

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

*Cebu, Philippines  
14 to 18 October 2024*

AGENDA ITEM 7: AVIATION AND ENVIRONMENT

**PROMOTING STRONGER MULTI-SECTORAL  
COLLABORATION IN PURUSUING DECARBONIZATION  
OF AIR TRANSPORT**

(Presented by Philippines)

**SUMMARY**

Achieving the Long-Term Aspirational Goal (LTAG) by 2050, ICAO and member States are encouraged to enhance multi-sectoral discussions and collaborations. This involves the participation of the aviation as industry, integrating policies to the UNFCCC and Paris Agreement through the inclusion of the aviation sector in the National Determined Contributions as well as integrating mitigation and adaptation practices in the air transport.

## PROMOTING STRONGER MULTI-SECTORAL COLLABORATION IN PURSUING DECARBONIZATION OF AIR TRANSPORT

J

### 1. INTRODUCTION

1.1 In Asia-Pacific, fossil fuels still account for 85 per cent of all energy consumption. The region spans the entire spectrum of the climate cause-and-effect story today. Fast growing economies reliant on fossil fuels to meet growing energy demand are accounting for an ever-larger share of global emissions. At the other end of the spectrum are the small Pacific Island States, which contribute only 0.01 percent to global emissions but must grapple with immediate and existential threats such as rising sea levels.

1.2 The region is experiencing significant climate change impacts with the growing intensity and magnitude of extreme weather events and increasing economic, environmental and social damage.<sup>1</sup>

1.3 While the aviation sector operates safely and efficiently in a variety of climates, climate change is likely to pose a number of risks in the future, including an increased frequency or intensity of disruptive weather events in some areas of the world, potentially beyond the current capacity for resilience of the aviation system.<sup>2</sup>

1.4 Further, the aviation sector plays a significant role in global CO<sub>2</sub> emissions, contributing around 2.8% of the total annually. Despite not being explicitly included in the Paris Agreement, the industry is actively working towards aligning with its 1.5-degree target. Achieving net-zero emissions by 2050 is a critical goal, and this requires a collective effort involving civil aviation authorities, industry stakeholders, manufacturers, government agencies, and NGOs such as the International Civil Aviation Organization (ICAO).

1.5 The collaboration among these entities is vital to accelerate decarbonization in aviation. This involves the development and implementation of sustainable aviation fuels (SAFs), enhancing aircraft efficiency, and adopting new technologies. The commitment to net-zero by 2050 represents a significant challenge, but it is also an opportunity for innovation and progress in reducing the environmental impact of air travel.

1.6 The race towards the net carbon zero by 2050 has been amplified by the recent development towards green and sustainable practices, and this includes green/environment friendly form of travelling.

1.7 Decarbonizing technologies for industry, electric or hydrogen-related mobility (land, aviation, and shipping), materials with lower lifecycle GHG emissions, carbon capture, utilization and storage (CCUS), hydrogen, sustainable forest management options, and afforestation and reforestation.<sup>3</sup>

---

1 ASEAN State of Climate Change Report (2021) online [https://asean.org/wp-content/uploads/2021/10/ASCCR-e-publication-Correction\\_8-June.pdf](https://asean.org/wp-content/uploads/2021/10/ASCCR-e-publication-Correction_8-June.pdf)

2 ICAO Climate Adaptation Synthesis (2018) [https://www.icao.int/environmental-protection/Documents/Climate%20Adaptation%20Synthesis%20with%20Cover\\_20200221.pdf](https://www.icao.int/environmental-protection/Documents/Climate%20Adaptation%20Synthesis%20with%20Cover_20200221.pdf)

3 ibid

## 2. DISCUSSION

2.1 According to the most recent IATA Air Passenger Market Analysis, an 8.0% increase in revenue passenger-kilometers (RPK) from July 2023, with the Asia Pacific region playing a pivotal role in the resurgence of air travel. The region registered an increase of 19.1% (year on year) and mostly driven by the domestic travel in China (7.1%).<sup>4</sup> (IATA July 2024)

2.2 The increase in air travel is supported by the growing number of middle-income households, who are driving the demand for aviation services due to their rising disposable incomes and travel preferences. In the latest outlook of the International Monetary Fund (IMF), GDP growth in the region is projected at 4.5%<sup>5</sup> which can significantly increase and balance air travel demand. (IMF, 2024).

2.3 Further, the increase in air transport translates to an increase in CO2 emissions and needs to be sustained through a stronger combination or balance of both adaptation and mitigation solutions to increase its resiliency towards adverse impact of climate change. Operational effectiveness through fleet modernization, adoption of the renewable sources of energy in airport operations, effective and efficient air traffic management, adoption of sustainable aviation fuel and carbon offsetting are few ways to decarbonize the sector aligned with the 2050 net zero target and ICAO Long Term Aspirational Goal (LTAG).

2.4 The transition towards sustainability in the sector involves just transition, allowing all stakeholders in the supply chain to adapt and adjust their business models to align with sustainable practices. The consideration of Sustainable Aviation Fuels (SAF) for the next generation of fleet not only demonstrates the industry's commitment to decarbonization but also underscores the shift towards a circular economy, leading to enhanced socio-economic benefits and environmental sustainability.

### **On Sustainable Aviation Fuels**

2.5 National policies further support the integration of SAF. The Renewable Energy Act of 2006 promotes clean energy technologies, aligning with SAF's renewable nature. The Philippine Development Plan (PDP) 2023-2028 emphasizes sustainability and emission reduction targets, which SAF can significantly contribute to. In addition, the Climate Change Act and the National Climate Change Action Plan (NCCAP) guide the country's climate strategies, and SAF's potential to reduce aviation emissions complements these goals.

2.6 Further, an inter-agency collaboration through an institutional framework creating the SAF Committee under the National Biofuels Board. The committee consists of inter-agency departments/ministries spearheading the development of a state-level SAF roadmap, outlining the strategies and actions required to integrate SAF into the Philippine aviation sector effectively. This strategic leadership position reflects a significant step towards formalizing SAF implementation and setting a clear pathway for its adoption across the industry. On the regional scale, CAAP is one of the member States participating in the ASEAN Sustainable Aviation Roadmap Working group, enabling collaboration in the region towards sustainable aviation.

---

<sup>4</sup> Air Passenger Market Analysis (IATA, 2024) <https://www.iata.org/en/iata-repository/publications/economic-reports/air-passenger-market-analysis-july-2024/>

<sup>5</sup> Regional Economic Outlook Asia and Pacific (International Monetary Fund, 2024) [Regional Economic Outlook for Asia and Pacific \(imf.org\)](https://www.imf.org/en/Publications/RO/AP)

2.7 Recent fund allocations and actions underscore the Philippines' commitment to advancing SAF technology. On 8 July 2024, a notable initiative was launched with a PhP35 million allocation to support research studies on sustainable fuels under a joint program of the Philippine Council for Industry, Energy, and Emerging Technology Research and Development (PCIEERD-DOST) and the Department of Energy's Renewable Energy and Science and Technology Institute (DOE-RESTI).<sup>6</sup> This funding will play a crucial role in enhancing SAF technologies and making them more viable for commercial use.

### **On Airport Operations through Environment Management System**

#### ***Environmental Management Systems (EMS) ISO 14001:2015***

2.8 Environmental Management Systems (EMS) aligned with ISO 14001:2015 standards is essential for advancing environmental stewardship within organizations, including those in the aviation sector. ISO 14001:2015 offers a comprehensive framework for managing environmental responsibilities systematically, emphasizing continual improvement and adherence to regulatory requirements.

2.8 The successful ISO 14001:2015 certification of Iloilo Airport exemplifies CAAP's commitment to environmental management. This achievement highlights the airport's rigorous approach to setting objectives, implementing operational controls, conducting regular audits, and engaging stakeholders. Following this success, CAAP is adopting EMS guidelines across all its operated airports, reinforcing its dedication to sustainability and environmental regulatory compliance.

2.9 To further this commitment, CAAP monitors the progress of EMS implementation at each airport, using this data to determine the next airport to undergo ISO 14001:2015 certification. This proactive approach not only enhances environmental performance but also fosters a culture of sustainability across CAAP-operated airports. It reduces environmental risks, improves operational efficiency, and demonstrates a strong commitment to environmental protection to stakeholders and the public.

#### ***Airport Carbon Accreditation***

2.10 The Mactan-Cebu International Airport has achieved level 1-mapping ACA accreditation early this year. The initiative includes determination of emission sources, calculation and consolidation of annual carbon emission.<sup>7</sup> Also includes minimizing the use of non-biodegradable waste on-site, introducing infrastructure projects aimed at lowering energy consumption, and integrating renewable energy sources.

### **3. ACTION BY THE CONFERENCE**

3.1 The Conference is invited to:

- a) For ICAO and member States to strengthen regional collaboration in upscaling the knowledge and technological transfer supporting the ICAO's program of No Country Left Behind through increase participation on the ICAO ACT CORSIA, SAF and other capacity building programs of ICAO.

---

<sup>6</sup> DOST, DOE PARTNER TO FUND RENEWABLE ENERGY INNOVATIONS (DOST, 2024) online <https://pcieerd.dost.gov.ph/news/latest-news/574-dost-doe-partner-to-fund-renewable-energy-innovations>

<sup>7</sup> Levels of ACA Accreditation (ACA, 2024) <https://www.airportcarbonaccreditation.org/about/7-levels-of-accreditation/mapping/>

- b) For the Conference to reassess the areas of collaboration involving all stakeholders in mitigating adapting to the impacts of climate change in aviation.

—END—