



SAF Registry

# CADO SAF Registry

## Introduction

Kristyna Matoulkova  
SAF Registry Manager, IATA

Website (including login): [SAF Registry | CADO](#)  
Contact: [safregistry@cado.org](mailto:safregistry@cado.org)



# Facts about Sustainable Aviation Fuel (SAF)

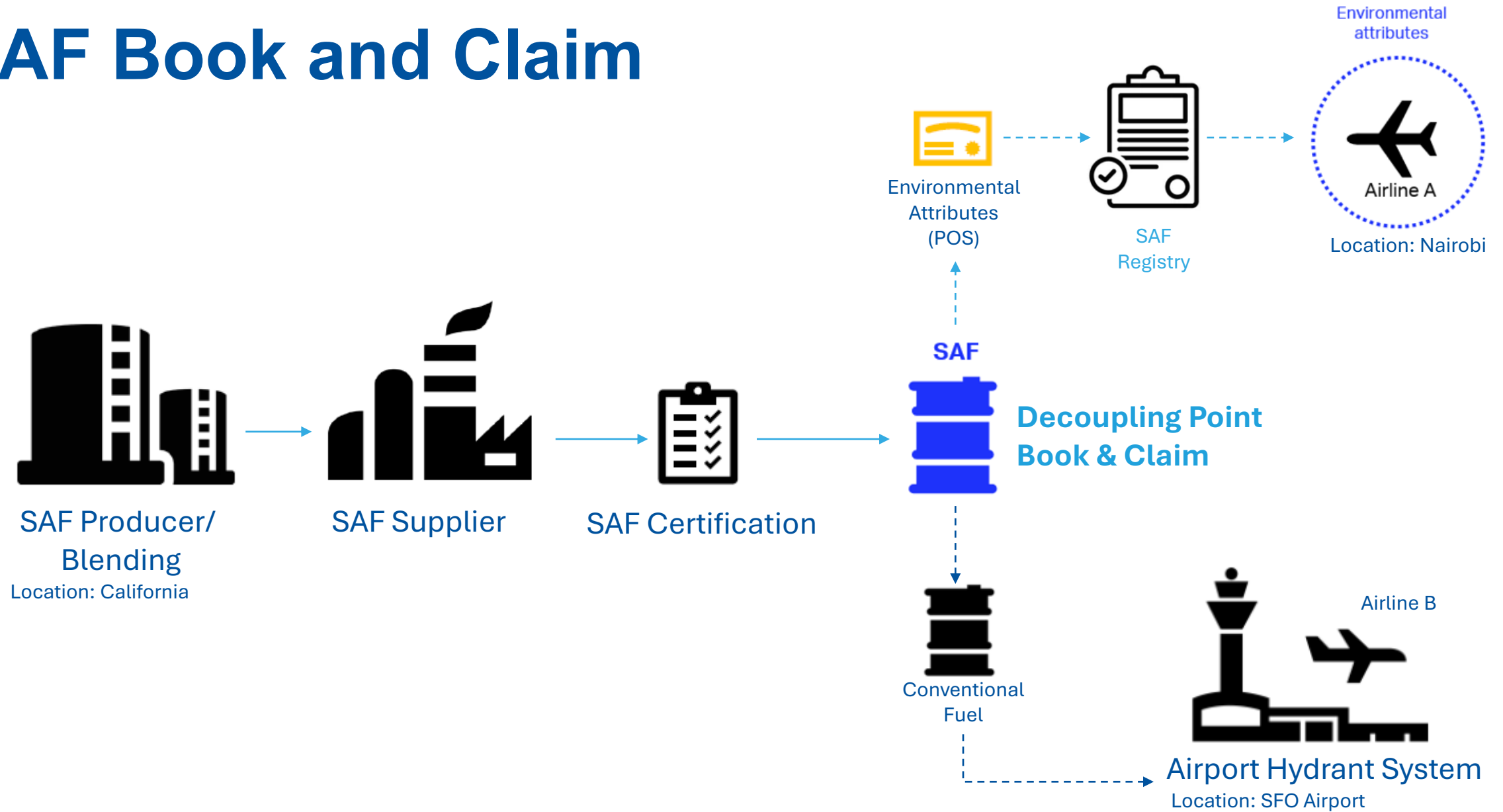
- **SAF** = low carbon alternative to conventional jet fuel produced from waste-derived or renewable feedstock
- Most significant decarbonization lever
- **Challenge:**
  - Insufficient supply not available in all geographical locations
  - High cost
- **Solution:**
  - Decouple physical SAF from its environmental attributes so that AO's and Corporates can claim the use of SAF without physically flying it (Book & Claim approach)
- The industry needs [a trusted SAF Accounting system that will transparently track and account for these SAF environmental attributes -> \*\*CADO SAF Registry\*\*](#)

# 65%

of aviation emissions expected to be abated using SAF by 2050

Source: IATA Net Zero Roadmaps

# SAF Book and Claim



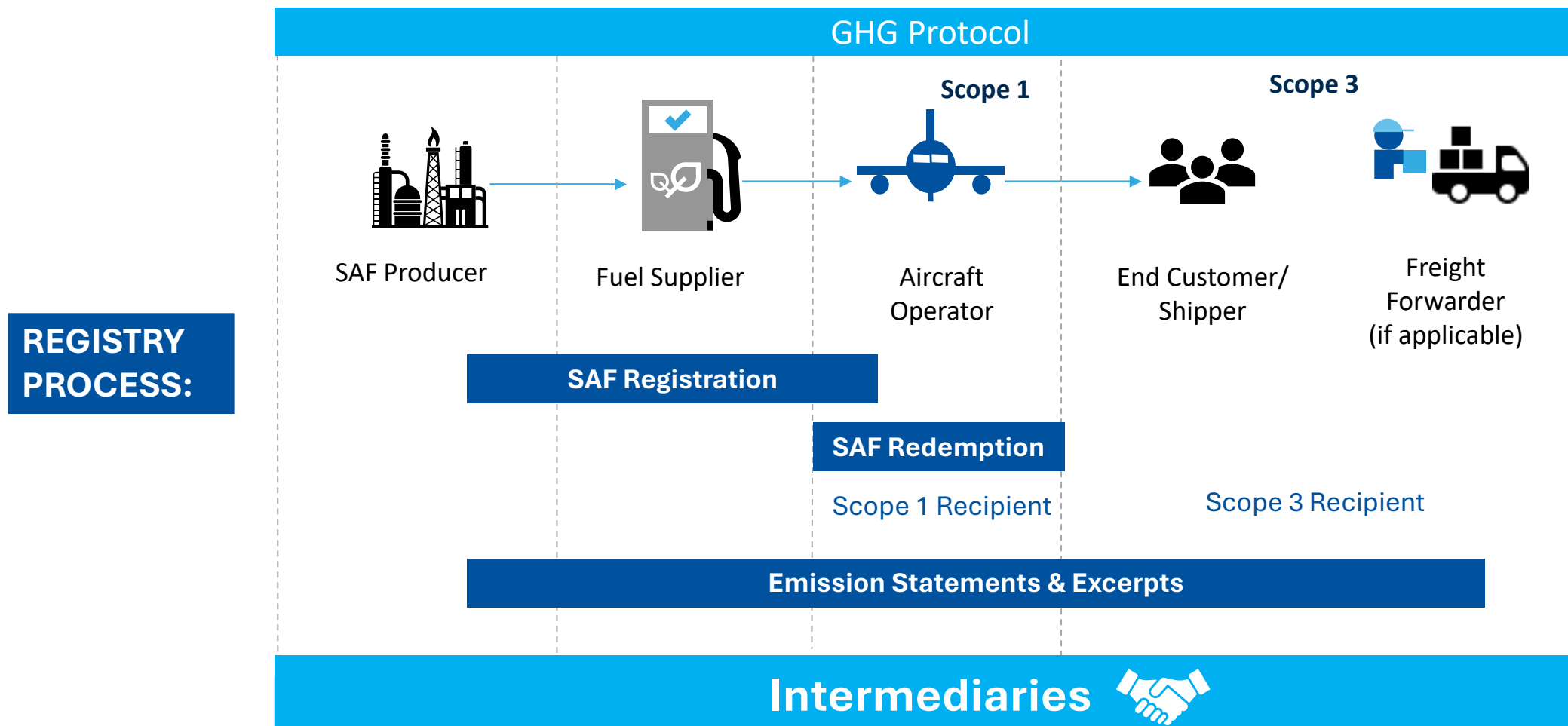
# What is the CADO SAF Registry?

- Enables 'Book and Claim' approach. Ensures immutable tracking, recording, transfer, and accounting of SAF
- Managed by Civil Aviation Decarbonization Organization ([CADO](#)) to ensure impartiality

## Design principles:

- Underpinned by [IATA Sustainable Aviation Fuel \(SAF\) Accounting & Reporting Methodology](#), which complements **ICAO SARPs**
- Follows the **natural SAF value chain** in accordance with the GHG Protocol philosophy – involves all stakeholders
- Ability to **support existing regulations (starting with CORSIA)** & enable authorities to verify compliance
- **Flexibility in SAF transactions** facilitates cost-sharing across the value chain
- **Minimize costs** and administrative burden throughout the SAF value chain
- **Interoperability** and coordinated data transfer with other registries to prevent double-counting

# Example of SAF transactions in the Registry



# User group benefits:

## Producers & Suppliers

- **Improved market connectivity**
- Simplification of the SAF registration process (parsing, register similar feature)
- Registration & transfer of environmental attributes (incl. option of predetermined Scope 3 allocation)
- Maintaining Scope 1 and Scope 3 attribution in accordance with the GHGP

## Corporate Customers

- **SAF investments possible where SAF is physically not available**
- Scope 3 allocation of emissions reductions from SAF
- Facilitates substantiation and recognition of mitigation action
- Flexible inventory screen to manage env. attributes
- Download of Emission Statements and Emissions Excerpts

## Aircraft Operators

- **SAF investments possible where SAF is physically not available**
- Facilitation of SAF co-investment by corp. customers
- No orphaned Scope 1
- Allocation of Scope 3 to specific companies or per pax/shipment
- Future enhancements:
  - Third-party verification of SAF claims (Q4 2025)
  - Claiming of environmental attributes under voluntary and mandatory schemes (Q1 2026)

## States

- Access to inventory with detailed overview of SAF redemptions by AOs in the state's jurisdiction
  - **Monitor SAF usage and uplift**
  - **Track progress to national SAF targets**
  - **Verify compliance**

# A quick look at the system:

SAF Inve

Active Redeem

SAFR ID

SAFR-9806019746

SAFR-3420278074

SAFR-1224786848

SAFR-0007621535

Emissions Statement

This document provides a summary of the Sustainable Aviation Fuel (SAF) redeemed on the SAF Registry.

Scope 1 (Aircraft Operator)

MEA

Amount of neat SAF

29.00 (kg)

0.0 (tonnes)

Scope 3 (End Customer)

Global Tech

Emissions Reduction

94.71 (kg)

0.1 (tonnes)

The following fuel characteristics determine the SAF environment

Amount of Neat SAF (kg)

Neat SAF Energy Content (MJ/kg)

Sustainability Certification Scheme

Total Lifecycle Emission Value (gCO<sub>2</sub>e/MJ)

LCA Reduction (%) - [89 fossil baseline]

Feedstock Type

Feedstock Conversion Process

Country of Feedstock Origin

Year of Neat SAF Production

Neat SAF Producer Name

Neat SAF Supplier Name

Information on Economic Incentives

Information on Applicable Mandates

Airport of Delivery

Date of Delivery

Regulatory Scheme Claim

The Emissions Reductions are calculated using the GHG value submitted during the SAF redemption process.

IATA WTW

$$\left( \frac{\text{kg of CO}_2\text{e}}{\text{kg}} \right) \times 3.84 \left( \frac{\text{kg CO}_2\text{e}}{\text{kg}} \right) \times \text{Amount of Neat SAF (kg)} = \left( \frac{\text{Total LCA}}{\text{kg}} \right) \times \left( \frac{\text{Total LCA}}{\text{kg}} \right)$$

Note: This redemption was facilitated by the intermediary account of SAF GBT.

Emission Statement

Transfer SAF Fuel

Transfer of EA

State Account

Welcome, (State name)

My Country

The World

2025

Unit (SFU Amount)

Tonnes

Unit (Emissions Reductions)

CO<sub>2</sub>/CO<sub>2</sub>e kgs

Formula

IATA WTW (Baseline: 89)

Reset to default

Total Redeemed Amount

SFUs

200.0 tonnes

Emissions Reductions

395.2 CO<sub>2</sub>/CO<sub>2</sub>e kgs

SAF Emissions Reductions

GHG Savings

36% On average (X) Baseline

Total LCA

25 gCO<sub>2</sub>e/MJ On average

SAF Claims

CORSIA

1000.0 tonnes | 40%

ETS

500.0 tonnes | 20%

Voluntary

500.0 tonnes | 20%

Scope 1 Owner

Alpha Airlines

1000 tonnes | 40%

Beta Airlines

1000 tonnes | 30%

Gamma Airlines

1000 tonnes | 30%

Others

1000 tonnes | 30%

Int/Dom Accounting

International

1000.0 tonnes | 40%

Domestic

1200.0 tonnes | 60%

SFUs Produced in [my Country]

Total SFUs

72.0 tonnes

SFUs Uplifted

ABC

250.0 tonnes | 10%

DEF

125.0 tonnes | 5%

BCD

250.0 tonnes | 10%

EFG

125.0 tonnes | 5%

CDE

125.0 tonnes | 5%

Others

1000.0 tonnes | 65%

Total amount 2000.0 tonnes

Latest Activity, (State Name)

SAFR-ID

SFUs (kg)

Redemption Date

Redeemed Emissions Reductions (kg)

Redemption Formula

Feedstock Type

Total LCA (gCO<sub>2</sub>e/MJ)

Scope 1 Owner (AO)

Regulatory Claim

Accounting

Claim Year

Redeemed

00000010

24.0

22 May 2025

47.2

IATA WTW

Corn Stach

19.87

Alpha Airlines

CORSIA

International

2025

Redeemed

00000011

2.0

22 May 2025

3.9

IATA WTW

Tallow

19.87

Beta Air

EU RED

International

2025

Redeemed

00000012

7.0

21 May 2025

13.8

IATA WTW

Tallow

19.87

Alpha Airlines

EU RED

Domestic

2025

Redeemed

00000013

8.0

20 May 2025

15.7

IATA WTW

Corn Oil

19.87

Alpha Airlines

CORSIA

International

2025

Redeemed

00000014

15.0

20 May 2025

29.5

IATA WTW

Corn Grain

19.87

Beta Air

Voluntary

Domestic

2025

Redeemed

00000015

44.0

19 May 2025

86.5

IATA WTW

Tallow

19.87

Beta Air

EU RED

Both

2025

Redeemed

00000016

9.0

19 May 2025

17.7

IATA WTW

Used Cooking Oil

19.87

Alpha Airlines

EU RED

Domestic

2025

Redeemed

00000017

15.0

19 May 2025

29.7

Formula 2

Tallow

19.87

Alpha Airlines

EU RED

International

2025

Redeemed

00000018

46.0

16 May 2025

90.4

IATA WTW

Corn Oil

19.87

Beta Air

Voluntary

Domestic

2025

Redeemed

00000019

26.0

16 May 2025

53.0

Formula 4

Tallow

19.87

Alpha Airlines

EU RED

Both

2025

Redeemed

00000020

4.0

16 May 2025

7.9

Formula 2

Waste Grains

19.87

Alpha Airlines

EU RED

Domestic

2025

Redeemed

1-11 from 10

Rows per page 11

Redemption of EA

SAFR ID

SAFR-9806019746

SAFR-3420278074

SAFR-1224786848

SAFR-0007621535

Emissions Reductions Formula

IATA WTW

Available for Redemption

SFU Amount: 170.0 tonnes

24 US gallons | 235,779 litres | 100,000 kg

Emissions Reductions: 432.7 tonnes

432,755.56 kg

+ Add Redemption

Save

Review

CADO

Civil Aviation Decarbonization Organization

SAF Registry



# Useful links:

- SAF Registry website: [SAF Registry Home | SAF Registry](#)
- Access to the Registry: [SAFR - SAF Registry Portal](#)
- SAF Registry User Manual: [saf-registry-user-manual.pdf](#)
- SAF Registry System Rules: [saf-registry-system-rules.pdf](#)
- IATA SAF Accounting and Reporting Methodology: [saf-accounting-reporting-methodology](#)
  
- Contact: [safregistry@cado.org](mailto:safregistry@cado.org)
- Book a session with SAF Registry Team: [Sustainability Programs](#)





# Q&A



# Appendix

# Outlook

## Next releases:

### Q4 2025 (planned for December 2025)

- New User Accounts:
  - **Carbon Auditor** – can be invited by any system user to review and verify transactions
  - **State** – can access an inventory & a dashboard including an overview of redemptions performed by Aircraft Operators headquartered in the State's jurisdiction
- Interoperability framework expanded
- Group Level User Management

### Early 2026

- Claiming module
- Enhanced State account
- Regulatory claims toward selected schemes
- Enhanced allocation of Scope 3 emissions reductions to airline customers

# SAF Registry Stakeholder Workshops

## (Save the Date)

**In-person** workshops dedicated to key actors across the Sustainable Aviation Fuel (SAF) value chain to learn, connect, and shape the future of the SAF Registry.

### Who is the in-person workshop for?

Producers, suppliers, airlines, freight forwarders, end customers, intermediaries, and others.

### Why attend the workshop?

- Exclusive hands-on access to the SAF Registry in [a testing environment](#)
- Direct engagement SAF value chain stakeholders
- Understand SAF accounting in real-system setting

### Where & when?

Host City	Dates	Event/Location
Hong Kong	23-24 October 2025	World Sust. Symposium (WSS)
Mexico City	20-21 November 2025	Aviation Energy Forum (AEF)
London	27 November 2025	Aviation Carbon

### Interested in joining the in-person workshops?

Express your interest in upcoming sessions by clicking on the [link here](#) or scanning the QR code.



# SAF Registry formulas

## IATA WTW (kg of CO<sub>2</sub>e)

$$3.84 \left[ \frac{kgCO_2e}{kg} \right] \times \text{Amount of Neat SAF [kg]} \times \left( 1 - \frac{\text{Total } LCA_{SAF} \left[ \frac{gCO_2e}{MJ} \right]}{89 \left[ \frac{gCO_2e}{MJ} \right]} \right)$$

## Formula 2 (kg of CO<sub>2</sub>e)

$$\frac{\text{Neat SAF Energy Content [MJ]} \times 90 \left[ \frac{gCO_2e}{MJ} \right] \times LCA_{SAF} \text{ Reductions [\%]}}{1000}, \text{ where } LCA_{SAF} \text{ Reductions [\%]} = 1 - \frac{\text{Total } LCA_{SAF} \left[ \frac{gCO_2e}{MJ} \right]}{90 \left[ \frac{gCO_2e}{MJ} \right]}$$

## Formula 3 (kg of CO<sub>2</sub>e)

$$\frac{\text{Neat SAF Energy Content [MJ]} \times 89 \left[ \frac{gCO_2e}{MJ} \right] \times LCA_{SAF} \text{ Reductions [\%]}}{1000}, \text{ where } LCA_{SAF} \text{ Reductions [\%]} = 1 - \frac{\text{Total } LCA_{SAF} \left[ \frac{gCO_2e}{MJ} \right]}{89 \left[ \frac{gCO_2e}{MJ} \right]}$$

## Formula 4 (kg of CO<sub>2</sub>e)

$$\frac{\text{Neat SAF Energy Content [MJ]} \times 94 \left[ \frac{gCO_2e}{MJ} \right] \times LCA_{SAF} \text{ Reductions [\%]}}{1000}, \text{ where } LCA_{SAF} \text{ Reductions [\%]} = 1 - \frac{\text{Total } LCA_{SAF} \left[ \frac{gCO_2e}{MJ} \right]}{94 \left[ \frac{gCO_2e}{MJ} \right]}$$

## IATA TTW (kg of CO<sub>2</sub>)

$$3.16 \left[ \frac{kgCO_2}{kg} \right] \times \text{Amount of Neat SAF [kg]} \times \left( 1 - \frac{\text{Total } LCA_{SAF} \left[ \frac{gCO_2e}{MJ} \right]}{89 \left[ \frac{gCO_2e}{MJ} \right]} \right)$$

# System accounts & user roles (as of Oct 2025)

	Register SAF	Hold SFUs	Transfer SFUs	Redeem SFUs	Access emission statements/ excerpts	Obtain Scope 1/3
<b>Fuel Producer</b>	X	X	X		X	
<b>Fuel Supplier</b>	X	X	X		X	
<b>Aircraft Operator</b>	X	X	X	X	X	Scope 1
<b>Intermediary</b>		(Reserve)		(Redeem on Command)	X	
<b>Freight Forwarder</b>		(Reserve)		(Redeem on command)	X	Scope 3
<b>End Customer</b>					X	Scope 3