Q & A Summary - State Action Plan (SAP) Webinar
8 May 2025

Note: This is not a transcript of the Q&A session, but an attempt to provide structured answers to the questions discussed.

1. What actions should a State take after submitting its State Action Plan (SAP) to ICAO?

The development and submission of an action plan is not the end goal, but the beginning of a multi-year effort to reduce the impact of international aviation on the global climate while ensuring that aviation continues to grow in a sustainable manner.

After the action plan has been finalized, a State:

- Will need to set in motion a process to implement the relevant measures in the action plan either directly or by working with and through stakeholders. Various stakeholders will be involved in, and actively contribute to, the implementation of the selected measures.
- Continuous consultation and coordination between the various stakeholders will be essential to the successful implementation of the action plan.
- The State will need to monitor the implementation of all activities. At the same time, the State will need to continue to work through ICAO to ensure that the needs identified by the State are met, in accordance with the practices and policies of the Organization, for the successful implementation of mitigation actions for which additional action at the international level would be necessary.
- Areas in which such assistance could be provided include gaining access to financial resources, building national capacities and receiving technological or technical assistance.

2. What is the difference between the CORSIA and the State Action Plan baseline?

The "baseline scenario" in terms of the present and future CO2 emissions projection established by each State in its State Action Plan is different from the State's CO2 emissions in the CORSIA "baseline years" of 2019. However, the information reported to the State through the CORSIA MRV system can serve as the basis for the fuel consumption and CO2 emissions data in the State Action Plans.

Ref. SAP FAQ #4

Baseline scenario under SAP is projected international aviation traffic for the State, fuel consumption and CO2 emissions for the State until 2050 (without action).

Ref. CORSIA FAQ #2.17

The ICAO Assembly, having considered the recommendations from the Council arising from the 2022 CORSIA periodic review (see question 2.29), adopted Resolution A41-22, which establishes adjustments to the definition of the CORSIA baseline as follows (Assembly Resolution A41-22, paragraph 11 b):

- For the pilot phase (2021-2023): the total CO2 emissions covered by CORSIA in 2019; and
- For the first and second phases (2024-2035): 85% of the total CO2 emissions covered by CORSIA in 2019.

Paragraph 11(g) of the Assembly Resolution A41-22 notes that the sectoral baseline will be re-calculated when the routes included in CORSIA change. This can happen, for example, when new States volunteer to participate or States decide to withdraw their voluntary participation. The recalculation of the baseline will be done by ICAO at the start of each year.

3. How to get involved in the ICAO SAP Buddy programme?

- States interested in participating in the ICAO State Action Plan Buddy Programme are invited to contact ICAO at actionplan@icao.int.

Ref. SAP FAQ #7

In line with ICAO Resolution A41-21Para 12, the ICAO State Action Plan Buddy Programme invites States that have already submitted their State Action Plan on CO2 Emissions Reduction Activities to ICAO to partner with Member States that have not prepared their State Action Plans, in order to support those States. States that have not yet developed, or are in the process of developing, a State Action Plan are also invited to inform ICAO of their interest in being matched with a Supporting State through the Buddy Programme.

ICAO has developed a draft agreement of cooperation aiming to establish a model framework by which ICAO Member States can help other Member State(s) to prepare and submit a State Action Plan. It aims to facilitate the development of international cooperation among ICAO Member States.

4. **It was noted that several States have yet to submit their State Action Plans (SAPs). Some of these States may require assistance in developing or updating their SAPs. Could you kindly elaborate on the support ICAO can provide to facilitate this process?**

To support States in developing their State Action Plans on CO2 Emissions Reduction Activities, ICAO has undertaken the following actions:

- Developed ICAO Document 9988 - Guidance on the Development of States'Action Plans on CO2 Emissions Reduction Activities.
- Developed a dedicated web interface (the Action Plans for Emissions Reductions (APER) portal) that can be used by State Focal Points to upload and submit action plans electronically. This portal includes instructions for online submission; ICAO Doc 9988; the Environmental Benefit Tool (EBT) - a tool that is designed for use by State Action Plan Focal Points to quantitatively estimate the benefits attributable to the implementation of various mitigation measures; links to the publicly available tools (IFSET, ICAO Carbon Calculator); and downloadable presentations from past training seminars.
- Conducted capacity-building activities (e.g., webinars, regional workshop, tailored technical assistance, SAP Buddy programme, etc.).

States with specific questions regarding State Action Plans are invited to contact the ICAO State Action Plan team directly: actionplan@icao.int.

5. **Please elaborate on how financial or technical support can be obtained for specific projects using the State Action Plan (SAP).**

When developing their Action Plans, States are strongly encouraged to clearly explain each proposed measure and specify the type of support needed. This helps ICAO better understand the national context and provide assistance that aligns with each State's priorities and circumstances.

For financial support, ICAO Document 9988 outlines general conditions, requirements, and eligibility criteria commonly used by financial institutions to assess decarbonization projects. States can use these examples to better define their support needs, particularly when seeking funding. This guidance can help facilitate project implementation and secure the necessary resources. The financial information included in the Action Plan also serves as a useful forecast of funding needs, whether from internal or external sources.

As mentioned during the webinar, the examples in Table 5-1 are for reference only. Financial institutions may apply additional requirements, and this information should not be considered legal, financial, or professional advice. Users are advised to independently verify details and consult with appropriate institutions or experts before making any decisions based on this information.

6. **How are the States developing new technologies to reduce aviation emissions, considering both domestic and international aviation?**

States are developing new technologies to reduce aviation emissions through a combination of national initiatives, international collaboration, and alignment with ICAO's global frameworks. In doing so, they must balance innovation with safety, economic feasibility, and global compatibility to ensure that both domestic and international aviation benefit from these efforts.

A key example is the investment in emerging technologies such as electric and hybrid-electric aircraft, hydrogen propulsion, and more efficient engines. Although these technologies are initially aimed at short-haul domestic routes, they also provide a valuable foundation for future deployment in international aviation. Another example is the development of SAF, many States are supporting the research, production, and deployment of SAF as a drop-in replacement for conventional jet fuel. This includes funding pilot projects, setting blending mandates, and establishing partnerships between government, industry, and academia. SAF contributes to emissions reductions across both domestic and international flights.

7. **How can projects such as the installation of Solar PV systems in international terminals and the adoption of e-GPUs be effectively implemented and integrated within the basket measures of the SAP?**

   - **Context:** ICAO Doc 9988, Chapter 4, Sub-chapter 4.7 – Supplemental benefits for domestic sectors

The development of State Action Plans can encourage national aviation stakeholders to adopt and showcase comprehensive climate change strategies. These strategies can include measures that would only trigger CO2 emissions reduction for domestic sectors. For instance, airport improvements include changes made to the airfield, the sources of energy used (e.g., **the installation of Solar PV systems**), GSE (e.g., **e-GPU**) and transportation infrastructure. Each of these areas can offer significant potential for emissions reduction; however, not all those changes will directly affect international aviation emissions as defined in this guidance document.

While States are invited to use their State Action Plans to showcase these supplemental benefits for domestic sectors, their quantified impacts should not be reported within the context of the international baseline scenario or the international expected results, which are required as a part of the State Action Plan. ICAO Member States can quantify the supplemental benefits for domestic sectors as part of their reporting obligations under the United Nations Framework Convention on Climate Change (UNFCCC)

   - Specific examples of measures included in State Action Plans that provide additional benefits to the domestic sector, particularly those involving the use of cleaner energy sources **(e.g., solar PV)** and improved ground support equipment **(e.g., e-GPUs)**, can be found in ICAO Doc 9988, Appendix E, Point 4 (pages App E-27 to App E-28).

   - To secure the necessary support for the effective implementation of these measures, States are encouraged to clearly outline their assistance needs within their Action Plans. A relevant example is provided in ICAO Doc 9988, Appendix E, Point 5 (page App E-29).

8. **Would it not be better if study material/presentations were shared in advance, so it enables the participants to prepare better for the webinars/training sessions?**

Thank you, and we will strongly consider this for future activities.

9. **For Malaysia and the Philippines, what are the primary pathways currently being pursued for SAF production? How are you addressing the challenges related to limited feedstock availability?**

   - Malaysia:

Current SAF production in Malaysia mainly focusing on the HEFA method, which relies on used cooking oil (UCO) as its primary pathways. Producers are actively working to collect more UCO through various

programs. The government is also exploring ways to support these efforts through potential policies or incentives.
Concurrently, CAAM is facilitating collaboration between Petronas and agricultural feedstock producers to explore vegetable waste (particularly rice straw) as a viable potential feedstock for Sustainable Aviation Fuel (SAF) production.

- Philippines:

Since there is an ongoing study on the potential feedstock in the country, the Philippines is open for discussion on the use of HEFA pathway, however, the country is also exploring other pathways available (e.g. fischer tropsch). Looking at the geographical context of the country as well as the feedstock availability, further in-depth feedstock mapping and analysis per feedstock type is necessary, together with appropriate pathway.

10. Is there currently a specific SAF mandate in place in Malaysia? Additionally, how are SAF projects being funded?

No specific SAF mandate yet, the National Energy Transition Roadmap (NETR) has classified SAF refinery projects as catalyst initiatives for Malaysia's energy transition. Additionally, the Malaysia Aviation Decarbonization Blueprint (MADB) recognizes SAF as a key emissions mitigation measure. These policy frameworks serve as government signals to encourage industry and financial institutions to invest in SAF development.

11. Regarding the reporting platform developed by CAAM to collect data from airlines, has the collected data undergone a verification process?

Data is verified internally by the airlines prior to submission to CAAM. CAAM then assesses this data using a methodology aligned with CORSIA's OMC process. While third-party validation is not currently required, this option remains under active consideration for future implementation.

12. To CAAM: What proportion of your potential SAF feedstock is expected to qualify as CORSIA Eligible Fuel (CEF)?

At this stage, we are still in the process of assessing the full range of our potential SAF feedstock sources. However, based on preliminary evaluations, we anticipate that a significant proportion - potentially between 60% to 80% - could meet the sustainability criteria required to qualify as CORSIA Eligible Fuel (CEF). This estimate may change as we complete more detailed supply chain analyses and certification processes and it will also depend on fuel producers strategies.

13. For the Philippines: How do you view the potential benefits of joining ACT-SAF in relation to your ongoing SAF projects?

The ACT- SAF provided a foundational level understanding of the SAF ecosystem, its enablers, the stakeholders, and actors in the supply chain and its interaction (e.g. policy, investment, research and development and among others). Furthermore, the ICAO - ACT SAF provides an avenue for potential investors and collaborators in the development of SAF roadmap for the Philippines. It also connects the CAA with other partners and collaborators.

14. With reference to your study conducted with aircraft manufacturers, what has been identified as the primary feedstock for SAF in the Philippines?

Currently, the potential feedstocks available in the Philippines are used cooking oil, agricultural wastes, non-standard coconut, animal manure, cassava, rice and corn. However, these potential feedstocks require further study in terms of production supply and technological pathway applicability and availability in terms of volume.