

**60<sup>th</sup> CONFERENCE OF  
DIRECTORS GENERAL OF CIVIL AVIATION  
ASIA AND PACIFIC REGIONS**

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**AGENDA ITEM 7: AVIATION AND ENVIRONMENT**

**FOSTERING SUSTAINABLE AVIATION FUELS  
COMMERCIALIZATION IN THE APAC REGION:  
STRENGTHENING POLICY AND INFRASTRUCTURE**

(Presented by Indonesia)

**SUMMARY**

This paper highlights the critical role of strengthened and harmonized regional efforts in accelerating the commercialization of Sustainable Aviation Fuels (SAF) in the Asia-Pacific (APAC) region. It outlines Indonesia's national initiatives and associated challenges, and highlights the importance of aligning policies with existing global and regional frameworks, developing robust infrastructure, and establishing harmonized approaches to scale up SAF deployment. The paper invites the Conference to consider possible actions to promote regional policy coherence and infrastructure readiness to expedite SAF commercialization in the region. Action by the Conference is proposed in paragraph 3.1.

## FOSTERING SUSTAINABLE AVIATION FUELS COMMERCIALIZATION IN THE APAC REGION: STRENGTHENING POLICY AND INFRASTRUCTURE

### 1. INTRODUCTION

1.1 According to the ICAO Long-Term Global Aspirational Goal (LTAG) report published in 2022, Sustainable Aviation Fuels (SAF), Lower Carbon Aviation Fuels (LCAF), and other aviation cleaner energies are essential for enabling the international aviation sector to achieve its LTAG of net-zero carbon emissions by 2050. These energy sources are projected to contribute the largest share of CO<sub>2</sub> emissions reductions, up to 55% by 2050, making them critical to the sector's decarbonization pathway.

1.2 The Third ICAO Conference on Aviation and Alternative Fuels (CAAF/3), held in Dubai in 2023, adopted a Global Framework for SAF, LCAF, and other Aviation Cleaner Energies. This framework sets out a collective global vision to achieve a 5% reduction in CO<sub>2</sub> emissions from international aviation by 2030 – compared to zero cleaner energy use.

1.3 The Asia-Pacific (APAC) region is experiencing growing momentum in decarbonizing international aviation, with SAF increasingly recognized as a key long-term solution to reduce CO<sub>2</sub> emissions. However, the region remains at varying stages of readiness in terms of, but not limited to, SAF production capacity, feedstock distribution, supply chain development, investment climate, and enabling policies.

1.4 Indonesia, as a Member State of ICAO, is strongly committed to the global goal of net-zero carbon emissions from international aviation. In its updated State Action Plan and national policies, Indonesia has made the development and use of Sustainable Aviation Fuel (SAF) a key priority. The country has demonstrated its commitment by starting regulatory work, launching a SAF roadmap with a target of 1% SAF use by 2027, supporting collaboration among stakeholders, and exploring investment opportunities. Despite this progress, Indonesia still faces challenges in aligning related policies, increasing local SAF production, consistently improving infrastructure and supply chains, and encouraging airlines to use SAF.

### 2. DISCUSSION

#### *National Progress and Opportunities in Indonesia<sup>1</sup>*

2.1 Indonesia has made steady progress in developing SAF. Key actions include finalizing its national SAF roadmap, launched in September 2024 at the Bali International Air Show ([Portal DKPPU](#)), setting up coordination among stakeholders, starting local SAF production and testing, and increasing investment – led by the national oil company PERTAMINA and other potential private producers. With abundant sustainable feedstocks like used cooking oil, Palm Fatty Acid Distillate (PFAD), Palm Oil Mill Effluent (POME), and other residues, Indonesia has strong potential to support regional SAF supply chains.

2.2 Indonesia's large aviation market offers strong potential for SAF implementation. With 683 airports across the country and over 59 million air passengers in 2023 (52.6 million domestic and 7.1 million international), Indonesia ranks as the fourth-largest air travel market in the world. This creates a valuable opportunity to expand SAF use, bringing not only environmental benefits but also economic and social advantages for the country.

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<sup>1</sup> [https://www.icao.int/Meetings/LTAGStocktaking2024/Documents/2024%20LTAG%20Stocktaking\\_DGCA%20Indonesia.pdf](https://www.icao.int/Meetings/LTAGStocktaking2024/Documents/2024%20LTAG%20Stocktaking_DGCA%20Indonesia.pdf); <https://jdih.esdm.go.id/dokumen/download?id=2025pmesdm4.pdf> ; <https://www.safinvestor.com/news/145963/indonesia/>; <https://www.argusmedia.com/en/news-and-insights/latest-market-news/2669620-indonesia-s-pertamina-to-produce-saf-at-cilacap-in-2q>

Regional Policy Alignment and Harmonization Needs

2.3 In the APAC region, differences in SAF policies, targets, and incentives – along with added costs such as levies and taxes – have made airlines cautious about switching from conventional jet fuel to SAF. These variations also pose challenges to cross-border SAF trade and investment.

2.4 To overcome these challenges, stronger regional alignment is needed on SAF regulations, certification standards (in line with CORSIA<sup>2</sup> sustainability criteria ([ICAO document - CORSIA Sustainability Criteria for CORSIA Eligible Fuels](#))), and coordinated policy incentives. Stronger cooperation among countries can help create a consistent policy environment and avoid market fragmentation, especially important for international airlines seeking to benefit from SAF use in meeting CORSIA offsetting requirements

2.5 A regionally coordinated SAF implementation policy is crucial to advancing SAF commercialization in the APAC region. While business competition among SAF producers exists, collaboration can help reduce costs through shared infrastructure investment, economies of scale, and more resilient supply chains. To achieve this, harmonized technical and economic standards, simplified investment procedures, and active partnerships between governments and industry are paramount.

Infrastructure and Market Readiness Gaps

2.6 One of the main challenges in scaling up SAF in the APAC region is the lack of supporting infrastructure – such as dedicated SAF refineries, feedstock processing facilities, and enabling policies for all stakeholders, including producers, airlines, feedstock suppliers, and airport operators. For archipelagic and developing countries like Indonesia, targeted investment and technical support are crucial to build infrastructure that links feedstock sources and production sites with airports and refueling facilities.

2.7 Developing an appropriate number of regional SAF hubs near feedstock sources and major airports can reduce infrastructure costs, boost supply chain efficiency, and enable economies of scale. However, this approach requires harmonized technical standards, simplified investment procedures, and strong cooperation among governments and industry players across the region.

**3. ACTION BY THE CONFERENCE**

3.1 The Conference is invited to:

- a) Note the information presented in this Paper;
- b) Recognize the importance of regional cooperation in advancing SAF commercialization in the APAC region, especially through policy alignment, infrastructure development, and improving airlines readiness and willingness;
- c) Encourage States to align their national SAF policies with global frameworks, taking into account their national circumstances, capabilities, and potential contributions;
- d) Promote regional collaboration to identify potential incentives mechanisms or enabler schemes for SAF producers, airport operators, and airlines to accelerate SAF production and use;
- e) Request ICAO to strengthen technical assistance and support investment facilitation for APAC States with strong SAF potential but limited readiness; and

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<sup>2</sup> [Carbon Offsetting and Reduction Scheme for International Aviation \(CORSIA\)](#)

- f) Invite States and stakeholders to share best practices, collaborate, and initiate joint projects to accelerate SAF commercialization across the region.

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