



Jane Hupe

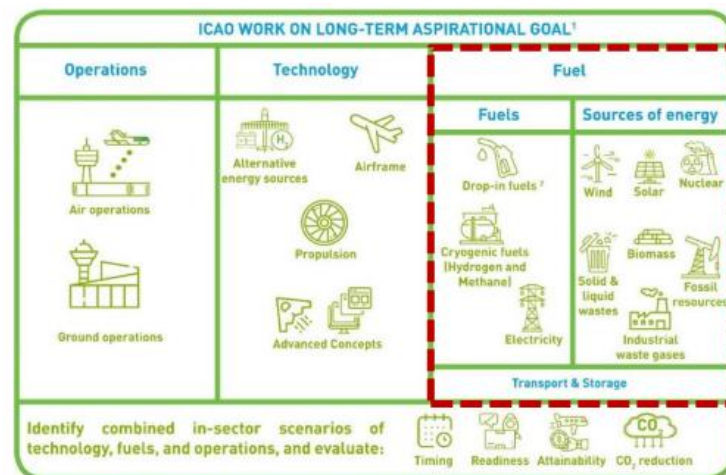
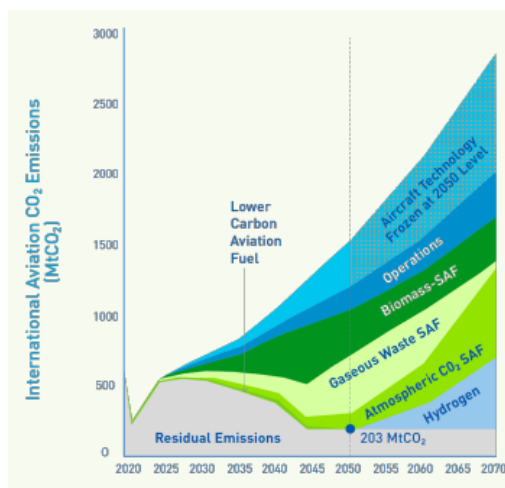
Deputy Director, Environment
International Civil Aviation Organization (ICAO)

Assistance, Capacity-building, and Training on SAF:
ACT-SAF





SAF is crucial to the achievement of LTAG



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



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

**Collective
Vision**



**Regulatory
Foundation**



**Implementation
Initiatives**



**Facilitate
Financing**





CAAF/3 Global Framework for SAF, LCAF, and other Aviation Cleaner Energies

Policy and Planning	Regulatory Framework	Implementation Support	Financing
• Global aspirational Vision to reduce international aviation CO₂ emissions by 5% by 2030 • Each State's special circumstances and respective capabilities • CAAF/4 no later than 2028, with a view to update Vision • Collaborative effort across different stakeholders, and encourage State policies, action plans and roadmaps • Implementation monitored and periodically reviewed	• CORSIA eligibility framework as accepted basis for SAF, LCAF and other aviation cleaner energy • Increase the number of SCS, additional fuel production pathways / life-cycle values • Parameters for fuel accounting methodologies, leveraging on CORSIA MRV system • Study of fuel accounting systems to determine any possible ICAO role	• Robust, targeted and tailored capacity -building and implementation support • Building on ACT-COSIA and ACT-SAF programmes • Facilitate partnerships, and exchange of best practices • Develop policy toolkit/guidance and support State Action Plans • Support feasibility studies, pilot projects, which may facilitate access to investment • Support access to technology	• Advocacy and outreach for greater investment in aviation cleaner energy projects, including UN and international financial community. • Welcome and request for operationalization of ICAO Finvest Hub to facilitate better access to public fund / private investment, to respond to Resolution A41-21, para 18. a) • Expedite work to consider the establishment of a climate finance initiative or funding mechanism under ICAO, to respond to A41-21, para 18. b)



Collective global aspirational Vision
to reduce CO2 emissions in international aviation by
5 % by 2030, through aviation cleaner energy use



Each State's special circumstances and respective capability will inform
its ability to contribute to the Vision

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Introduction to ACT-SAF

ACT-SAF launched on 1 June 2022 as ICAO's associated event for the UN Stockholm+50 Conference

- Builds on existing ICAO 'ACT' experience, through **partnerships and cooperation**
- **Welcomed** and **requested** by 41st Assembly (A41-21, para 18)
- Referenced in CAAF/3 Global Framework, **Building Blocks – Implementation Support, and Financing**
- In line with ICAO No Country Left Behind initiative

What does the ACT-SAF programme do?

- Creates **opportunities for States to develop full potential** in SAF development and deployment
- **Tailored support** for States in various stages of SAF development
- **Facilitate partnerships and cooperation**
- **Foster knowledge sharing** and recognition of SAF initiatives around the world





Overview of ACT-SAF initiatives

A wide scope of initiatives
under ACT-SAF
programme, aligned with
ICAO Global Framework for
SAF, LCAF, and other
Aviation Cleaner Energies –
Building Block 3



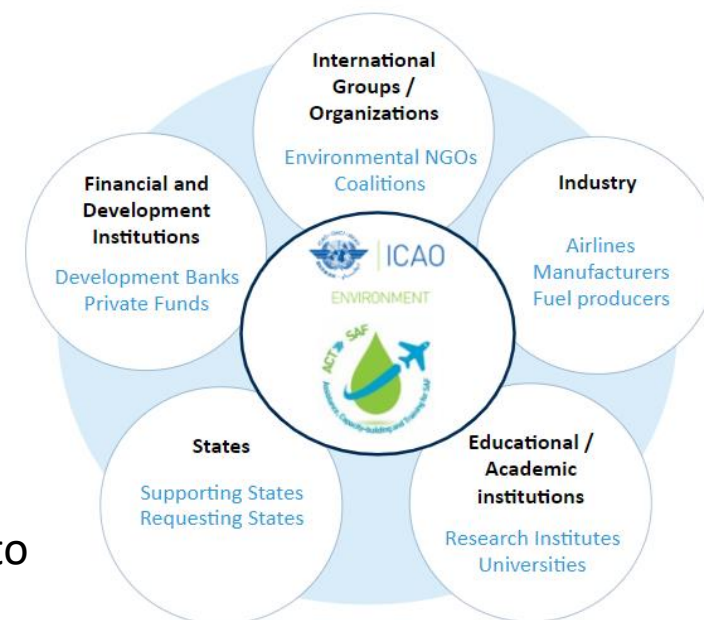
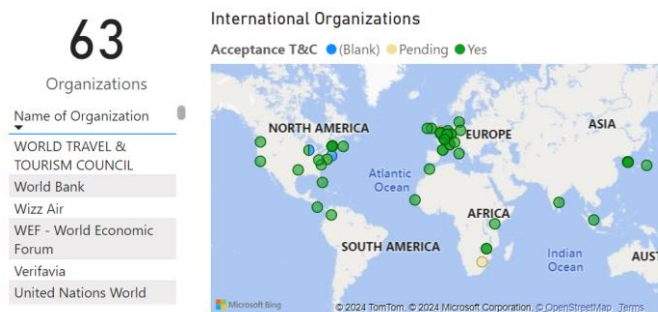


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ACT-SAF partners

More than 150 States and Organizations have become ACT-SAF partners



How to become an ACT-SAF partner?

- ICAO issued State Letter ENV 9/1 – 22/56 (May 2022), inviting States to participate
- Participation from States, academia, aviation industry, financial institutions, civil society organizations, etc. is welcomed
- Becoming partner by agreeing to the **ACT-SAF Terms and Conditions**



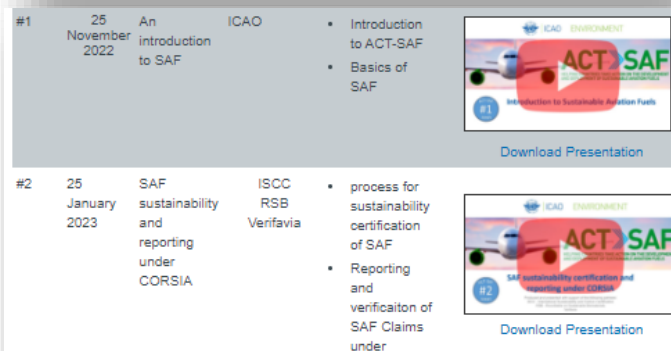
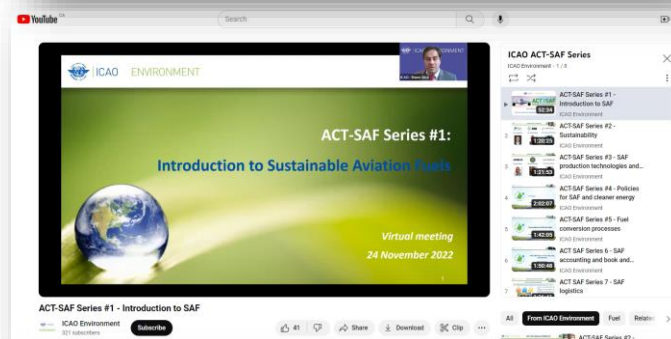
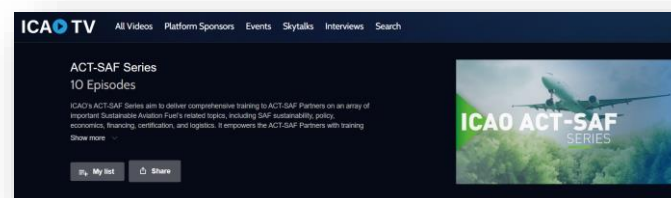
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ACT-SAF training series

ACT-SAF series offers comprehensive training to partners on an array of important SAF-related topics

- Online training supported by experts from States and Organizations
- Partners benefit from immediate interactions with speakers, Q&A
- Ten sessions have been completed – more than 100 participants per session
- Training materials available in ICAO TV, YouTube, and the ICAO ACT-SAF website



ACT-SAF Series

- #1 Introduction to SAF
- #2 SAF sustainability and reporting under CORSIA
- #3 SAF production technology and certification
- #4 SAF policies
- #5 SAF conversion processes
- #6 SAF accounting and Book and Claim systems
- #7 SAF logistics
- #8 Launch of the 2024 ACT-SAF Season
- #9 Green Hydrogen for Aviation
- #10 ICAO methodologies and tools for life cycle assessment
- #11 Implementing the ICAO Global Framework – step-by-step examples of SAF policymaking (date TBD)



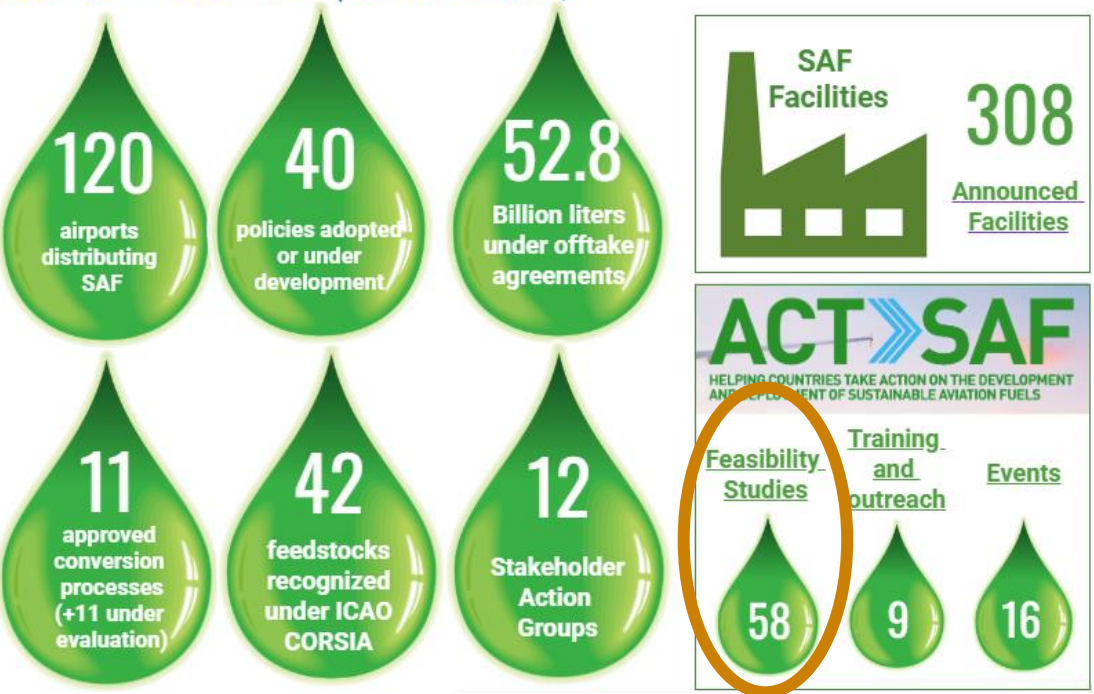
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ICAO ACT-SAF platform

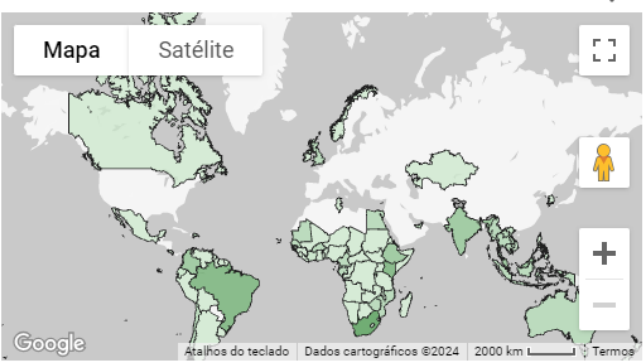
ACT-SAF platform and tracking tools to monitor progress and facilitate information exchange:

ICAO SAF Tracker tools (click for details)



Feasibility Studies
58

	Supported State	Number of initiatives
1.	South Africa	5
2.	Kenya	4
3.	Brazil	4
4.	Rwanda	3



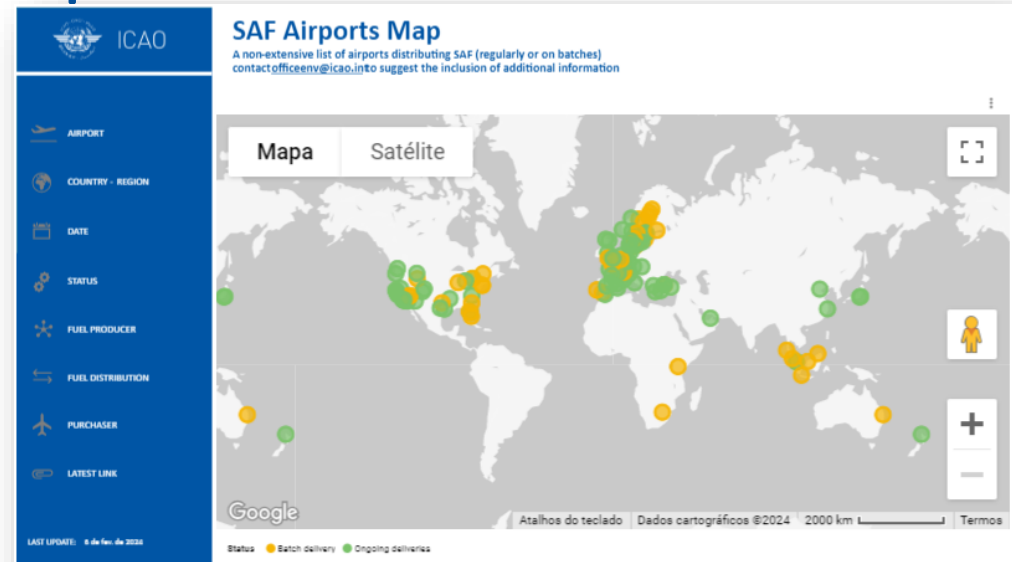
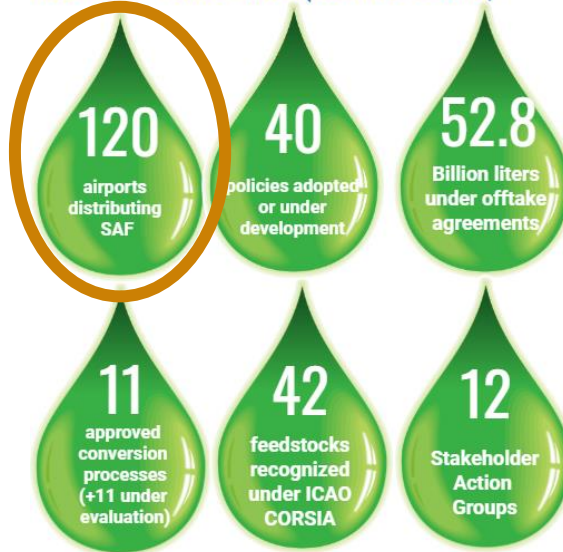
Supported State/Region	Year	Supporting / Developing Organizations	Title and hyperlink	Details	Status
Australia	2023	Boeing / CSIRO Futures and Towards Net Zero	Sustainable Aviation Fuel Roadmap	CSIRO Futures and the Toward Net Zero Mission are collaborating with Boeing to develop a roadmap for cost-effective production of SAF. CSIRO is developing a range of tools and systems for optimising biomass production as well as fuel processing technologies.	concluded
Australia	2013	Qantas, Shell / Sinclair Knight Merz (SKM), AltAir, the Australian Research Council (ARC) Centre of Excellence in Plant Cell Walls at the University of Adelaide and SkyNRG	A feasibility study of Australian feedstock and production capacity to produce sustainable aviation fuel	the project partners focused exclusively on the production of SAF from the HEFA pathway. To augment understanding of the production of SAF from the certified Fischer Tropsch (FT) pathway, Qantas – independent of the main study partners – commissioned Solena to provide industry insights.	concluded
Brazil	2013	Boeing/Embraer/ FAPESP and UNICAMP / Boeing/Embraer/ FAPESP and UNICAMP	Flightpath to Aviation Biofuels in Brazil: Action Plan	Report on a national assessment of the technological, economic and sustainability challenges and opportunities associated with the development and commercialization of sustainable biofuel for aviation in Brazil.	Concluded

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ICAO ACT-SAF platform

ICAO SAF Tracker tools (click for details)



Airport	Status	Source	Date
1. Schiphol Airport	Ongoing deliveries	https://biofuelscent...	6 de fev. de...
2. Scottsdale Airport	Ongoing deliveries	https://www.safinve...	23 de dez. ...
3. Bozeman Yellowstone International Airport	Ongoing deliveries	https://www.safinve...	23 de dez. ...
4. Phuket Airport	Batch delivery	https://biofuels-new...	15 de dez. ...
5. Grenoble Airport	Ongoing deliveries	https://biofuels-new...	13 de dez. ...

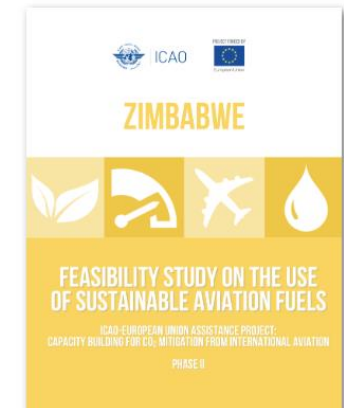
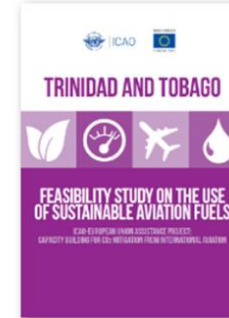
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SAF Feasibility studies

Feasibility studies provide recipient States with:

- Identification of priority SAF pathways, according to the State's circumstances
- Assessment of implementation support and financing needs
- Recommendation of an Action Plan aligned with the State's governmental policies related to SAF



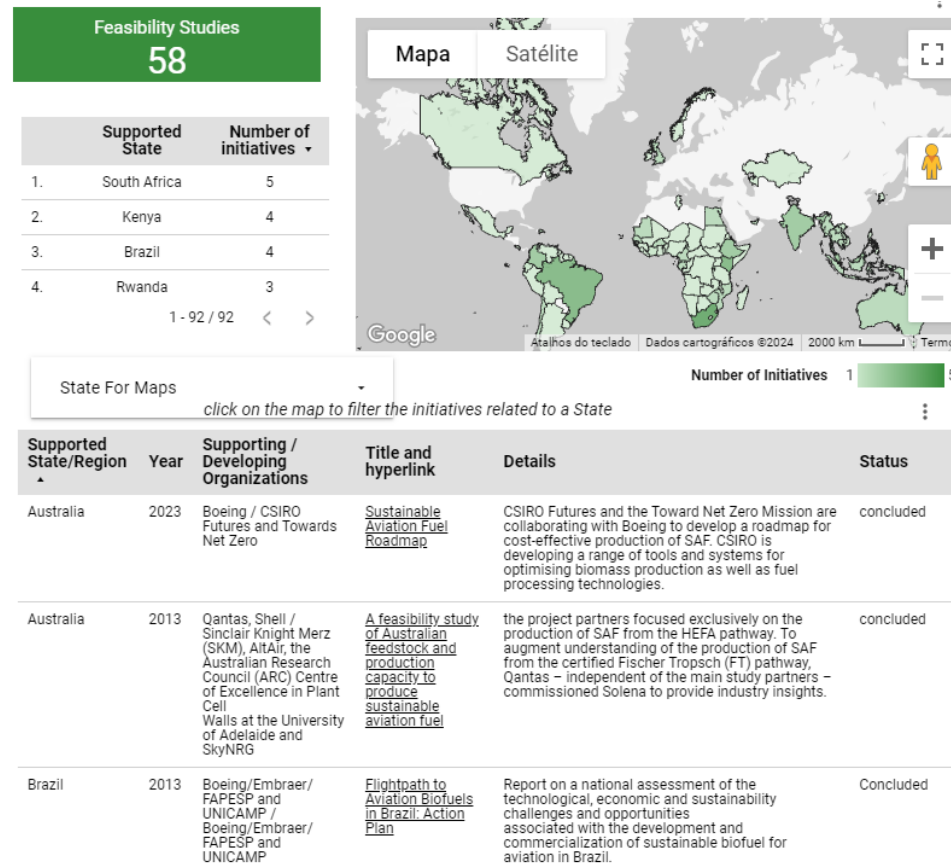
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SAF Feasibility studies

**20 SAF
feasibility
studies are to
be launched in
the upcoming
years under
ICAO ACT-SAF**

**58
Feasibility
Studies**



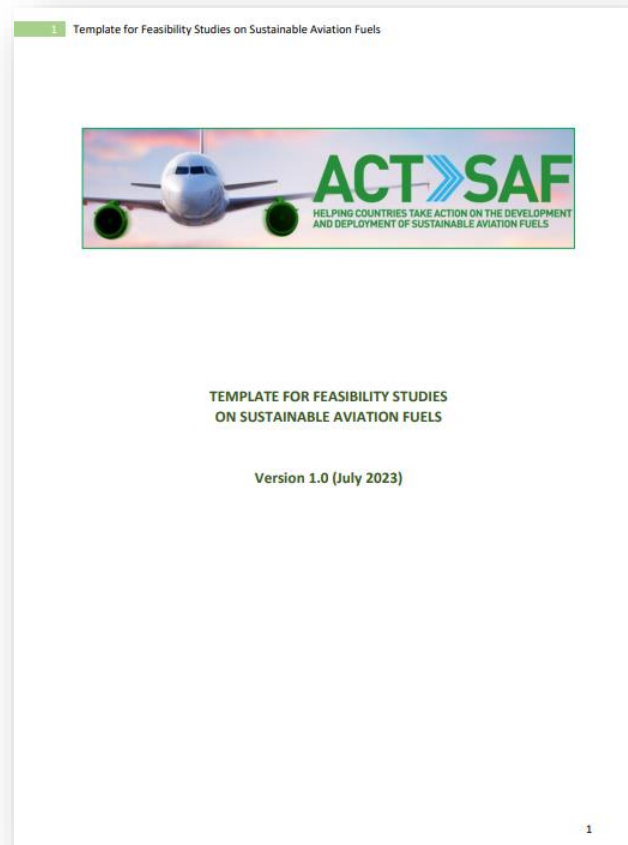
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Other ACT-SAF initiatives

ACT-SAF is deploying other activities:

- ACT-SAF Newsletter
- Template for Feasibility Studies
- Template for Business Implementation Studies (BIS)
- Deployment of BIS in Requesting States
- On-site training sessions for States





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ICAO Assistance, Capacity-building and Training for Sustainable Aviation Fuels (ICAO ACT-SAF)

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

90 States

States

Acceptance to ... Pending Yes

North America Europe Asia

Thank You

