



**INTERNATIONAL
CIVIL AVIATION
ORGANIZATION**



Agenda Item 5

Scaling up the SAF production and progressing the LTAG

Blandine Ferrier

Environment Officer, ICAO

EUR/NAT-DGCA/2026

Castellaneta, Italy, 9-10 June 2026

Table of contents

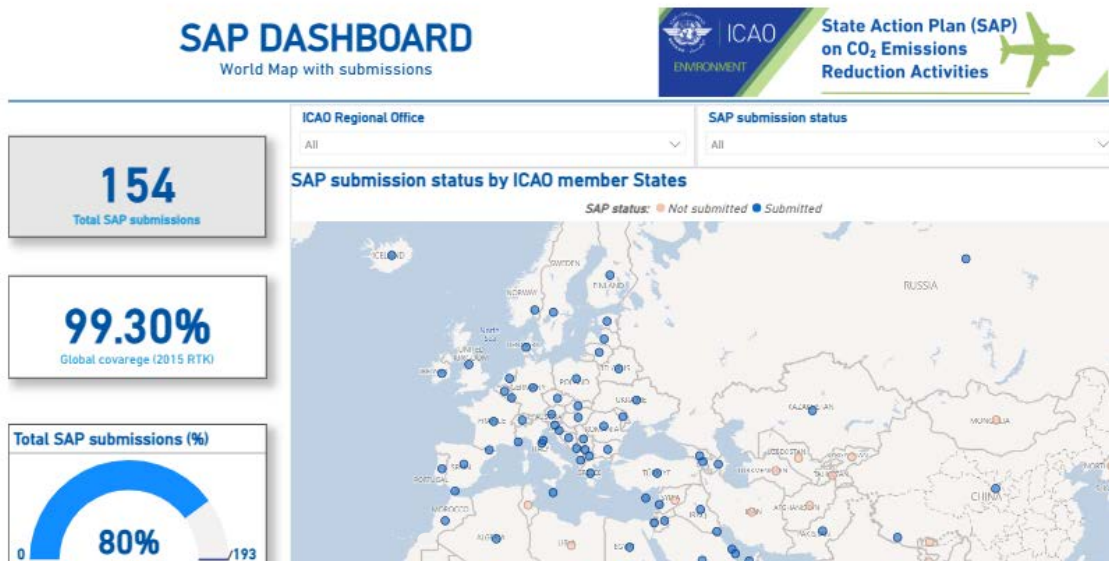
1. ICAO States Action Plans Initiative
2. Basket of CO2 emissions reduction measures
3. CORSIA
4. Sustainable Aviation Fuels
5. FINVEST
6. ACT LTAG
7. Draft EUR/NAT DGCA Conclusion



ICAO States Action Plans Initiative

State Action Plans are voluntary strategic documents developed by ICAO Member States to outline their **national long-term strategies in reducing CO2 emissions** from international aviation.

SAPs serve as a framework for setting emissions reduction targets, selecting mitigation measures, and engaging relevant national stakeholders.



The purpose of ICAO’s State Action Plan initiative is to also help ICAO to track global progress.

- **2%** annual fuel efficiency improvement
- **Carbon neutral growth** from 2020 onwards
- Collective Long-Term Global Aspirational Goal (LTAG) of **net-zero carbon emissions by 2050**
- **5% reduction in CO2 emissions** by 2030 through the use of aviation cleaner energies



States Action Plans in the EUR/NAT Area



With the adoption of ICAO's Long-Term Global Aspirational Goal (LTAG) and the ICAO Global Framework for SAF, LCAF and other Aviation Cleaner Energies, State Action Plans have become even more critical.

The quantified information submitted in State Action Plans enables ICAO to compile global progress toward its aspirational climate goals

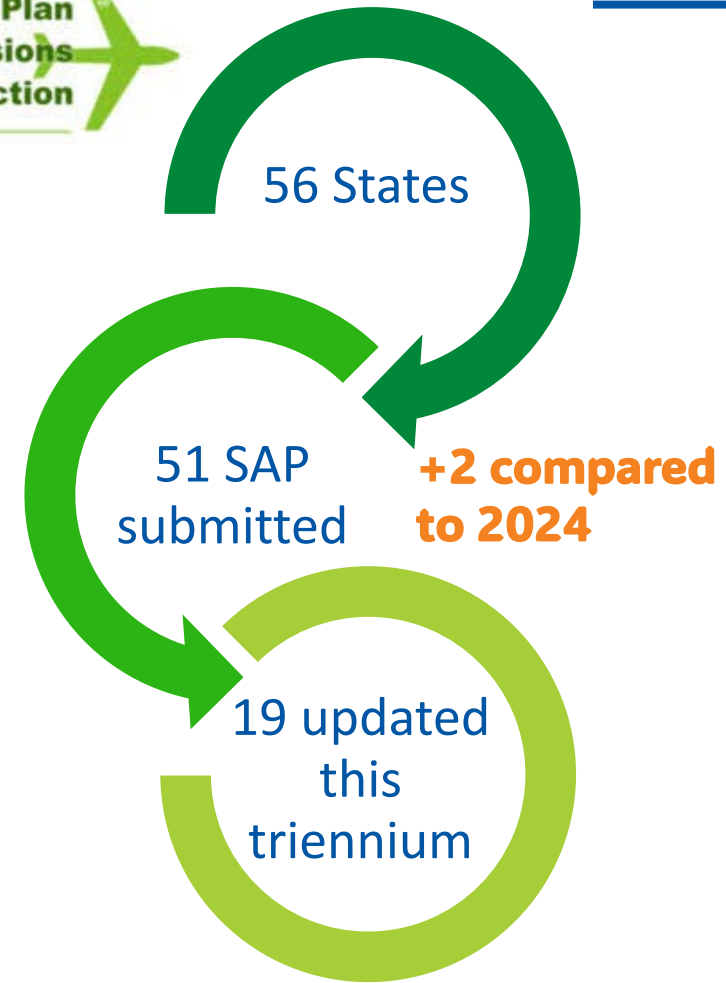
Components of the SAP

Define a Baseline: Establish projected CO2 emissions in the absence of any mitigation action

•Select **Mitigation Measures:** Choose suitable actions from ICAO's basket of measures to reduce emissions


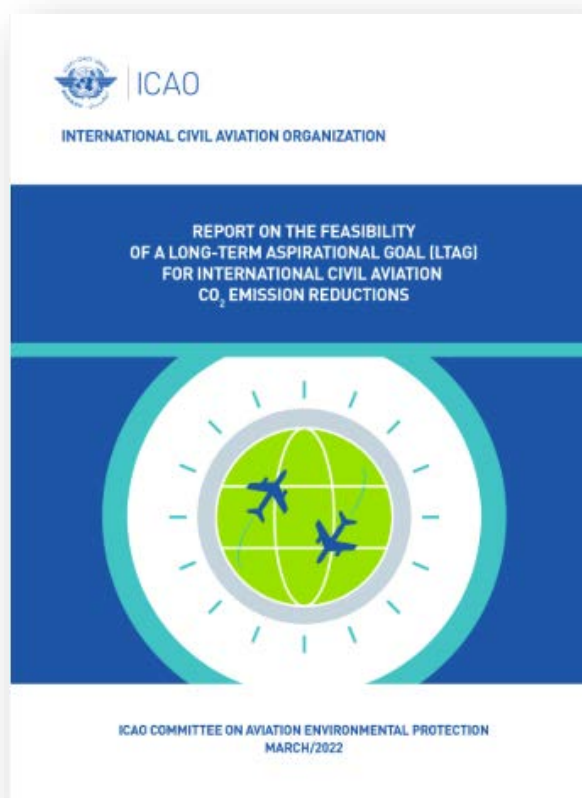
•**Quantify Impact** (Expected Results): Calculate the expected CO2 reduction benefits from implementing selected measures

•Notify ICAO of Assistance Needs: Identify technical, financial, or capacity-building support required for the implementation of mitigation measures





Basket of CO₂ emissions reduction measures



Aviation Cleaner Energies:
up to **55%**



Aircraft Technologies:
up to **21%**

Operational Improvements:
up to **11%**



Remaining CO₂
CORSIA



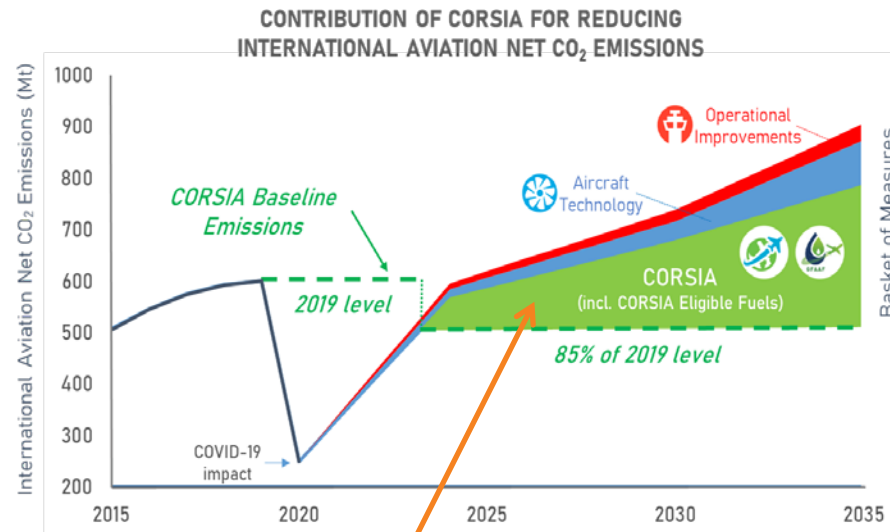
CORSIA

The first global market-based measure for any industry sector

CORSIA complements the other 3 elements in the ICAO basket of measures:

- technological innovations
- operational improvements
- sustainable aviation fuels

Objective: Achieve ICAO’s global aspirational goal of carbon neutral growth from 2020 (CNG 2020)



CORSIA addresses the remaining "emissions gap" to achieve CNG2020

All Member States are encouraged to participate in CORSIA

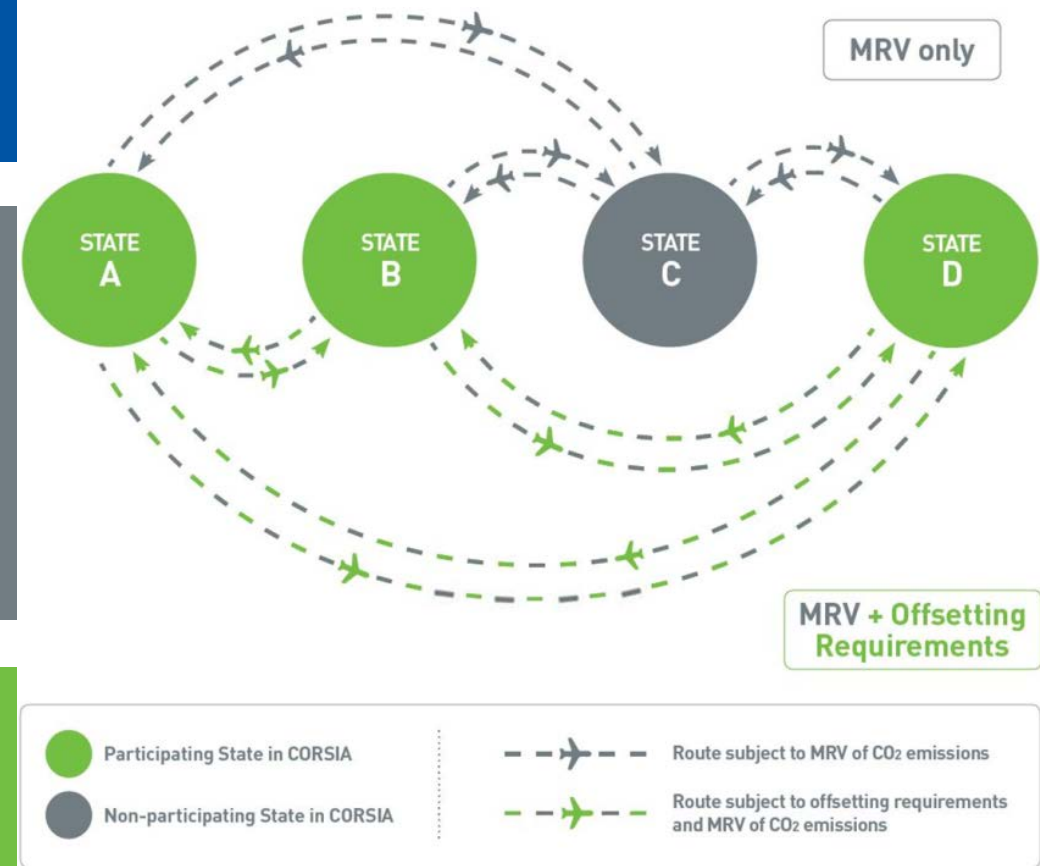
contribute to the higher environmental integrity of the scheme

closer to meeting the global aspirational goal of carbon neutral growth

From 1 January 2019, all States with operators performing international flights have to establish a monitoring, reporting and verification (MRV) system for CO₂ emissions.

From 1 January 2019, all operators performing international flights have to monitor CO₂ emissions - operators with emissions more than 10,000 tonnes annually have to verify CO₂ emissions and report to State.

All operators performing international flights between States participating in CORSIA have to comply with the CORSIA offsetting requirements.





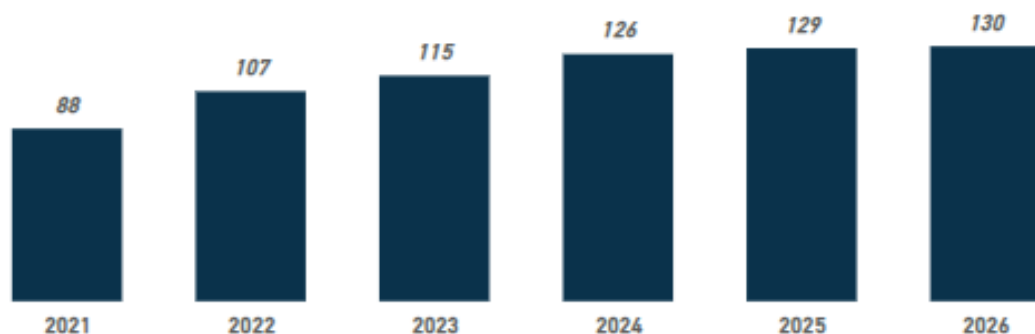
CORSIA



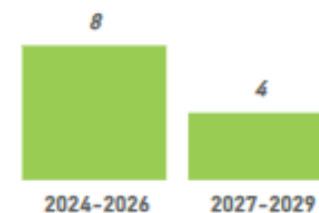
Carbon Offsetting and
Reduction Scheme for
International Aviation

CORSIA Implementation Overview

Voluntary States Participation



Eligible Emissions Units Programmes



Additional programmes may be approved by ICAO Council

CORSIA Implementation Overview

CORSIA Eligible Emissions Units

CORSIA Eligible Emissions Units

(Issued by Programme Registries) – As of April 29, 2026

Host Country	Program Registry	Quantity of CEEUs (tonnes)
Cambodia	VCS	1,275,362
Gambia	VCS	196,652
Guyana	ART	24,963,214
Lao	VCS	1,276,305
Madagascar	VCS	1,347,521
Malawi	GS	1,376,680
Rwanda	GS	51,199
Rwanda	VCS	4,577,464
Sierra Leone	GS	2,078
Tanzania	GS	2,806
Uzbekistan	VCS	1,568,083
Total		36,637,564

Program Registry ● ART ● GS ● VCS

Data from the CORSIA Central Registry (CCR)

2025 Aeroplane Operators

690

2025 Verification Bodies

65

2024 CO₂ Reports from

128

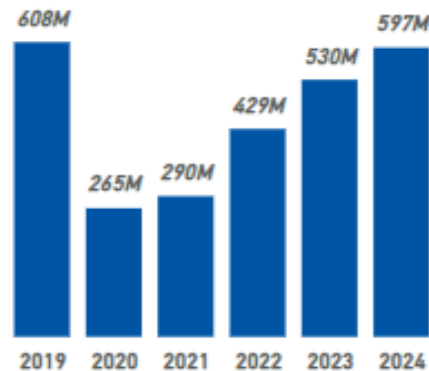
States

Reports cover

99%

of Total 2024 emissions

Total CO₂ Emissions (tonnes)



CORSIA Eligible Fuels

57

Feedstock Types

14

Sustainability Themes

3

Sustainability Certification Schemes

MAKING EMISSIONS UNITS AVAILABLE FOR CORSIA

Host country authorization is important to avoid double claiming of units, confirming that:

- Emissions units to be used in CORSIA are not counted toward National Determined Contributions (NDCs) under the Paris Agreement.
- Emissions units should be properly accounted (*i.e.* applying corresponding adjustments) in its national reports under the Paris Agreement.

CORSIA in EUR/NAT



ONLY 2 States did not submit for 2024

- 1 compared to 2023

50 States submitted their 2024 data

+ 3 compared to 2023

56 EUR/NAT States

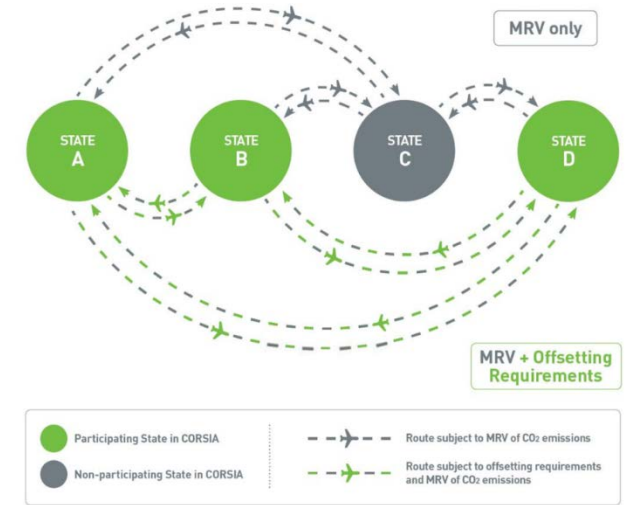
46 States in CORSIA

No change

14 EUR/NAT States in ACT CORSIA

5 Supporting States ACT CORSIA

5 webinars ACT CORSIA



From 1 January 2019, all States with operators performing international flights have to establish a monitoring, reporting and verification (MRV) system for CO₂ emissions.

All operators performing international flights between States participating in CORSIA have to comply with the CORSIA offsetting requirements.



Sustainable Aviation Fuels – ICAO Global Framework for SAF, LCAF and other Aviation Cleaner Energies

Global Framework is set out through 4 Building Blocks

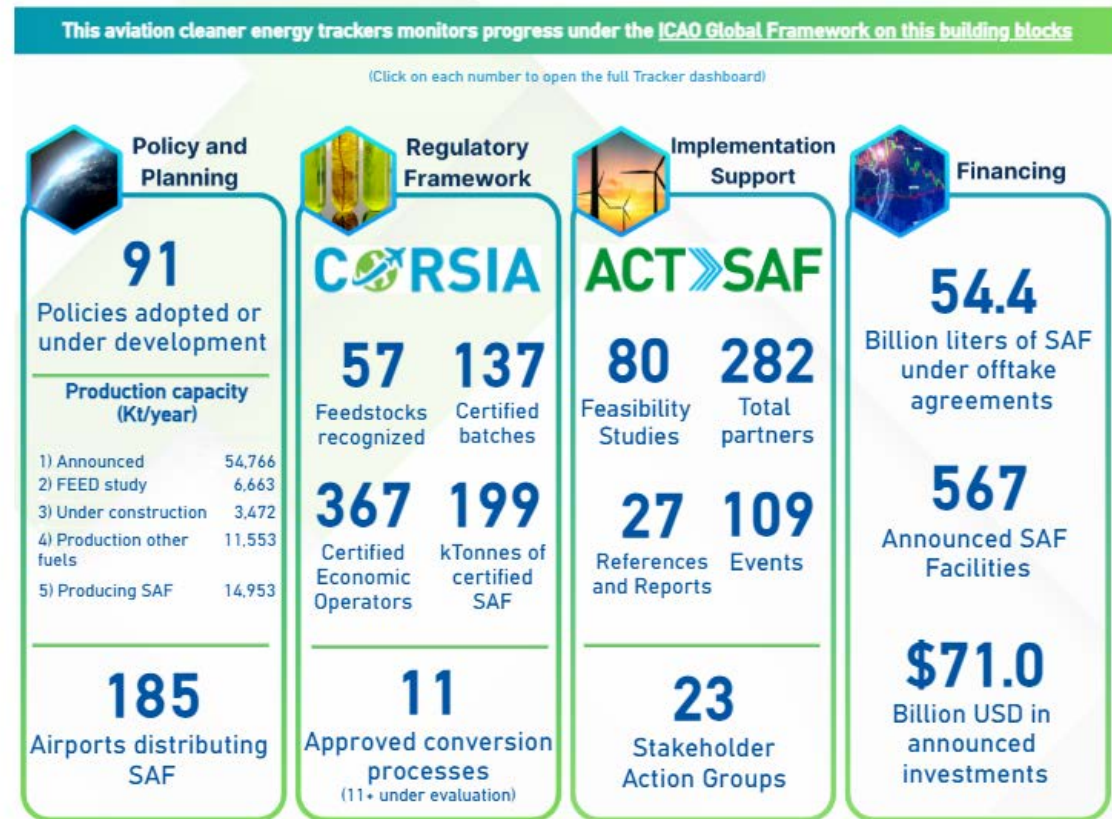
- Adopted at the third ICAO Conference on Aviation and Alternative Fuels (CAAF/3) in November 2023
- **Collective Vision** to reduce **5% CO₂** by **2030** in international aviation using SAF, LCAF and other aviation cleaner energies
- Requires **~23 million tonnes (Mt)** of cleaner energies use by 2030

ICAO Cleaner Energy Tracker Tools



ICAO adopted a Vision to reduce CO₂ emissions in international aviation by **5 per cent by 2030** through the use of SAF, LCAF, and other aviation cleaner energies

This requires **23 million tonnes (Mt)** of cleaner energies use in international aviation on 2030
(source: LTAG report data)





Sustainable Aviation Fuels – ACT SAF Programme

>280 ACT-SAF partners

24 ACT SAF Series training sessions concluded

33 SAF feasibility studies now

50 studies by 2028

1 ACT SAF Accelerator project – sustainability certification in line with CORSIA requirements



ACT-SAF disclaimer (click here). For comments or questions, please contact the ICAO Environment Office by email: officeenv@icao.int



Sustainable Aviation Fuels in EUR/NAT



+ 10 compared to 2024



26 States joined ACT SAF in 2025

56 States

6 EUR/NAT States, EU, and Airbus are ACT SAF contributors

ACT-SAF is an ICAO initiative to facilitate the development and deployment of SAF

Tailored support for States

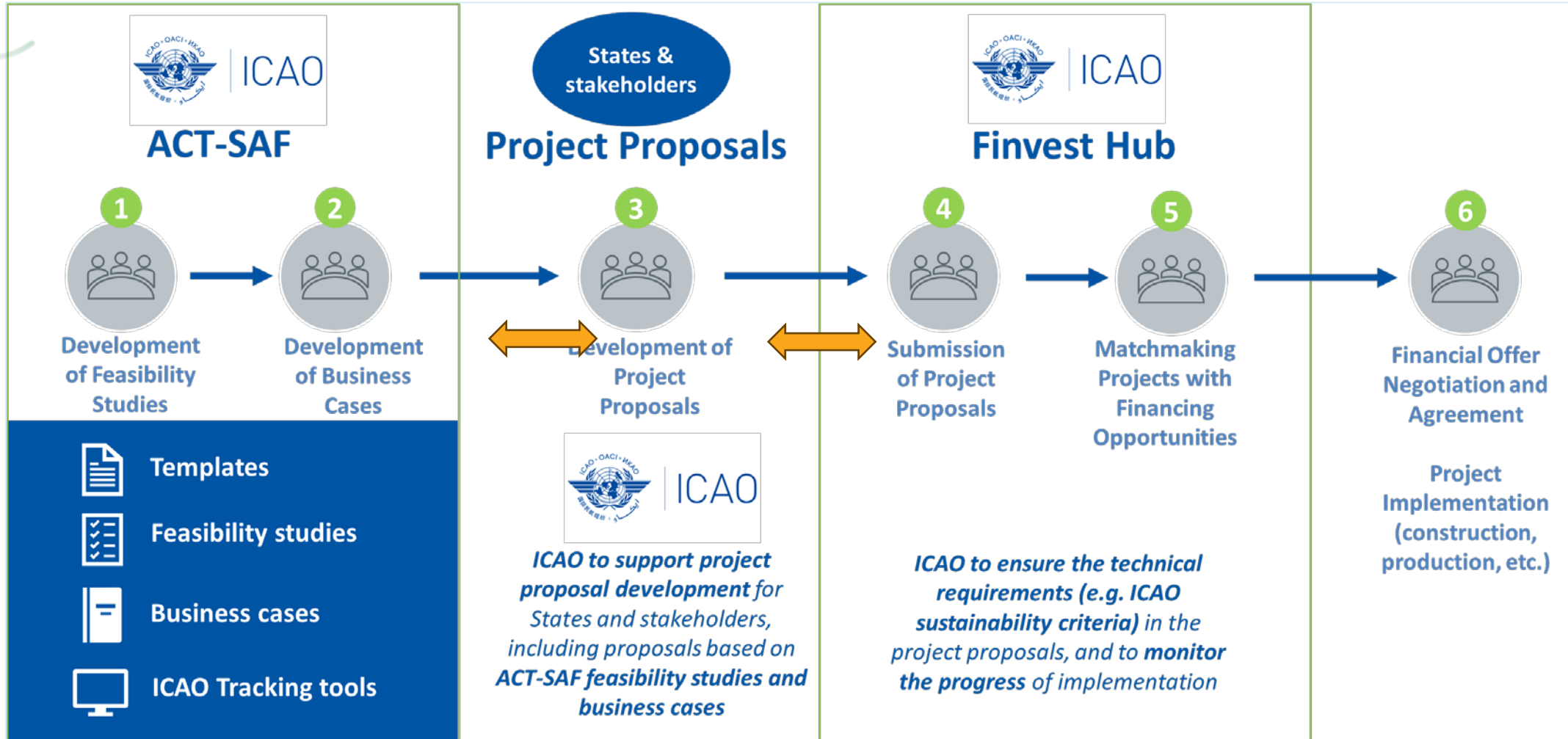
Facilitate cooperation under ICAO coordination

platform to facilitate knowledge sharing and progress monitoring



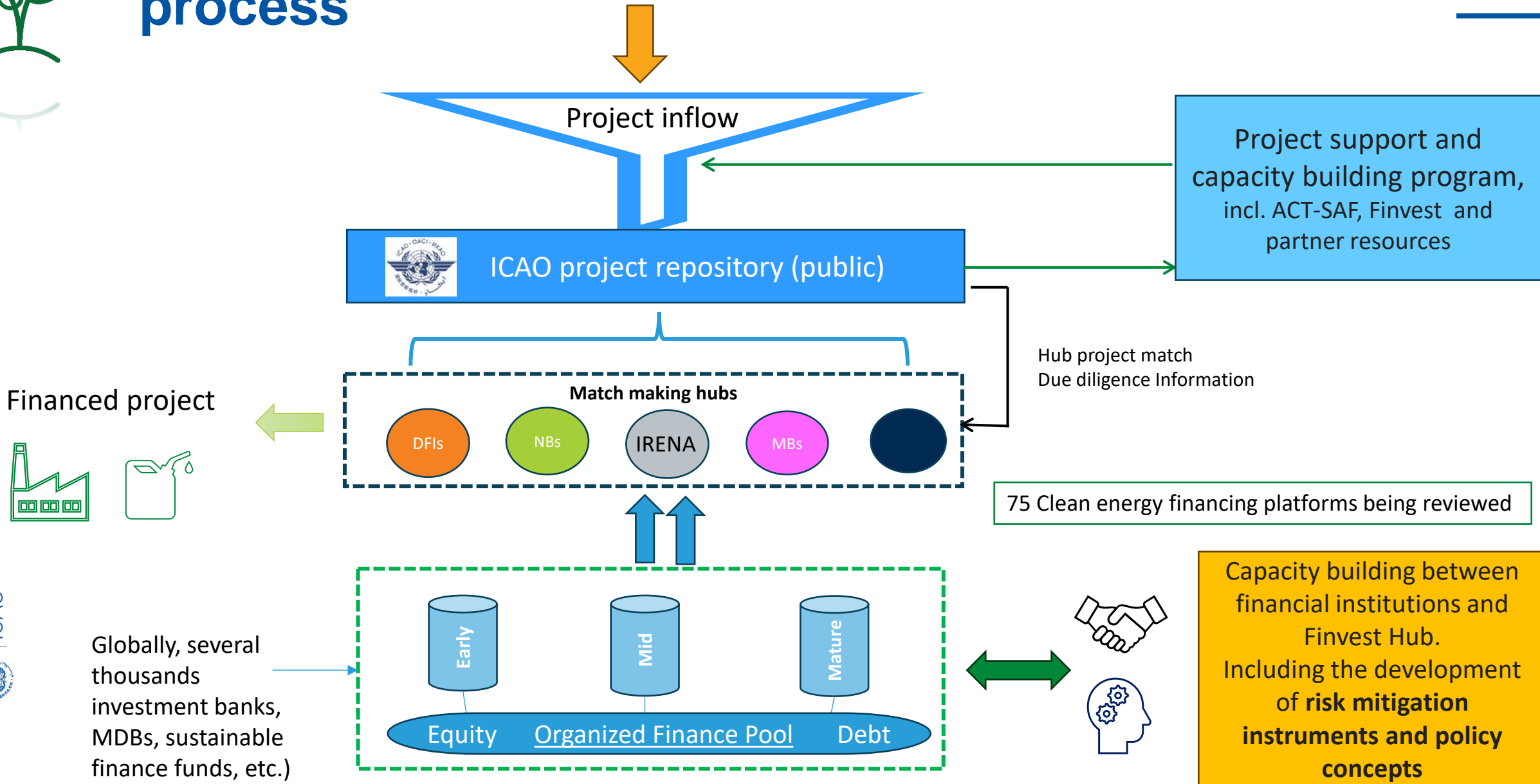


ICAO SAF development support framework





Conceptual operation of the Fininvest match-making process





ICAO ACT-LTAG programme for CO2 Mitigation

Basket of CO₂ Mitigation Measures

ICAO Global Implementation Roadmaps

ICAO ACT-LTAG Programme and State Action Plans (SAPs)



Aircraft technologies

Operational Improvements

SAF, LCAF and other Aviation Cleaner Energies

Additional Measures (e.g. CORSIA)

- ICAO Standardization Roadmap
- CAEP Technology Goals and Standards

- ICAO Global Air Navigation Plan (GANP)
- CAEP Operational Goals and Guidance

ICAO ACT-SAF programme to support Roadmap for CAAF/3 Global Framework implementation

ICAO ACT-CORSIA programme to support CORSIA SARPs implementation (up to 2035 for CNG goal)

Strengthen support for the development, update and implementation of

State Action Plans on aviation CO₂ reductions to contribute to LTAG

in collaboration with regional initiatives and platforms

(Resolution A42-21, para 22)



KNOWLEDGE SHARING



TRAINING SERIES



SEMINARS AND WORKSHOPS



GUIDANCE AND TOOLS



SUPPORT STUDIES, POLICES, PROJECTS



PARTNERSHIPS



JOINT SAP



FACILITATE ACCESS TO FINANCE



SUPPORT LTAG MONITORING

Climate Adaptation – ICAO to support the development of climate change adaptation plans by States (Resolution A42-21, para 32, 33, 36)



ICAO Capacity Building Activities

The EUR/NAT Office carries out a number of capacity-building and assistance activities. These assistance activities are most often related to the ICAO State Action Plan Initiative, CORSIA and support the new programme related to Sustainable Aviation Fuels ACT-SAF.

Regular meetings of ENV TF since its establishment in 2018 and support to other regions

Capacity building activities

ENV Task Force meetings

Virtual and face to face meetings SAPs, CORSIA, promote ACT SAF, ENV Tools, etc.

Support partnerships with France and Germany



Collaboration with other organizations

ACAO, ACI EUROPE, EASA ECAC, EUROCONTROL



ICAO Capacity Building Activities

Environmental Protection Meetings and Events

ACT CORSIA – France and Canada – 2 webinars	2026
ACT CORSIA – EUR States – Germany – 3 webinars	2026
ENV TF webinar on FINVEST	March 2026
ENV TF webinar on CORSIA Order of Magnitude Check	May 2026
ENV TF webinar on CORSIA Eligible Emissions Units and Letter of Authorization (LOA)	September 2026
ENV TF webinar on non CO2	June 2026
ENV TF meeting with MID Office and ACAO on SAF	September 2026
ENV Task Force meeting in Tashkent, Uzbekistan	7-9 October 2026
ENV Webinars for the WACAF Region and 1 event in Rwanda	2026
Assistance missions– Egypt (Syria and Libya);	2026
Outreach activities – Regional Director	States Visits





Draft EUR/NAT-DGCA Conclusion 2026/#–State Action Plans and CORSIA

That the ICAO Regional Director, Europe and North Atlantic, encourage EUR/NAT States to:

- a) develop or update, as needed, their quantified State Action Plans (SAP) on CO₂ Emissions Reduction Activities in line with the provisions of the ICAO Guidance on the Development of States' Action Plans on CO₂ Emissions Reduction Activities (ICAO Doc 9988 4rth edition) as a mean to measure the global progress toward the ICAO environmental goals including the LTAG, and to contact the ICAO EUR/NAT Regional Office for any assistance needed in the preparation, submission, and implementation of their SAP and related mitigation measures;
- b) **join CORSIA and** notify ICAO accordingly (by 30 June 2026 for voluntary participation starting from 1 January 2027), to **submit the 2025 CO₂ emissions data** by 31 July 2026 and participate—either as donor or beneficiary States—in ICAO ACT-CORSIA capacity-building activities, including the CORSIA Buddy Partnerships;
- c) continue engaging with relevant national authorities to expedite the issuance of **Letters of Authorization for CORSIA eligible emissions units.**



Draft EUR/NAT-DGCA Conclusion 2026/#–ICAO ACT SAF

That the ICAO Regional Director, Europe and North Atlantic, encourage EUR/NAT States and Organizations active in the EUR/NAT Area to:

- a) join, as supporting or beneficiary States, the **ICAO ACT SAF** - Assistance, Capacity-building and Training for Sustainable Aviation Fuels programme by signing the Terms and Conditions available on the ICAO website;
- b) for States having joined ACT-SAF, take actions to invite in relevant activities, such as webinars, representatives and experts from ministries in charge of energy and environment, as well as oil and gas companies;
- c) **inform the ICAO EUR/NAT Regional Office of any ongoing or planned activities related to SAF**, including feasibility studies and capacity-building initiatives.



Draft EUR/NAT-DGCA Conclusion 2026/#-LTAG

That the ICAO Regional Director, Europe and North Atlantic:

Encourage EUR/NAT States and Organizations to note the information on the ACT-LTAG structure as a mean to support progress across all elements of the ICAO baskets of measures to reduce CO2 emissions from international aviation.

Thank You

