



ICAO

ENVIRONMENT

ICAO ACT-SAF programme



20 March 2023

LTAG Decision



ICAO Long Term Global Aspirational Goal For International Aviation (LTAG)

Adopted by ICAO Assembly Resolution A41-21 (2022)

https://www.icao.int/environmental-protection/Documents/Assembly/Resolution_A41-21_Climate_change.pdf

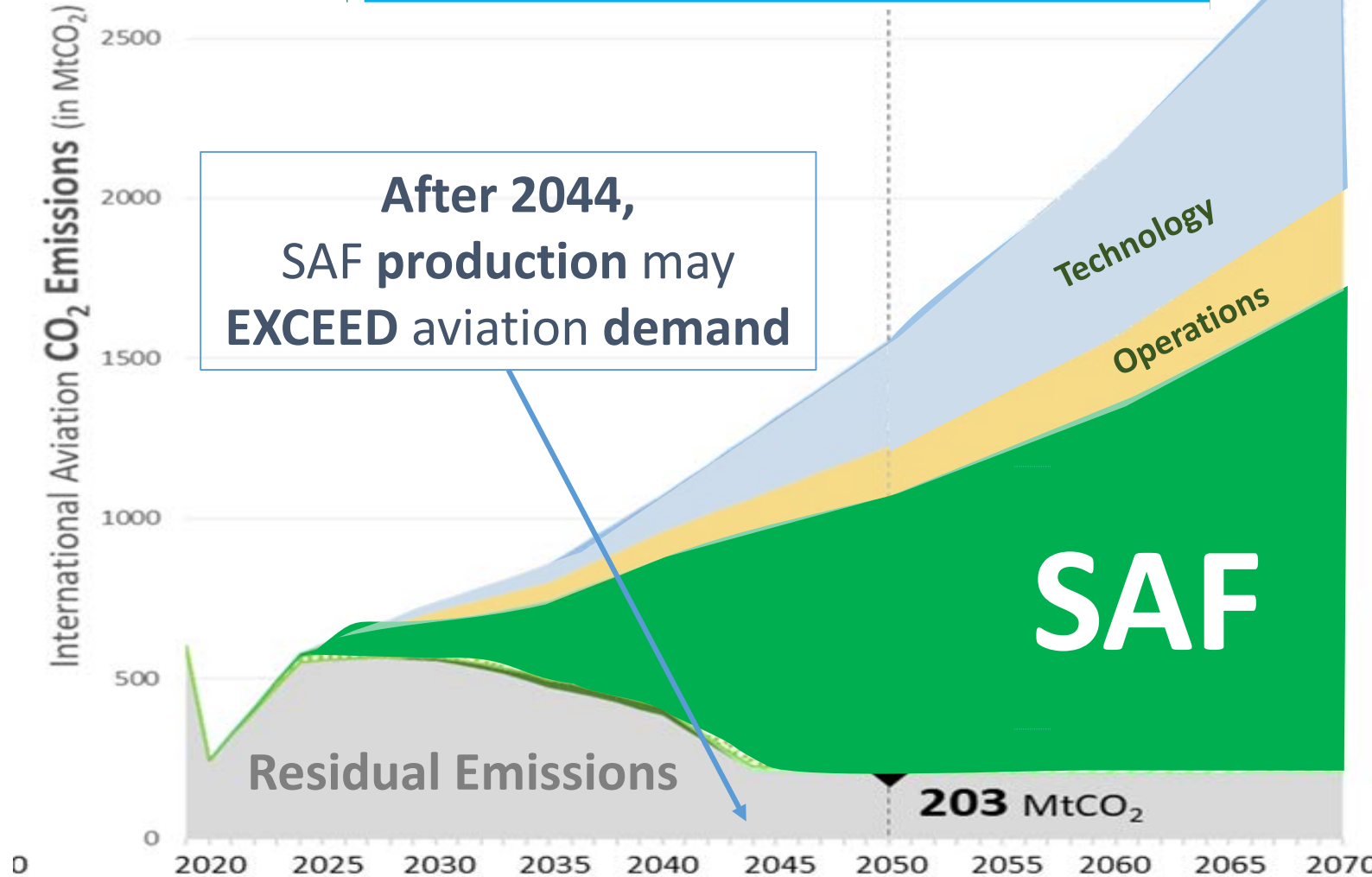


LTAG Report

SAF will play a key role in aviation decarbonization efforts

LTAG report and SAF

IS3 LTAG Integrated Scenario 3



2022: 0.15 Billion Liters of SAF being produced



2045: 636 billion liters needed to replace all fossil fuels



Need for immediate action to scale up SAF globally

References:

<https://www.icao.int/environmental-protection/LTAG/Pages/LTAG-data-spreadsheet.aspx> <https://www.iata.org/en/iata-repository/pressroom/fact-sheets/fact-sheet---alternative-fuels/>

ICAO work on SAF goals

ICAO 2050 Vision for SAF

adopted at the Second ICAO Conference on Aviation and Alternative Fuels (CAAF/2 - 2017)



- Calls on States, industry and other stakeholders to substitute a significant proportion of conventional aviation fuels with sustainable aviation fuels by 2050.
- 2050 Vision to be revised in November 2023 (CAAF/3 Conference)
- Stocktaking process supporting these goals – yearly events held since 2019



ICAO ACT-SAF

ICAO Assistance, Capacity-building and Training for Sustainable Aviation Fuels



Launched on 1 June 2022, in an event Associated to the Stockholm+50 Conference

<https://www.icao.int/environmental-protection/Pages/act-saf.aspx>



1) Interested party* expresses interest in becoming an ACT-SAF Partner

2) ICAO deploys ACT-SAF activities based on States tailored needs and capabilities

3) ICAO connects ACT-SAF Participants

4) ICAO facilitates agreements and coordinates concrete SAF projects

Ongoing

Deployment of ACT-SAF activities

- Coordination calls with States to assess needs
- ACT-SAF Series on a monthly basis
- Preparations to launch feasibility studies
- Development of ICAO template for studies
- Inception of ACT-SAF Platform on monitoring and reporting of SAF

Connection with financing institutions

Regional workshops & meetings with banks
Identification of financial tools relevant for SAF

Facilitate the matching of needs and opportunities between States and industry

What is ICAO ACT-SAF?

- An ICAO initiative by States, for States, developed, coordinated and implemented by ICAO.
- Technical training on all aspects of SAF (ACT-SAF Series).
- Tailored support for States based on their individual needs.
- An ACT-SAF Platform to monitor and report the use of SAF.
- SAF feasibility studies for States, in line with ICAO template.
- Development of concrete SAF projects coordinated by ICAO



ICAO ACT-SAF Platform

Here you will find more information on ACT-SAF Participants* and Initiatives.

69

States

Name of State

Albania
Argentina
Bhutan
Botswana
Brazil
Burkina Faso

Acceptance to ... Pending Yes



26

Organizations

Name of Organization

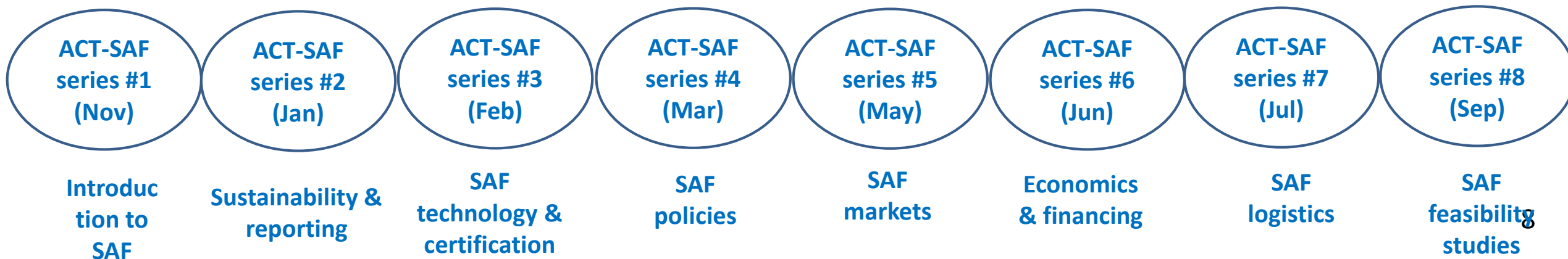
AACO - Arab Air Carriers' Organization
ACI - Airports Council International
Airbus
Airports Company of Zimbabwe
All Nippon Airways (ANA)

International Organizations

Acceptance T&C Pending Yes

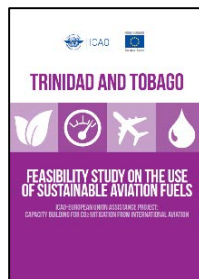


- **Technical Knowledge of SAF is a pre-requisite for implementation of specific SAF projects and policies.**
- **Training on SAF is a key request of ACT-SAF partners**
- **ICAO is offering the “ACT-SAF series” of training events to the ACT-SAF partners**
 - ACT-SAF partners participate live and can direct questions and feedback
 - Recordings and presentations publicly available after the events
 - Potential future events in other ICAO languages



SAF Production Feasibility Studies:

- Many feasibility studies will be developed in ACT-SAF
 - Following four successful feasibility studies done previously
 - Three new feasibility studies under existing ICAO-EU project
 - Financial resources provided by Cote D'Ivoire, France, Netherlands and the European Commission will allow several additional feasibility studies
 - ICAO and World Bank project being structured
 - Studies also being pursued by ACT-SAF partners
- ICAO is currently developing a template for SAF Feasibility Studies
 - Ensure coherence across studies, increased quality
 - Harmonized structure (more practical/quantitative)
 - Ensures alignment with ICAO's methodologies and guidance
 - Include information relevant to facilitate financing
 - Facilitate outreach of results of the studies

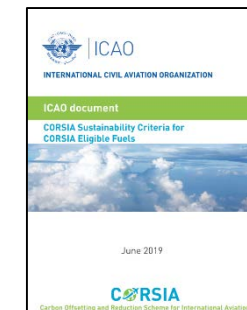


All elements of a SAF Supply chain needs to be certified:

- Feedstock production (Farms / Plantations / Waste-producing facilities)
- First Gathering point; collecting point
- SAF production plant
- SAF blend point



Once the potentials are identified, ACT-SAF can support States on the SAF certification processes



Sustainability Certification
ICAO CORSIA Standards



Technical Certification
ASTM Standards

Support to policy implementation

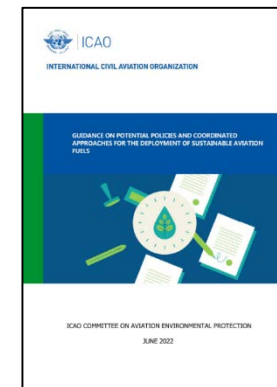
Many policies are available to support SAF development

Potential Policy Categories*	
Government funding for SAF research, development, demonstration and deployment (RDD&D)	SAF mandates
Targeted incentives and tax relief	Update of existing policies to incorporate SAF
Recognition of SAF environmental benefits	Demonstrate government leadership

ACT-SAF can support States to	
Identify tailored policy solutions	Implement a policy framework

* Reference: ICAO *Guidance on Potential Policies and Coordinated Approaches for the deployment of Sustainable Aviation Fuel (2022)*, developed by CAEP

https://www.icao.int/environmental-protection/Pages/saf_guidance_potential_policies.aspx



ICAO is connecting with financial institutions across all regions with the objectives to:

1. **Raise awareness of financial institutions on the role of SAF** to achieve the LTAG, and on the interest of aviation/fuel industries for immediate and massive SAF scale-up;
2. **Inform financial institutions of the significant investments needs** to scale-up SAF production capacity across all regions, in particular for developing countries.
3. **Explore financial institutions' existing or future financing opportunities** to support SAF deployment and inform financing institutions of ways in which they can best contribute to SAF deployment.

ICAO has organized **regional workshops and** had **initial discussions** with **public and private financing institutions** and has **learned many lessons** in this process.

ACT-SAF next steps

1) Interested party* expresses interest in becoming an ACT-SAF Partner

2) ICAO deploys ACT-SAF activities based on States tailored needs and capabilities

3) ICAO connects ACT-SAF Participants

4) ICAO facilitates agreements and coordinates concrete SAF projects

Ongoing

Deployment of ACT-SAF activities

- Coordination calls with States to assess needs
- ACT-SAF Series on a monthly basis
- Preparations to launch feasibility studies
- Development of ICAO template for studies
- Inception of ACT-SAF Platform on monitoring and reporting of SAF

Connection with financing institutions

Regional workshops & meetings with banks
Identification of financial tools relevant for SAF

Facilitate the matching of needs and opportunities between States and industry



Next steps

Coordination of specific **ACT-SAF projects** (2023 and beyond)



70 States are already part of ACT-SAF Join ACT-SAF too!

<https://www.icao.int/environmental-protection/Pages/act-saf.aspx>

States

Acceptance to ... ● Pending ● Yes



How to become an ACT-SAF Partner?

You can become an ACT-SAF Partner by agreeing to the **ACT-SAF Terms and Conditions**. For those interested in further information, an e-mail can be sent to the Office of Environment (officeenv@icao.int). ICAO will schedule a meeting to discuss potential needs and/or contributions under ACT-SAF and further steps into the programme.

Next steps



(<https://www.icao.int/Meetings/RS2023/Pages/default.aspx>)

Ongoing activities in ACT-SAF to support
SAF development and deployment



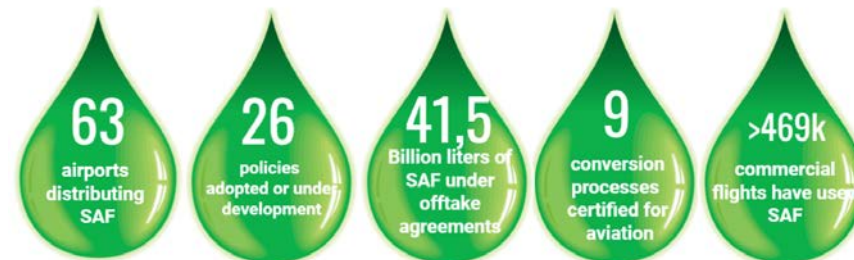
ICAO

ENVIRONMENT

More information on SAF on the ICAO website



SAF Tracking tools (click on the drops for details)



<p>ICAO document CORSIA Eligibility Framework and November 2019</p>	<p>ICAO document CORSIA Approved Sustainability Certification Schemes November 2020</p>	<p>ICAO document CORSIA Sustainability Criteria for CORSIA Eligible Fuels November 2021</p>	<p>ICAO document CORSIA Default Life Cycle Emissions Values for CORSIA Eligible Fuels June 2022</p>	<p>ICAO document CORSIA Methodology for Calculating Actual Life Cycle Emissions Values Third Edition, June 2021</p>
CORSIA Eligibility Framework and	CORSIA Approved Sustainability Certification Schemes*	CORSIA Sustainability Criteria for CORSIA Eligible Fuels**	CORSIA Default Life Cycle Emissions Values for CORSIA Eligible Fuels***	CORSIA Methodology for Calculating Actual Life Cycle Emissions Values



SAF facilities map

see the facilities (existing and announced) that can produce SAF



<https://www.icao.int/environmental-protection/pages/SAF.aspx>
(or google it "Sustainable Aviation Fuels")