



ASSEMBLY — 42ND SESSION

EXECUTIVE COMMITTEE

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

EGYPT VIEWS ON THE LTAG - CHALLENGES AND OPPORTUNITIES TOWARDS IMPLEMENTATION

(Presented by Egypt)

EXECUTIVE SUMMARY

This Working Paper highlights some challenges in Egypt to start to scale the production capacity for produce and scale-up the use of Sustainable Aviation Fuel (SAF) towards the collective Long-term aspirational goal (LTAG), summarizing how Egypt is turning the challenges into opportunities towards LTAG successful implementation.

Action: The Assembly is invited to:

- a) note the information and challenges presented in this working paper, similar to most of developing States, which endeavour to the production and use of Lower Carbon Aviation Fuels (LCAF)/SAF;
- b) invite the Council with its relevant committees to continue its important and vital role in the coordination for monitoring and reporting of the LTAG implementation;
- c) invite the Council to ensure that the scale-up production and use of SAF, LCAF and renewable energy is not concentrated in some States and geographic regions, but for all States under the No Country Left Behind (NCLB) initiative to enable all States to accelerate the pace of the SAF, LCAF and cleaner energy production; through developing their national policies and mechanisms, and in accordance with their Special Circumstances and Respective Capabilities (SCRC);
- d) acknowledge that successful LTAG implementation requires differentiated pathways based on national circumstances, monitoring and reporting of the LTAG implementation by the International Civil Aviation Organization (ICAO) should also include monitoring of the correlated volume of international investments flow, while taking into considerations the ICAO's commitment to equity under the Special Circumstances and Respective Capabilities (SCRC) framework; and
- e) urge States and the industry to continue supporting the ICAO Assistance, Capacity-building and Training for SAF (ACT-SAF) Programme and to increase the regional workshops focusing on potential solutions that States can implement, including understanding likely costs and assistance on monitoring CO₂ emissions from international aviation towards LTAG implementations.

<i>Strategic Goals:</i>	This working paper relates to the Strategic Goal – <i>Aviation is Environmentally Sustainable</i> .
<i>Financial implications:</i>	The cost associated with this work is expected to be included in the current three-year budget plan.

<i>References:</i>	Doc 7300, <i>Convention on International Civil Aviation</i>; Doc 10184, <i>Assembly Resolutions in Force</i> (as of as of 7 October 2022); Doc 10178, <i>Report of the High-Level Meeting on the Feasibility of a Long-Term Aspirational Goal for International Aviation CO₂ Emissions Reductions (HLM-LTAG)</i>, Montréal, 19-22 July 2022; Doc 10201, <i>Report of the Third ICAO Conference on Aviation and Alternative Fuels (CAAF/3)</i>, Dubai, 20-24 November 2023; ICAO Report on the feasibility of a long-term aspirational goal (LTAG) for international civil aviation CO₂ emission reductions (LTAG Report); and ICAO publication of the “Evolution of Market-Based Measures and ICAO’s Journey to CORSIA”¹.
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1. INTRODUCTION

1.1 During the 41st Session of the International Civil Aviation Organization (ICAO) Assembly (A-41)² in 2022, Member States adopted a collective long-term global aspirational goal (LTAG) of net-zero carbon emissions by 2050, in addition to the previously-agreed carbon neutral growth from 2020 (CNG2020 goal). States and relevant organizations agreed to work through ICAO to strive to achieve a collective long-term global aspirational goal for international aviation CO₂ reduction of net zero by 2050 (LTAG), recognizing that each State’s Special Circumstances and Respective Capabilities (SCRC).

1.2 Following the adoption of LTAG, ICAO also adopted in 2023 a comprehensive ICAO Global Framework for Aviation Cleaner Energies³, which comprise a Vision to reduce CO₂ emissions in international aviation by 5 per cent by 2030 using sustainable aviation fuels (SAF), lower carbon aviation fuels (LCAF) and other aviation cleaner energies. The Framework recognized the need for comprehensive capacity-building, implementation support and financing activities to support developing countries and States with particular needs, in making broader progress on aviation decarbonization efforts.

1.3 The ICAO LTAG Report⁴ and its technical analysis showed that significant financial resources by 2050 are required for the aviation sector to achieve the LTAG through in-sector measures consisting of aircraft technology improvements, operational improvements and SAF/LCAF, renewable energy. The ICAO LTAG Report clearly shows that the most significant regional variations are expected in the production and uptake of fuels. While a limited number of scenarios were constructed by the LTAG Task Group (LTAG-TG) to capture increasing aspirations across technology, operations and fuels (In-Sector Measures), there are multiple paths that may result in similar levels of CO₂ emissions. The costs and investments associated with the 3 scenarios are largely driven by fuels (e.g. SAF) acknowledging that incremental costs of fuels (i.e. minimum selling price of SAF compared to conventional jet fuels) further motivates fuel (energy) efficiency improvements from aircraft technology and operations. This will also require some investments from governments and industry. In summary, the access to financial resources

¹ Evolution of Market-Based Measures and ICAO’s Journey to CORSIA: [https://www.icao.int/environmental-protection/CORSIA/Documents/Evolution%20of%20ICAO%20MBMs%20\(Levies\)%20and%20CORSIA_FINAL.pdf#search=Evolution%20of%20Market%2DBased%20Measures%20and%20ICAO%E2%80%99s%20Journey%20to%20CORSIA](https://www.icao.int/environmental-protection/CORSIA/Documents/Evolution%20of%20ICAO%20MBMs%20(Levies)%20and%20CORSIA_FINAL.pdf#search=Evolution%20of%20Market%2DBased%20Measures%20and%20ICAO%E2%80%99s%20Journey%20to%20CORSIA);

² ICAO Doc. 10184, *Assembly Resolutions in Force*, A41-21: “Consolidated statement of continuing ICAO policies and practices related to environmental protection — Climate change”

³ ICAO Doc. 10201, *Conference on Aviation and Alternative Fuels. Third Conference “Global Framework for Aviation Cleaner Energies”*

⁴ LTAG Report: <https://www.icao.int/environmental-protection/LTAG/Pages/LTAGreport.aspx>

is crucial for developing and deploying SAF and other cleaner aviation energies, as scaling up these fuels to support the LTAG will require an estimated USD 3.2 trillion in cumulative investments by 2050.

2. DISCUSSIONS “LTAG CHALLENGES AND OPPORTUNITIES TOWARDS IMPLEMENTATION”

2.1 The great challenge in Egypt and many developing States is to start to scale the production capacity for produce and scale-up the use of SAF. The need for green field fuel production plants requires many investments with great challenge and may be extended beyond the civil aviation sector such as investments from the government and fuel suppliers, costs and investments for Air Navigation System Providers (ANSPs) and costs and investments for airports “towards the implementation of operations measures.

2.2 Egypt hosted the 27th United Nations Climate Change Conference of the Parties (COP27) in 2022 under the presidency’s vision “to move from negotiations to implementation”. In order to harmonize our global efforts to meet our pledges and commitments, words must be turned into action. This event raised significant awareness on scale-up SAF production in Egypt’s strategy, such as to develop renewable/low carbon fuels and contribute to achieving sustainability and recycling various wastes, to achieve economic growth, as follows:

2.3 Egyptian Company for Solid Waste Recycling (ECARU), Qalaa Holdings, and Axens” French Company”, on July 17, 2023, signed a cooperation protocol, to carry out technical and economic studies for a project of second-generation biofuel (advanced bioethanol) and (SAF) production. The project will be carried out in two phases, the first of which will be the production of advanced bioethanol while the second will be the production of (SAF). The project’s studies, in line with Egypt’s strategy to maximize the use of various waste types and contribute to sustainability and waste recycling, thereby fostering economics.

2.4 The United States conglomerate Honeywell is considering building a SAF production facility in Alexandria⁵ under a public-private partnership (PPP) with state-run Egyptian Petrochemicals Holding Company and local private companies, according to the Ministry of Petroleum statement on October 2023, it’s expected to produce 120k tonnes of the fuel per year using edible oils as a feedstock. Feasibility studies are being carried out for the proposed facility.

2.5 Concluding the high importance to enable all States to accelerate the pace of the SAF/LCAF; through developing their national policies and mechanisms, and in accordance with their national Special Circumstances and Respective Capabilities (SCRC). Meanwhile, ICAO’s Vision should be kept “collective” and in line with the ICAO’s recent landmark. To that end, The European Commission announced⁶ support for the development of SAF under the ICAO ACT-SAF programme. The funding will go towards increasing SAF production, feasibility studies and assistance with the certification of these fuels. Implemented by ICAO and the European Union Aviation Safety Agency (EASA), the project involves 12 partner States, including Egypt.

3. CONCLUSIONS

3.1 Egypt fully supports and welcomes the successful adoption of the ICAO historic agreements including the LTAG, which reinforces the leadership of ICAO on issues relating to

⁵ <https://www.icao.int/environmental-protection/SAF/Pages/Production-Facilities.aspx>

⁶ <https://www.icao.int/Newsroom/Pages/Decarbonizing-aviation-European-Commission-to-support-development-of-sustainable-aviation-fuels-around-the-world.aspx>

international aviation and climate change. Egypt acknowledges that the ICAO exercises continuous leadership on environmental issues relating to international civil aviation, including greenhouse gas (GHG) emissions, as the only appropriate forum, based on ICAO's commitment to equity under the SCRC framework.

3.2 Egypt appreciates all the efforts of the governments of donor States, non-governmental and international organizations, and research institutes, financial institutions, EASA, AFCAC, ACAA along with the tireless efforts of the ICAO and its Member States, in particular, the ACT-SAF program. Egypt emphasizes the necessity of relying on the guiding principles in supporting the ICAO initiative *No Country Left Behind* in the development, production, and dissemination of (SAF/LCAF) within the global framework of ICAO, to ensure its availability in all regions, especially in developing States, in a manner that is consistent with the ambitious collective goal and proportional to the SCRC of each State, without imposing any obligations on individual States. Egypt stressed the need for ensuring that there are no negative impacts on the aviation industry, especially in developing countries. This should be achieved through strong institutional strengthening directed at three main axes: i) Access to proportional financing, ii) Science & Technology transfer, and iii) Assistance and Capacity Building.

3.3 Considering these three main axes to be critically important and a basic requirement commensurate with the level of ambition needed to achieve carbon neutrality according to the SCRC of each State and its national conditions. There would also be potential needs for accelerating Finance centrality "FINVEST" as a catalyst for progress on all aspects of the global climate agenda for many States that demonstrated the political will to deliver commitments as the cornerstone for implementing climate actions and scaling up ambition. To address several aspects of the climate finance ecosystem, including but not limited to, innovative and blended finance and financial instruments, tools and policies that has the potential to enhance access, scale up finance and contribute to the transition envisaged, including those related to debt for environment swaps.

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