



| ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY





ICAO

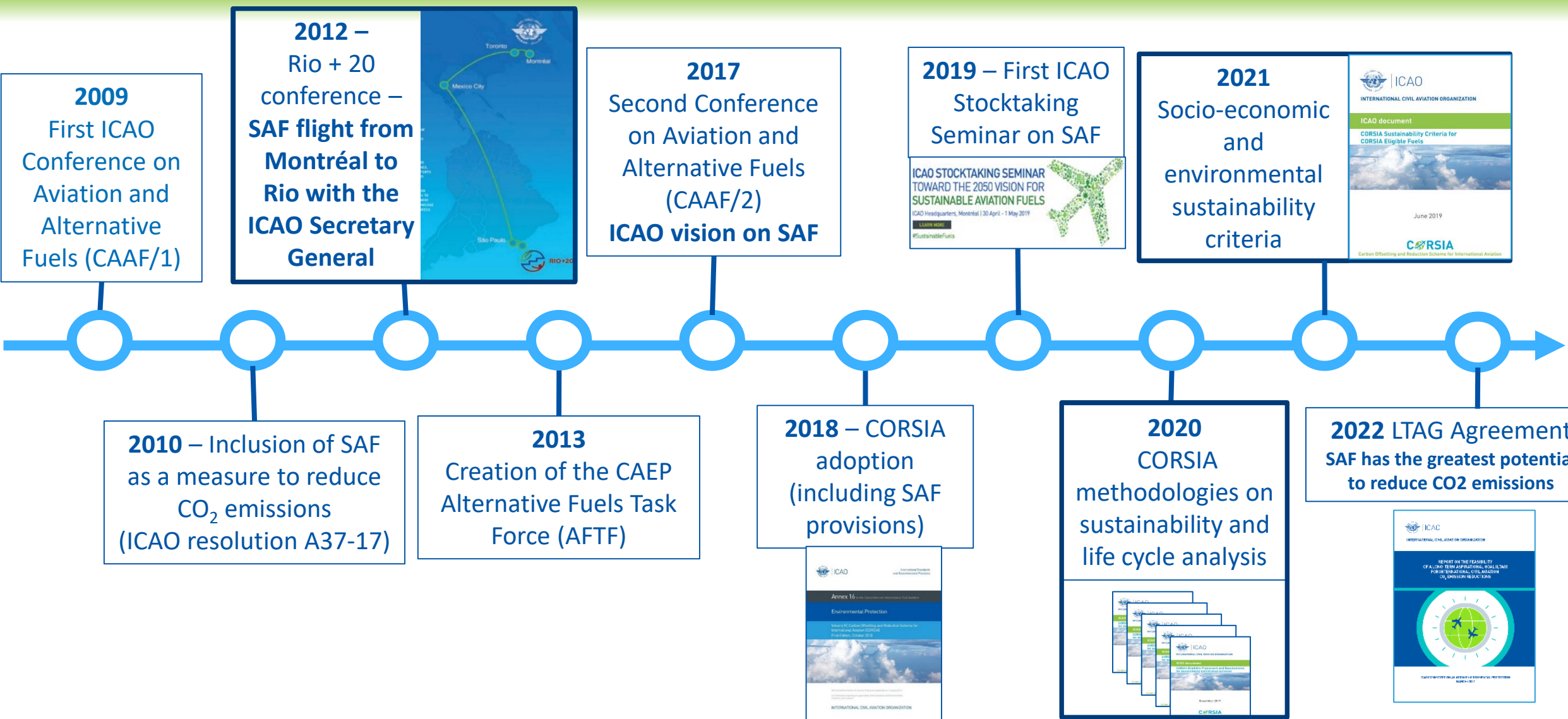
ENVIRONMENT

Developments in ACT-SAF SAF as a key future element of State Action Plans Road towards ICAO CAAF/3





ICAO action on Sustainable Aviation Fuels (SAF)





I. Updates on ACT-SAF





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>





What is ICAO ACT-SAF?

- An ICAO initiative to facilitate the development and deployment of SAF
- Tailored support for States
- Facilitate cooperation under ICAO coordination
- A Platform to facilitate knowledge sharing and progress monitoring



Why ICAO ACT-SAF programme?

- Builds on existing ICAO “ACT” experience, through partnerships and cooperation amongst States
- ICAO LTAG report foresees largest CO2 reductions coming from fuels/cleaner energy sources
- Need for immediate action to fully realize SAF potentials

ACT-SAF website provides the details on ACT-SAF participation and initiatives

85 States

Acceptance to ... ● Pending ● Yes

45 Organizations

Acceptance T&C ● (Vide) ● Pending ● Yes

Latest news (click for details)

Date ▾	Link
5 juil. 2023	Australia's Government Pledges AU\$30M for SAF Growth
30 juin 2023	Korean Air partners with GS Caltex to test sustainable aviation fuel
29 juin 2023	Virgin and Boeing join up for sustainable aviation fuel partnership
22 juin 2023	Sasol and Topsoe plan sustainable aviation fuel venture
20 juin 2023	Boeing Launches SAF Dashboard to Track and Project Sustainable Aviation Fuel Production
20 juin 2023	Manitoba n fuel facility
19 juin 2023	Twelve a m CO2 in





How does ACT-SAF work

1) Interested party* expresses interest in becoming an ACT-SAF Partner	2) ICAO coordinates with the interested party to detail the offers and requests, and suggest possible projects	3) ICAO connects ACT-SAF Participants	4) Agreement is signed and projects defined
<p>Supporting State / Organization can participate by providing experts and/or resources</p> <p>Requesting State can participate by providing a focal point for coordination</p>	<p>Possible projects:</p> <ul style="list-style-type: none"> • Feasibility Studies • Training programmes • Support for SAF certification • Support for Policy implementation 	<p>Criteria for connection:</p> <ul style="list-style-type: none"> • Matching expertise • Language, cultural and geographical aspects • Resources availability 	<p>Agreement will contain:</p> <p>Details on the cooperation terms, including the roles and responsibilities of ICAO and each participant</p>

HOW DOES ACT-SAF WORK

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

Deployment of ACT-SAF activities

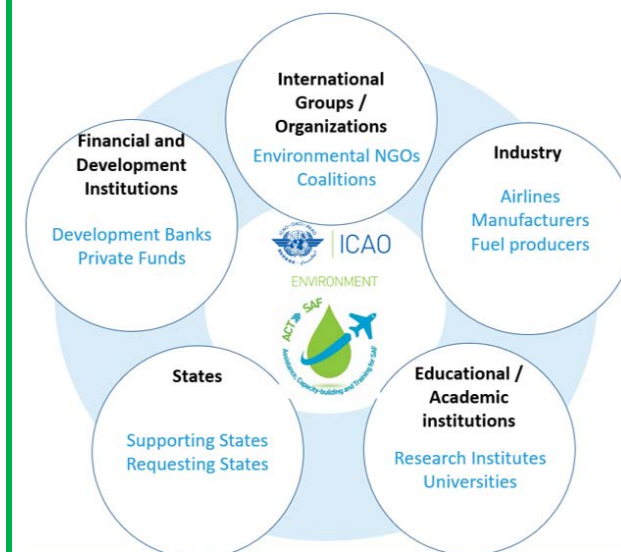
- Coordination calls with States to assess needs and offers
- **ACT-SAF Series** on a monthly basis
- Preparations to launch **feasibility studies**
- Development of ICAO **template for feasibility studies**
- Inception of **ACT-SAF Platform** on monitoring and reporting of SAF

Connection with financing institutions

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

Ongoing

Facilitate the matching of needs and opportunities between States and industry



Replay the trainings on the ACT-SAF website

- Technical training on SAF is a key request of States under ACT-SAF
- The “ACT-SAF Series” provides ACT-SAF Partners with trainings on various key technical aspects of SAF
 - 5 trainings have taken place (Introduction to SAF, Sustainability and reporting under CORSIA, SAF technology and certification, SAF policies)
 - Several additional trainings are coming up: SAF economics and financing, SAF Market Outlook, SAF logistics, SAF feasibility assessment. And more!
 - ACT-SAF partners participate live and can directly ask questions and have feedback

ACT-SAF Series	Date	Topics	Contributor(s)	Abstract	Video and Presentation
#1	25 November 2022	An introduction to SAF	ICAO	<ul style="list-style-type: none"> Introduction to ACT-SAF Basics of SAF 	 Download Presentation
#2	25 January 2023	SAF sustainability and reporting under CORSIA	ISCC, RSB, Verifavia	<ul style="list-style-type: none"> process for sustainability certification of SAF Reporting and verification of SAF Claims under CORSIA 	 Download Presentation
#3	23 February 2023	SAF technology and certification	Airbus, US FAA, Safran	<ul style="list-style-type: none"> specifications for aviation turbine fuels process for approval for new production pathways 	 Download Presentation
#4	23 March 2023	SAF policies	Brazil, European Commission, France, Japan, Singapore, United Arab Emirates, United States	<ul style="list-style-type: none"> Practical experiences from States that are developing a policy for SAF Sharing of 	 Download Presentation



Introduction to SAF
Nov/2022



SAF sustainability and reporting under CORSIA
Jan/2023



SAF technology & certification
Feb/2023



SAF policies
Mar/2023



SAF Conversion processes
Aug/2023



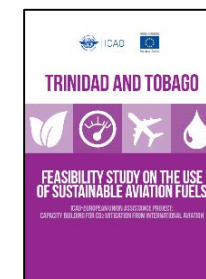
SAF accounting and book and claim systems
Oct. 2023 tbc



SAF feasibility assessment
tbc

Feasibility studies are the first step to assessing the SAF potential in a State

- Four successful feasibility studies previously developed under an ICAO-EU project
- Many feasibility studies will be developed in the ACT-SAF programme
 - Three new SAF feasibility studies under the existing ICAO-EU project (Cote d'Ivoire, Rwanda, Zimbabwe)
 - European Commission announced 1.6 million euros for SAF feasibility studies under ACT-SAF.
 - Several SAF feasibility studies will be conducted thanks to funds from France and the Netherlands.
 - ICAO and World Bank project being structured
 - Studies also being pursued by other ACT-SAF partners (e.g. US)



Capacity Building for SAF eligible under CORSIA and in support of achieving net zero emissions by 2050

- The project involves 10 partner states: Cameroon, Egypt, Equatorial Guinea, Ethiopia, Gabon, India, Mauritania, Mozambique, Senegal and South Africa.
- SAF feasibility studies to be conducted in 10 States (India and Africa)



ICAO has developed a template for SAF Feasibility Studies



- Ensure coherence across studies, increased quality
- Harmonized structure (more practical/quantitative)
- Ensure alignment with ICAO's methodologies and guidance
- Include information relevant to facilitate financing
- Facilitate outreach of results of the studies

- ICAO consulted more than 100 ACT-SAF Partners on the draft template by end of May
- Very useful feedback received, to be consolidated in the final version.

ICAO is connecting with financial institutions across all regions 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 needed** 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.

- Since September 2022, ICAO has organised workshops and initial discussions with 35 public and private financing institutions and foundations
 - 13 public institutions: Brazil Development Bank (BNDES), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Emirates Development Bank (EDB), Arab Bank for Economic Development in Africa (BADEA), Asian Development Bank (ADB), World Bank, Green Climate Fund (GCF), Caribbean Development Bank (CDB), Asian Infrastructure Investment Bank, European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), Finance Lab (Climate Policy Initiative), UNEP Financing Initiative (UNEP FI).
 - 18 private investment institutions: SmartEnergy, ING Group, Green Investment Group, The Arab Investment & Export Credit Guarantee Corporation (Dhaman), Genzero, Deutsche Bank, Investor Group on Climate Change, Banque de Montreal (BMO), First Abu Dhabi Bank (FAB), Hamilton Clark and Breakthrough Energy, Barclays, ING, Societe Generale, Credit Agricole, BNP Paribas, KWF, Standard Chartered.
 - 1 foundation: ClimateWorks Foundation.
- On March 28th 2023, the Council held an informal meeting with high-level representatives from international financing institutions.



The ACT-SAF Programme is open to all interested parties in supporting the programme.

To become a partner, the interested party shall accept the Terms and Conditions on the ICAO website.

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.

docs.google.com/forms/d/e/1FAIpQLSf28JBcRZNR9Xdj-LGB4XCZuhfwfIBSmsl9zjqeBGz5fGoUZA/viewform

1. Abbreviations and Definitions

1.1 In this document, unless the context otherwise requires, the following words or abbreviations shall have the corresponding meanings indicated below:

ACT-SAF ICAO's Assistance, Capacity-building and Training for Sustainable Aviation Fuels Programme

ENV ICAO's Office of Environment, a branch of the Air Transport Bureau (ATB)

ICAO The International Civil Aviation Organization, with Headquarters at 999 Robert- Bourassa Boulevard, Montréal, Quebec, Canada, H3C 5H7.

Partner An entity (State, Organization, or Institution) that has accepted the Terms and Conditions of the ACT-SAF in order to participate in the activities envisaged in the programme either as a supporting Entity or as a Requesting State.

Requesting State A Partner State that requests or receives support under the ACT-SAF Programme

SAF Sustainable Aviation Fuels

Supporting Entity A Partner entity that provides resources for the ACT-SAF Programme

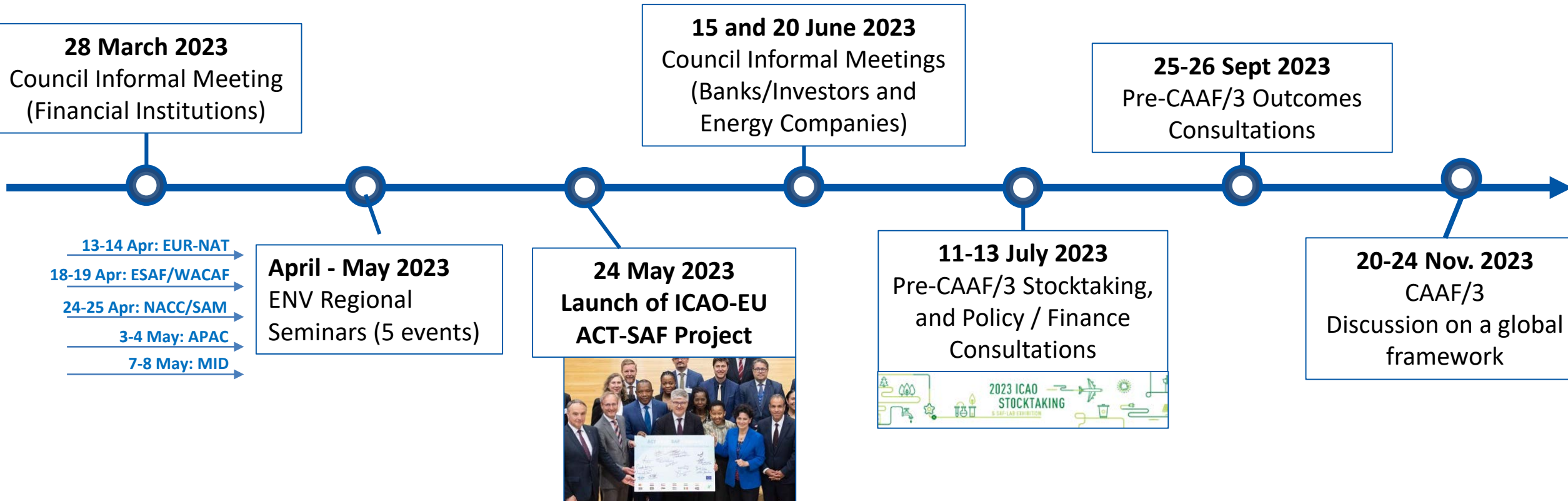


ICAO CAAF/3 process and timeline





ICAO CAAF/3 PROCESS AND TIMELINE





ICAO

ENVIRONMENT



ICAO

North American
Central American
and Caribbean
(NACC) Office
Mexico City

South American
(SAM) Office
Lima

ICAO
Headquarters
Montréal

Western and
Central African
(WACAF) Office
Dakar

European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU