Bank, Green Climate Fund (GCF).

³ SmartEnergy, ING Group, Green Investment Group, First Abu Dhabi Bank (FAB), Arab Investment & Export Credit Guarantee Corporation (Dhman), Genzero, Deutsche Bank, Investor Group on Climate Change, Banque de Montreal (BMO).

⁴ ATAG, International Air Transport Association, Shell, Citibank (also representing the Net-Zero Banking Alliance), Intesa Sanpaolo (also representing the Renewable and Low Carbon Fuels Value Chain Industrial Alliance), Hamilton Clark, and the United Kingdom Department for Transport.

⁵ European Commission, ICF International, United Arab Emirates, C-SAF, World Economic Forum, United States and the ICAO Secretariat.

2.2 Key takeaways from ICAO's dialogues with financing institutions and energy producers

2.2.1 The following key points can be taken from the ICAO dialogues with financing institutions and energy producers:

- There is strong interest from financial institutions for the deployment of SAF, albeit, the level of understanding on the SAF potential is unequal among them and across regions. ICAO's engagement with them is useful to fill knowledge gaps, in particular on the technical feasibility to deploy SAF in the very short term;
- From the perspective of financing institutions and energy producers, while investments come with non-negligible risks (due to the volatility of feedstock and crude oil prices, high capital and/or operational expenditure, lack of policy/funding), SAF are nevertheless increasingly perceived as an option for profitable investment, with prospects of stable revenues on the long-term, pending the support of a predictable regulatory framework;
- Predictable, long-term and harmonized regulatory frameworks as well as public funding are perceived by financing institutions and energy producers as essential to contribute to de-risking investments in SAF. Investors feel more confident to fund SAF projects in the presence of a harmonized and clear policy framework;
- Robust sustainability requirements and sustainability certification methodologies are a key prerequisite for financing institutions and energy producers to make investment decisions;
- Several financing institutions are already involved in supporting SAF projects and/or manage financing instruments (such as grants, procurements, loans, guarantees, equity, bonds, public-private partnerships, tax incentives, others) under which SAF could be eligible for funding; and
- In some cases, there appears to be a disconnect between investors and SAF/aviation industry players, which can be addressed by bringing all stakeholders and financing institutions together under global or regional platforms to facilitate collaboration.

2.3 ICAO activities to dialogue with States on financing

2.3.1 In the context of the ACT-SAF programme (CAAF/3-WP/7 refers), ICAO Secretariat has conducted around 55 exploratory interviews with ACT-SAF partner States and organisations. In response to the survey on States' needs, 67% requested the assistance to identify and access financing solutions for SAF, LCAF and other cleaner energy solutions.

2.3.2 In April and May 2023, during each of five ICAO Environment Regional Seminars (CAAF/3-WP/2 refers), a half-day was dedicated to the topic of financing, and the ICAO Secretariat presented the Assembly request on financing, the investments need for SAF, LCAF and other cleaner energies, as estimated in the LTAG report, as well as basic information on financing a SAF project. States were also invited to share their experience (challenges and opportunities) in obtaining and/or providing public or private financing to aviation-related cleaner energy projects.

2.3.3 During the ICAO Stocktaking event in July 2023, a full day was dedicated to presentations and discussions on financing the achievement of the LTAG, where two roundtable discussions took place involving States and multilateral development banks (MDBs) on financing SAF, LCAF and cleaner

energies for aviation. The first roundtable⁶ exchanged views on the financing needs and challenges for fuel production infrastructure as well as aviation and fuel industries, options and the roles of States/MDBs to de-risk projects, key pre-requisites for positive assessment of MDBs to finance a project, and competing sectors for access to financing and blended finance. The second roundtable⁷ shared their insights on the ongoing work of ICAO as regards the preparation of the financing pillar of possible CAAF/3 outcomes.

2.4 Key takeaways from ICAO's dialogues with States on Financing

2.4.1 The following key points can be taken from the ICAO dialogues with States on financing:

- Successful financing policies (including tax incentives and blended finance) in the field of renewable energy (solar, wind) could be relevant to boost private investments in SAF and aviation cleaner energies, and to support market scale-up;
- States have a key role to play to shape financing programs of MDBs in view of de-risking capital investments for SAF projects with e.g. concessionary loans;
- Successful scale-up of the SAF industry cannot solely rely on obligations (e.g. mandates), but will also need to rely on financial incentives;
- While all world regions may not have the possibility to adopt large-scale financial or fiscal incentives, such schemes in certain States can benefit not only domestic markets, but can also unlock financing of SAF projects in other parts of the world;
- Clear, long-term and harmonized regulatory frameworks are a key pre-requisite for banks to invest in SAF projects, in particular the certainty on the sustainability of the feedstock and the associated life-cycle emission reductions; and
- Elevating the cross-sectoral issue of aviation decarbonization as part of a broader discussion on the energy transition in other intergovernmental fora and linking developing and developed markets can bring about more opportunities in financing.

3. RELEVANT ICAO RESOURCES ON FINANCING

3.1 Guidance document - Financing Aviation Emission Reductions

3.1.1 In 2017, a guidance document⁸ on “Financing aviation emission reductions” was produced within the framework of the joint ICAO-UNDP-GEF assistance project, *Transforming the Global Aviation Sector: Emissions Reductions from International Aviation*. The purpose of this document is to inform ICAO Member States on how to finance projects that can be deployed to reduce CO₂ emissions from international aviation activities. The report includes an initial overview of project financing, barriers to climate financing in developing States, the roles of the public and private sectors, types of financing instruments, and the types of organizations that are active in climate financing programmes. While focusing on renewable energy projects, the document supports an understanding of financing mechanisms that may apply to projects for SAF, LCAF and other aviation cleaner energy projects.

⁶ Chile, Kenya, Nigeria, European Bank for Reconstruction and Development, European Investment Bank and Inter-American Development Bank.

⁷ Brazil, France, India, Malaysia, United States and United Kingdom, as well as the ICAO Council's CEC Small Group.

⁸ [FinancingLowCarbonAirportGuidance_4 \(icao.int\)](https://www.icao.int/financing/FinancingLowCarbonAirportGuidance_4)

3.2 **Guidance document – State Action Plans**

3.2.1 ICAO has been developing and updating Doc 9988, *Guidance on the Development of States' Action Plans on CO2 Emissions Reduction Activities*, which aims to support Member States as they develop and implement their Action Plans (CAAF/3-WPs 3 and 7 refer). The voluntary preparation of States' action plans helps States to identify their concrete actions to deploy SAF, LCAF and cleaner energy, as well as the specific assistance needs to implement such measures, notably financing. In turn, it allows ICAO to understand and where possible support States' specific needs in terms of financing.

3.2.2 The guidance document is currently under revision, with the objective, among others, to provide more detailed information to Member States on the assessment of their financial needs, so that States will be able to communicate their financing needs to investors and hence attract the necessary funds to the deployment of SAF, LCAF and cleaner energy contained in the State Action Plans.

3.3 **ACT-SAF feasibility study template and guide**

3.3.1 In the context of the ACT-SAF programme, ICAO has developed a harmonized template for SAF feasibility studies (CAAF/3-WP/7 refers). This template, which was elaborated with the contribution of ACT-SAF partners from States and the industry, aims to provide for a common basis of information to be provided in SAF feasibility studies. With the consistency in terms of structure and content across SAF feasibility studies, financing institutions and investors will have easier access to information on financing needs and economic viability of SAF projects. This is expected to facilitate the decision making of financing institutions and hence the efficacy of feasibility studies to attract investments.

4. **FURTHER ICAO WORK**

4.1 Specifically for financing, the 41st Session of the ICAO Assembly requested “the Council to initiate specific measures or mechanisms so as to facilitate, in particular for developing countries and States having particular needs, better access to private investment capacities, as well as funding from financial institutions, such as development banks, for projects contributing to the decarbonization of international aviation, as well as encourage new and additional funding to this purpose” (A41-21, paragraph 18. a) refers).

4.2 The Assembly also requested “the Council to further consider the establishment of a climate finance initiative or funding mechanism under ICAO, while addressing the possible financial, institutional and legal challenges, and report to the 42nd Session of the ICAO Assembly” (A41-21, paragraph 18. b) refers). The Council continues its work to respond to the Assembly request.

4.3 The Secretariat has outlined a proposal for the ICAO “Finvest Hub” initiative to facilitate enhanced access to public and private investment capacities and funding from financial institutions, with a focus on developing countries and States with particular needs, for projects that contribute to the decarbonization of international aviation. Key activities of the Finvest Hub would include: establishing an exchange for projects contributing to the decarbonization of international aviation thus enabling investors to assess and identify suitable projects, facilitating the development of financial instruments and risk mitigation mechanisms, fostering public-private partnerships, providing technical assistance and capacity building on financing, as well as conducting outreach and advocacy (CAAF/3-IP/5 refers).

4.4 The project would be brought forward in three phases, from 1) planning and set-up; 2) operationalisation and implementation; through to 3) scaling up and continuous improvement. Work is underway to develop the detailed structure of the Finvest Hub. In addition to putting in place a small Secretariat team to act as the ICAO focal point for these activities, a suitable governance structure will be implemented to ensure coordination across the Secretariat and an appropriate forum is being considered in order to ensure that feedback and proposals from key external stakeholders may be obtained.

5. **ACTION BY THE CAAF/3**

5.1 The CAAF/3 is invited to:

- a) consider information in this paper regarding the ICAO's work to facilitate access to financing aviation cleaner energy, including through the dialogues with financial institutions and States and their key findings, and relevant ICAO resources to support financing;
- b) underscore the importance of ICAO's further work to respond to the request by Assembly Resolution A41-21 related to financing for projects that contribute to the decarbonization of international aviation; and
- c) use information in this paper, for consideration of CAAF/3 outcomes.

— END —