



**WORKING PAPER**

**ASSEMBLY — 39TH SESSION**

**EXECUTIVE COMMITTEE**

**Agenda Item 22: Environmental Protection – International Aviation and Climate Change – Policy, Standardization and Implementation Support**

**THE NEED FOR POLICY GUIDANCE FOR THE PROMOTION OF SUSTAINABLE ALTERNATIVE FUELS FOR AVIATION**

(Presented by Indonesia)

**EXECUTIVE SUMMARY**

Indonesia has included the development of Sustainable Alternative Fuels for Aviation in its State Action Plan to reduce aviation emissions submitted to ICAO in 2013. As a result, the Government of Indonesia has included aviation in its national bio-energy policy and targets for transport, aiming to promote the supply of Sustainable Alternative Fuels at its airports at a level playing field with road transport.

As ICAO Assembly Resolution A38-18 noted that Sustainable Alternative Fuels for Aviation will require the introduction of *appropriate policies* and incentives to create long-term market perspectives, and requested Member States to develop policy actions, it would be desirable that ICAO develops guidance material for Member States for the establishment of globally aligned *appropriate policy actions*.

Indonesia also wishes to encourage other Member States to include aviation in their national bio-energy policies and/or targets for transport at a level playing field with road transport and to aim to avoid any regional market distortions in the promotion of Sustainable Alternative Fuels for Aviation.

**Action:** The Assembly is invited to:

- a) Note Indonesia's commitment to ICAO's policies and implementation of Assembly Resolution A38-18 calling for developing policy actions to promote sustainable alternative fuels for aviation;
- b) support the development of policy guidance by ICAO for the promotion of Sustainable Alternative Fuels for Aviation;
- c) encourage Member States to include aviation in their national bio-energy policy and/or targets for transport.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective E – <i>Environmental Protection</i> .
<i>Financial implications:</i>	The activities referred to in this paper will be undertaken subject to the resources available in the 2017–2019 Regular Programme Budget and/or from extra budgetary contributions.
<i>References:</i>	ICAO Assembly Resolution A38-18: Consolidated statement of continuing ICAO policies and practices related to environmental protection — Climate change.

## 1. INTRODUCTION

1.1 Since 2009, ICAO has actively encouraged Member States and industry in the promotion and harmonization of initiatives for the development of Sustainable Alternative Fuels for Aviation (hereinafter SAF).

1.2 The use of SAF is considered an integral component of ICAO's aviation carbon emission reduction goals.

1.3 Although enormous efforts have been made and progress achieved in proving the technological feasibility of drop-in SAF, the commercial scale-up and availability of supply is still at its very early stages with little real contribution towards ICAO's Carbon Neutral Growth aspirational goals.

1.4 The main reason as identified in several studies<sup>1</sup> is that globally many alternative fuel (or biofuel) policies do not include aviation or the existing ones do not establish a sufficient incentive for the industry to boost the large-scale production and bridge the cost gap between fossil fuel and SAF. The current policy landscape which favours ground transport over aviation incentivises production to be directed towards road-based end users.

1.5 Different States and authorities have developed, or are currently or potentially developing, diverse support instruments for the deployment and use of SAF. Some of those existing instruments and policies, when demonstrated to be effective, can serve as references for other member States when aiming to implement similar policies.

## 2. THE NEED FOR POLICY GUIDANCE

2.1 Indonesia included the development of SAF in its State Action Plan to reduce aviation emissions submitted to ICAO in 2013. As a result, the government has included aviation in its national bio-energy policy and targets for transport, aiming to promote the supply of SAF on its airports at a level playing field with road transport.

2.2 Positive and negative lessons learned from existing policy frameworks can help States such as Indonesia in the establishment and implementation of appropriate policies for the deployment of SAF.

2.3 Indonesia also wishes to develop such policy in a collaborative manner with ICAO and other Member States, to avoid the establishment of any regional competitive distortions and promote global harmonization of policies.

2.4 ICAO Assembly Resolution A38-18 noted that SAF will require the introduction of appropriate policies and incentives to create a long-term market perspective. The resolution also requested Member States to set a coordinated approach in their national administrations in order to develop policy actions to accelerate the appropriate development, deployment and use of SAF, in accordance with their national circumstances;

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<sup>1</sup> IATA Sustainable Aviation Fuel Roadmap (2015);  
EU Core-Jet Fuel Final Report on Policies, Incentives and Regulation (2016)

2.5 It also requested the Council to evaluate the costs and benefits of different measures, with the goal of addressing aircraft engine emissions in the most cost-effective manner in order to provide the necessary guidance to assist Member States.

2.6 It would be desirable that ICAO develops guidance material for Member States considering the perceived effectiveness of different policy options for the establishment of globally aligned SAF related policies and requirements affecting international aviation.

2.7 A better understanding of the positive and negative effects, direct or indirect, of varied policy application in a global context would help Member States' decision makers to consider the effectiveness of SAF policies before implementation.

2.8 The diversity of policy support instruments is, in some cases, not thoroughly understood by Member States. Policies that may be appropriate and effective for domestic application may have unintended consequences when applied in a global market. While some policy options could have regionally a specific merit, developing an understanding of the likely effects when applying them in a global context will be valuable for both operators and Member States.

2.9 Indonesia considers it is important to help Member States in the establishment of globally aligned appropriate policy actions and thus wishes to invite the ICAO Assembly to support the development of ICAO policy guidance for the promotion of Sustainable Alternative Fuels for Aviation.

### **3. ESTABLISHMENT OF AVIATION SUSTAINABLE ALTERNATIVE FUELS PRODUCTION TARGETS**

3.1 As mentioned above, Indonesia has included the development of SAF in its national bio-energy policy and targets for transport.

3.2 Indonesia also wishes to encourage other Member States to include aviation in its national bio-energy policy and/or targets for transport at a level playing field with road transport, and thereby aim to avoid any regional market distortions in the promotion of Sustainable Alternative Fuels for Aviation.

### **4. CONCLUSION**

The Assembly is invited to:

- a) note Indonesia's commitment to ICAO's policies and implementation of Assembly Resolution A38-18 calling for developing policy actions to promote sustainable alternative fuels for aviation;
- b) support the development of policy guidance by ICAO for the promotion of Sustainable Alternative Fuels for Aviation;
- c) encourage member States to include aviation in their national bio-energy policy and/or targets for transport.