ICAO ENVIRONMENT

ACT-SAF #6 SERIES

SAF accounting and Book & Claim systems

Produced and presented with support of

IATA, IBAC, CoSAFA, SABA, RSB, ISCC

1. Opening

Neil Dickson
Chief, Environmental Standards
ICAO Environment

Objectives

Provide participants with knowledge on SAF accounting and an overview of ICAO work and ongoing industry initiatives on Book & Claim systems

ACT-SAF Series #6 Partners

Michael Wolcott

Regents Professor

Director – ASCENT

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Azim Bin Norazmi

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Michael Schneider

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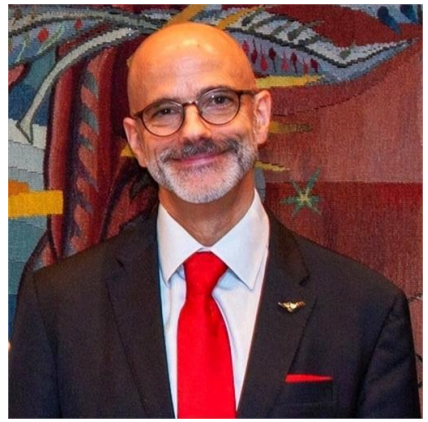

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Madison Carrol

Executive Director,
CoSAFA

Laura Hutchison

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RMI/SABA

Max Eichelbaum

RSB - Digital Solutions Manager

Thomas Bock

System Manager and Lead,
Aviation & Maritime
ISCC

Agenda

1. **ICAO update on ACT-SAF programme and process to CAAF/3**
2. Presentation of ICAO CAEP work on Book and Claim
3. IATA work on Book & Claim
4. IBAC and CoSAFA work on Book & Claim
5. SABA work on Book & Claim
6. RSB work on Book & Claim
7. ISCC work on Book & Claim
8. Questions & Answers
9. Closing

ACT-SAF updates

ACT-SAF platform provides the most recent information:

- List of Partners constantly updated
- ACT-SAF series material available online

ACT-SAF Series

Coordination with ACT-SAF partners identified that many States need conceptual training on SAF.

To address that, ICAO is developing the **ACT-SAF Series of training sessions**, to be held on a monthly basis This will allow delivering comprehensive training to ACT-SAF Partners on an array of important SAF-relatec topics, ranging from sustainability, to policy, economics/financing certification and logistics.

The ACT-SAF Series will empower the ACT-SAF Partners with training material designed with the support o Supporting States and Organisations from the air transport, fuels and finance sectors, as well as academics anc actors with niche expertise such as SAF reporting under CORSIA.

Want to participate on the ACT-SAF Series? Join ACT-SAF now (click here to access the ACT-SAF Terms and Conditions). Participation is open to all States and Organizations interested in further action on SAF.

ACT-SAF Series	Date	Topics	Contributor(s)	Abstract	Video and Presentation
#1	25 November 2022	An introduction to SAF	ICAO	• Introduction to ACT-SAF • Basics of SAF	Download Presentation
#2	25 January 2023	SAF sustainability and reporting under CORSIA	ISCC RSB Verifavia	• process for sustainability certification of SAF • Reporting and verificaiton of SAF Claims under CORSIA	Download Presentation
#3	23 February 2023	SAF technology and certification	Airbus US FAA Safran	• specifications for aviation turbine fuels • process for approval for new production pathways	Download Presentation
#4	23 March 2023	SAF policies	Brazil, European Commission,	• Practical experiences from States	

ICAO ACT-SAF Platform

Here you will find more information on our ACT-SAF Participants*

Latest news on ACT-SAF

Date	Latest news	Link
16/02/2023	ACI joins ACT-SAF	
12/01/2023	Cote d'Ivoire offers financial resources to ACT-SAF	
22/12/2022	Netherlands offers financial resources to ACT-SAF	
20/12/2022	France offers financial resources to ACT-SAF	
17/11/2022	ICAO launches the ACT-SAF Series of training events on SAF	
20/10/2022	Argentina signs the ACT-SAF Terms and Conditions	

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

ACT-SAF updates

ACT SAF

Key request - conceptual training on SAF

ACT-SAF Series (preliminary list of sessions)
✓ #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 SAF economics and financing
#9 SAF Feasibility Assessment

Today's Session

- Future sessions on specific aspects
- Subject to review – **feedback welcome**

https://www.icao.int/environmental-protection/Pages/ACT-SAF-Series.aspx

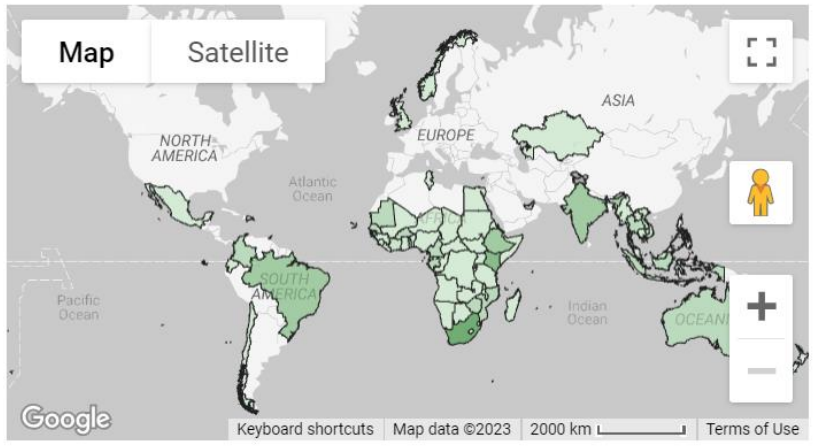
ACT-SAF updates

- Many feasibility studies will be developed in ACT-SAF
  - Three new feasibility studies under existing ICAO-EU project are approaching conclusion (Zimbabwe, Côte d'Ivoire and Cabo Verde)
  - Financial resources provided by ACT-SAF partners will allow **MANY** additional feasibility studies:
    - ICAO working with the European Union to initiate feasibility studies in ten partner States (Cameroon, Egypt, Equatorial Guinea, Ethiopia, India, Gabon, Mauritania, Mozambique, Senegal, and South Africa)
  - United Kingdom announced support to ACT-SAF projects during the preCAAF/3 consultation event
  - Studies and initiatives also being pursued by ACT-SAF partners – all are recognized in the ACTSAF tracker of initiatives

Feasibility Studies
50

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

1 - 78 / 78

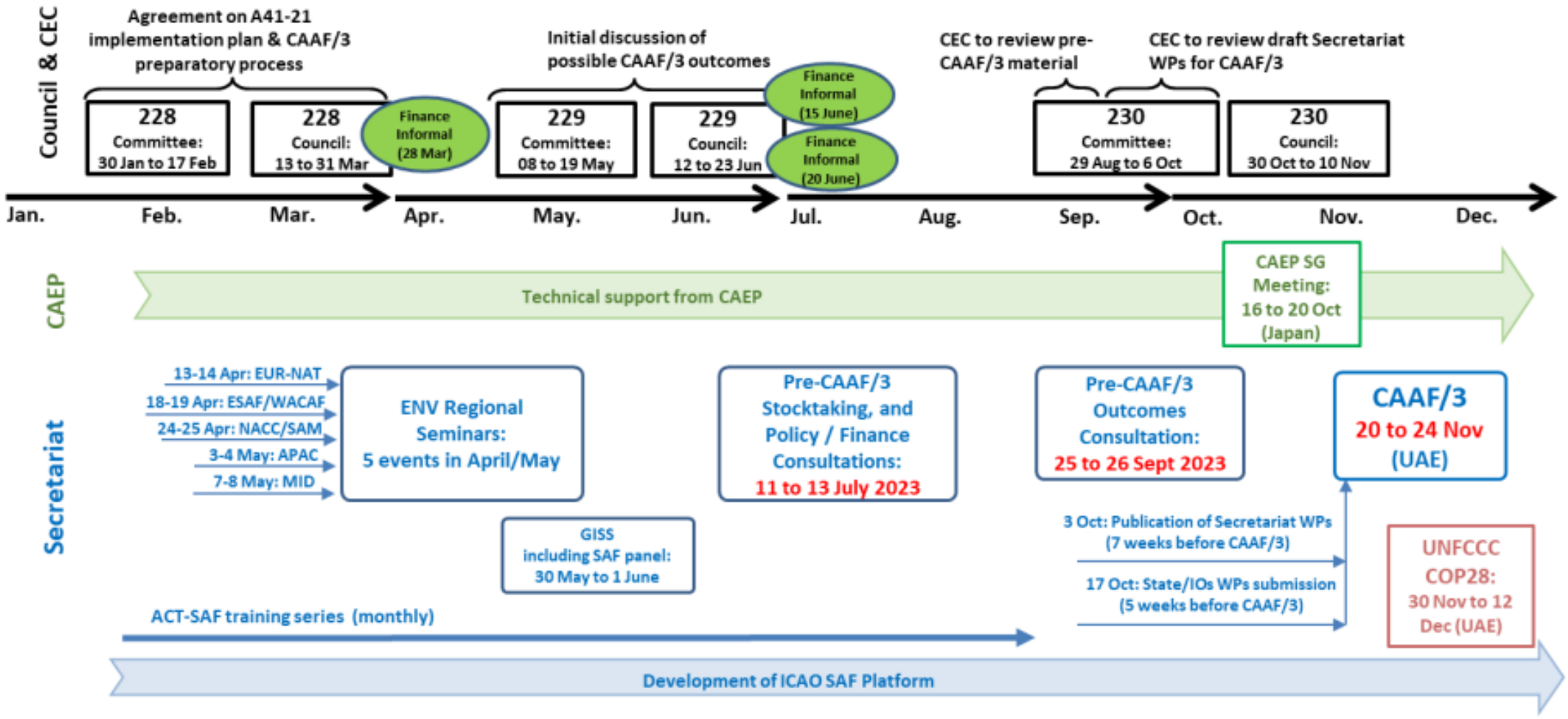


Number of Initiatives 1 5

Update on the process towards CAAF/3

ACT SAF

Updated 2023 timeline toward CAAF/3



Update on the process towards CAAF/3

- **LTAG Stocktaking and First pre-CAAF/3 consultation** (July 2023)
- **Second pre-CAAF/3 Outcomes Consultation** (September 2023)
  - From 25 to 26 September 2023 as a hybrid event in Montréal, Canada.
  - The event discussed possible CAAF/3 outcomes for consideration by the event, including a **draft ICAO global framework for aviation cleaner energy**
  - Documentation and videos available at https://www.icao.int/Meetings/pre-CAAF3/
- **CAAF/3** (November 2023)
  - The CAAF/3 will be held from 20 to 24 November 2023 in Dubai, United Arab Emirates
  - Secretariat Working Papers now available at

    https://www.icao.int/Meetings/CAAF3/Pages/Documentation.aspx
  - Documentation that your Government/Organization may wish to submit for discussion at the conference should be submitted to ICAO no later than 17 October 2023 for Agenda Items 1 to 4, while the documentation deadline is extended by 20 October 2023 for Agenda Item 5.
  - More information at https://www.icao.int/Meetings/CAAF3/

Agenda

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2. **ICAO CAEP Work on SAF accounting and reporting**
3. IATA work on Book & Claim
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ICAO CAEP Work on SAF Accounting and Reporting

Basic concepts

Outline

- Introductory Concepts
- Chain of Custody Methods
- CORSIA Accounting and Reporting
- Emerging SAF Book and Claim Initiatives
- CORSIA and Book and Claim

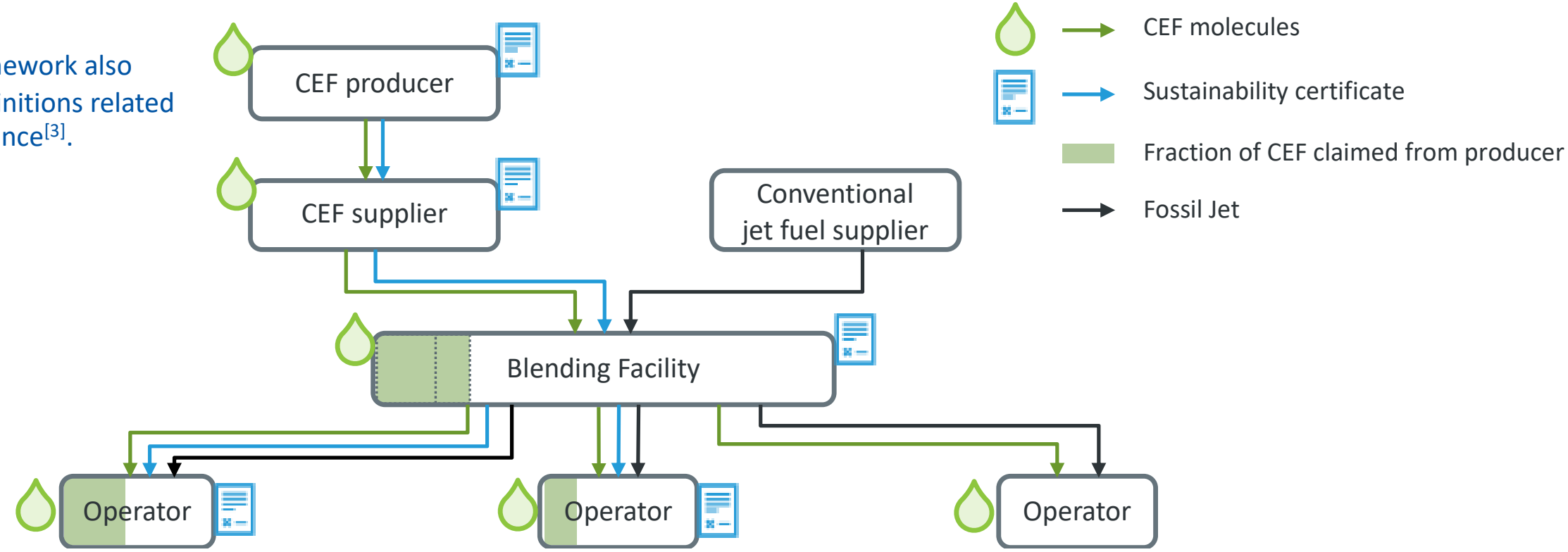
Introductory Concepts

- **Scope 1 Emissions**[1]: Combustion emission from assets that are owned or controlled by the reporting company.
- **Scope 2 Emissions**[1]: Emissions from the production and distribution of electricity, heat, and steam purchased by the reporting company.
- **Scope 3 Emissions**[1]: All indirect emissions not reported under scope 2. Emissions that are a consequence of the activities of a reporting company but that occur from sources not owned or controlled by the company.
- **Chain of Custody** (CoC)- Process by which inputs and outputs and associated information are transferred, monitored and controlled as they move through each step in the relevant supply chain[2]. CoC methods are: 1)Physical segregation, 2)Mass balance, 3)Book and Claim.
- **Double-counting:** The GHG Protocol defines double counting as happening when a single transferable emission unit is counted toward the mitigation goal of more than one entity. This could be by selling the unit twice, issuing the unit twice or having two entities claim the one-unit (which was issued only once) (single issuance, use, and claim)[1].

CoC - Mass Balance

Materials or products with a **set of specific characteristics are mixed** according to **defined criteria with materials or products without that set of characteristics**. The proportion of the input with specific characteristics might only match the initial proportions on average and will typically vary across different outputs[2].

CORSIA framework also includes definitions related to mass balance[3].



Note: Generic representations of supply chains may not represent all supply chain cases.

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CoC - Book & Claim

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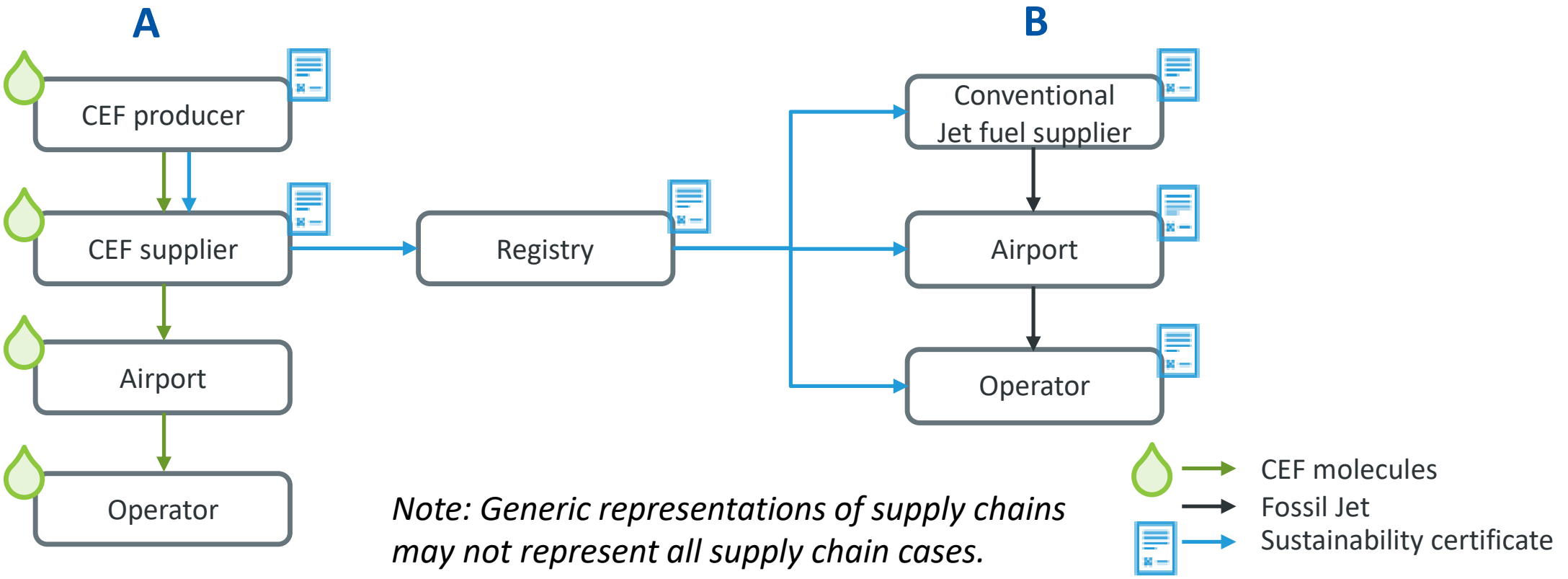
CoC model in which the **administrative record flow does not necessarily connect to the physical flow of material** throughout the supply chain [2].

A & B can represent different entities and/or geographic locations



Note: Generic representations of supply chains may not represent all supply chain cases.

Book & Claim Characteristics

- Book & Claim is a **chain of custody** method
- Tracks flow of a **physical product and environmental attributes** through transactions
- Can be used for tracking claims against **Scope 1 or 3** emissions
- Book & Claim is **NOT** synonymous with schemes to bring value to environmental attributes

Benefits

- Operators with and without access to the actual SAF molecules may have facilitated access to SAF benefits.
- Expands the potential market for SAF producers.
- Facilitates logistical efficiency for reducing cost and emissions.

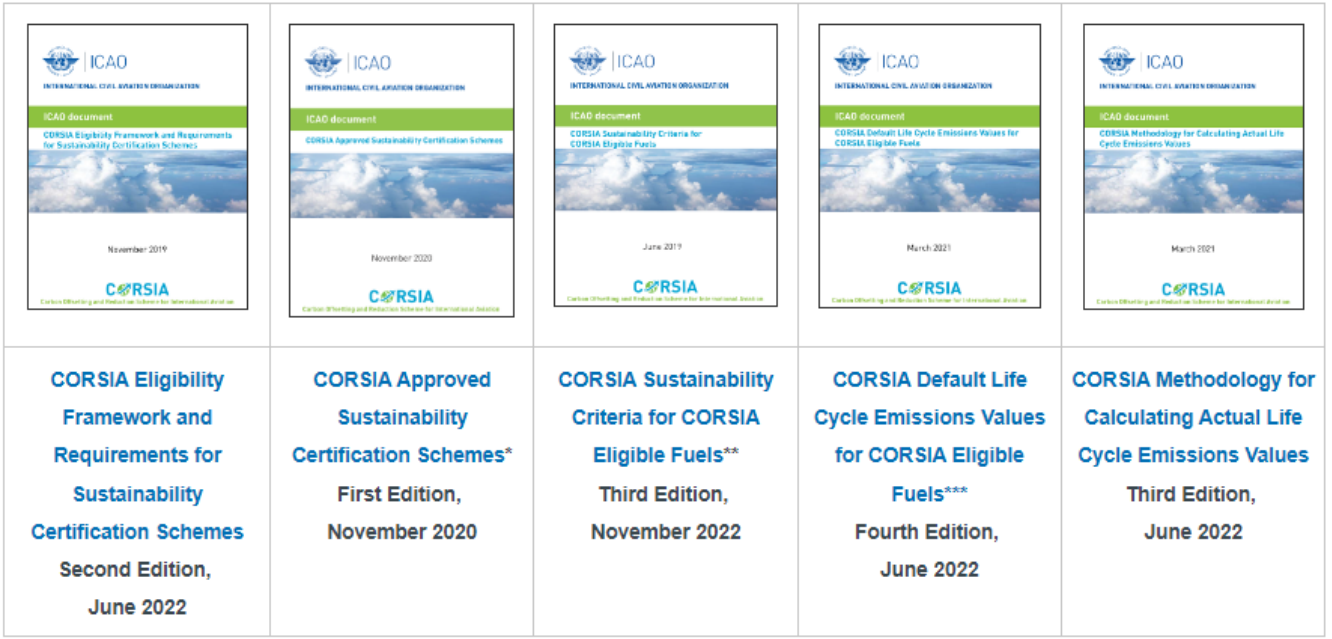
Challenges

- Definition and widespread use of a protocol for emission reporting.
- Entity/Location to host a registry.
- Geographically dependent incentive, regulatory, and/or accounting of the fuel booking vs sustainability certification claim.
- Potential overlap when complying with different schemes.

ICAO CORSIA Accounting and Reporting of Fuels

- **CORSIA is designed to address Scope 1 emissions from international aviation operations**
- An aeroplane operator can reduce its CORSIA offsetting requirements through the **use of CEFs**
- These CEFs can be produced and uplifted anywhere in the world. [3]
- For that, CORSIA includes a **detailed Monitoring, Reporting, and Verification (MRV)** system for CORSIA eligible fuels claims.

- The **CORSIA MRV system requires**:
  - **Sustainability certification** of the CORSIA eligible fuel producer, performed by a CORSIA-approved Sustainability Certification Scheme.
  - **Reporting** of CEF-Related information
  - **Verification** of the information by an accredited third-party verifier



https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-Eligible-Fuels.aspx

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CORSIA MRV and CoC Methods

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The **CORSIA MRV** system **includes** both **mass balance and book and claim elements**.

	Feedstock production/ collection	Feedstock processing	Feedstock transportation	CEF production	Transportation of neat CEF	CEF blending	CEF trading	CEF use
CORSIA MRV Responsibility	**Sustainability Certification Scheme (SCS)**						**Aeroplane Operator, Verification Body, and State**	
Chain of custody methods	**Mass balance** (*reference: ICAO document "CORSIA Eligibility Framework and Requirements for Sustainability Certification Schemes", Table 3: "1.1 SCS requires economic operators to use a mass balance system that…."*)						**Book and claim elements** *Reference: Annex 16, Vol IV, Part II, 2.2.4.3, Note 1: "Claims of emissions reductions from the use of CEF by an aeroplane operator are based on mass of CORSIA eligible fuels* ***according to purchasing and blending records****.*	

State and SCSs reporting to ICAO ACT SAF

CEF information will be reported to ICAO and published

CEF-related information

Production
(who / when)

Batch
(number / mass)

CEF information
(feedstock, conversion process)

Emission reductions for each CEF type

CORSIA-Approved SCS
(RSB, ISCC)

Annual report to CAEP SCSEG

Published report on ICAO website

Published information can avoid double claiming of CEF

Reporting requirements in Annex 16 Vol IV, Table A5-6.

Reporting State

CCR

ICAO document published on ICAO website

ICAO

Emerging SAF Book & Claim Initiatives

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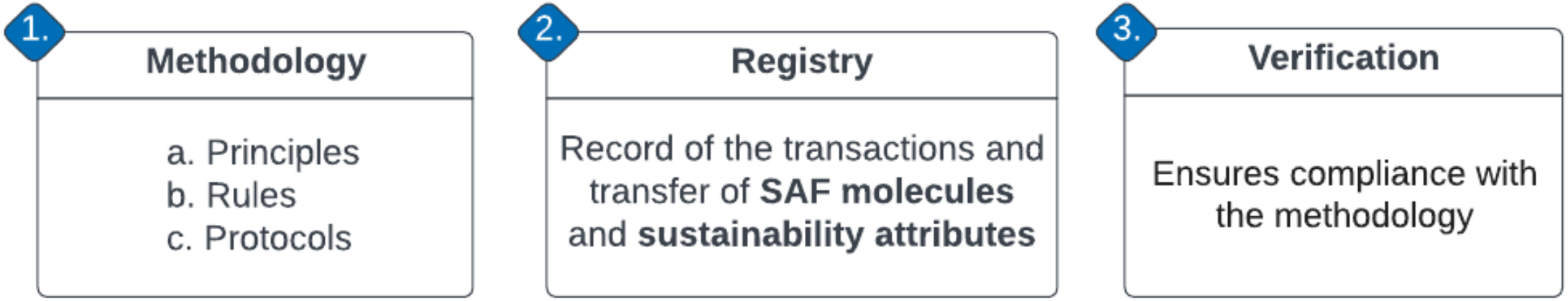
- Various aviation stakeholders are developing book & claim initiatives.
- In common, these initiatives intend to cover **Scope 3 emissions from aviation end-users (corporate, business and individual travel).**
- Different elements are being covered by each SAF Book & Claim initiative.
- These initiatives are in various levels of implementation.

Conceptualization/Under design
Publication/Implementation

*Registry designation on this table does not include all the qualities required in advance Book & Claim Systems (e.g., RNG , green electricity)

Organization	Guidance/Methodology	Registry*	Verification
Aireg[7]	X		
CST[6,9]	X		
EDF[9]	X		
SBTi[11]	X		
SFC and MIT[12]	X		
4AIR[13]		X	
Airline's Programs[14]		X	
Avelia[15]		X	
Board Now[16]		X	
FBO[17]		X	
Fly-i[21]		X	
SABA[10]	X	X	
COSAFA[18]	X		X
IATA[22]	X	X	X
ISCC[19]	X	X	X
RSB[5,20]	X	X	X

Common Elements of Identified B&C Initiatives



- A **B&C methodology is designed by a stakeholder consensus.**
- Common design features of **B&C registries include:**
  - Security
  - Differentiated users' capabilities
  - Auditability
  - Communication/comparison/with other registries

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CORSIA and Book & Claim

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Scope of Emissions	Chain of Custody
CORSIA is a **regulatory scheme** designed to **address Scope 1 emissions** from **international flights only**	**CORSIA uses "mass balance"** chain of custody **up to the SAF blending point**
Scope 1 emission reduction **reporting for domestic regulatory** schemes is **not addressed within CORSIA**	**CORSIA includes "book & claim"** chain of custody elements **after SAF blending**
Scope 3 emission reduction **claimed** by corporations **against voluntary schemes is not addressed within CORSIA**	**After** the point of **co-mingling of fuels at a tank farm**, **book & claim** is the **default** chain of custody system for **CORSIA**

CORSIA is not related to bringing value of environmental benefits through partnership with Scope 3 emitters. Therefore, GHG emissions reductions claimed in CORSIA by using CEF are not affected by other programs addressing scope 3 emissions.

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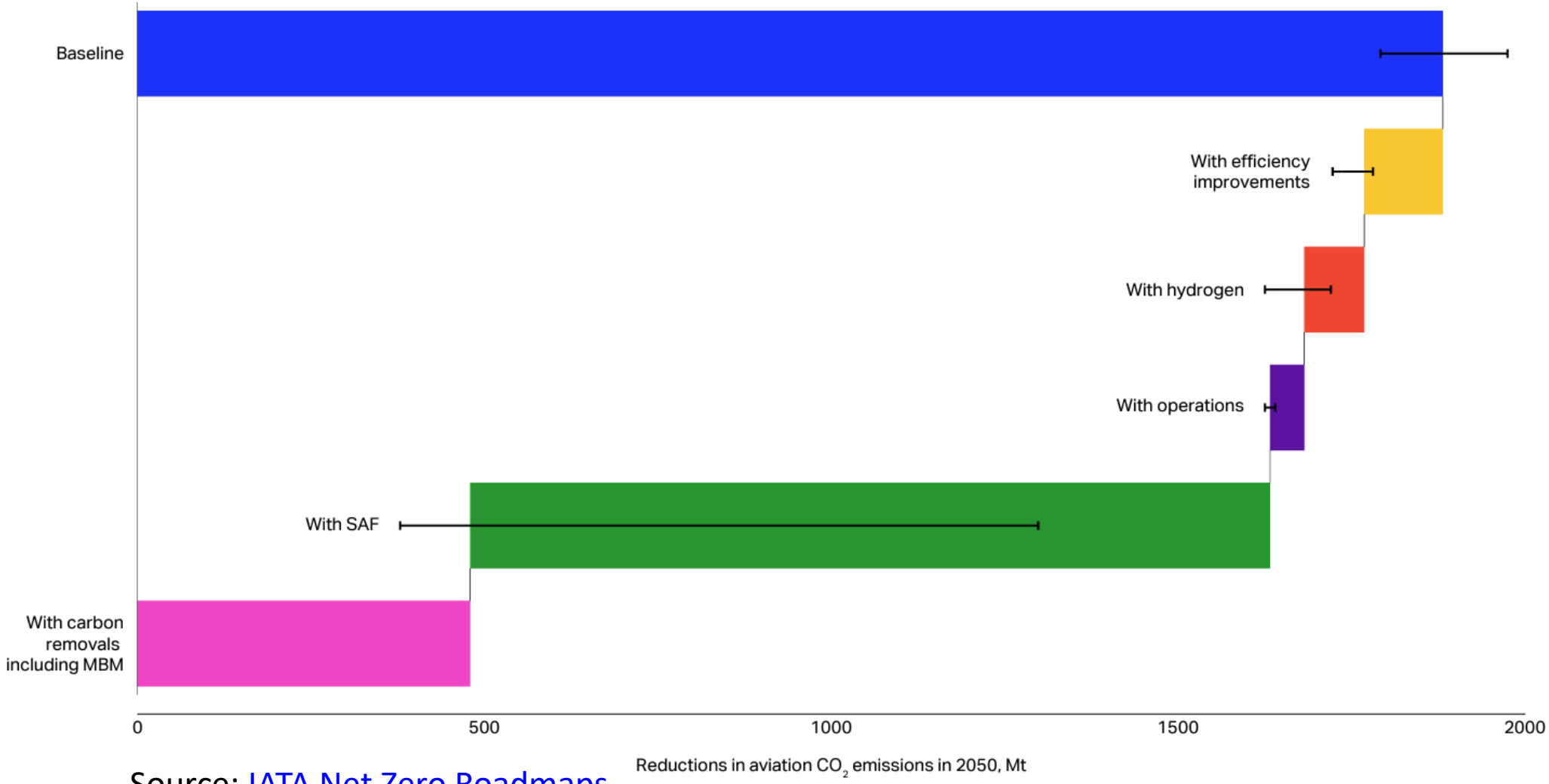
IATA's work on SAF accounting and reporting

IATA

SAF is the most significant decarbonization lever for the aviation industry

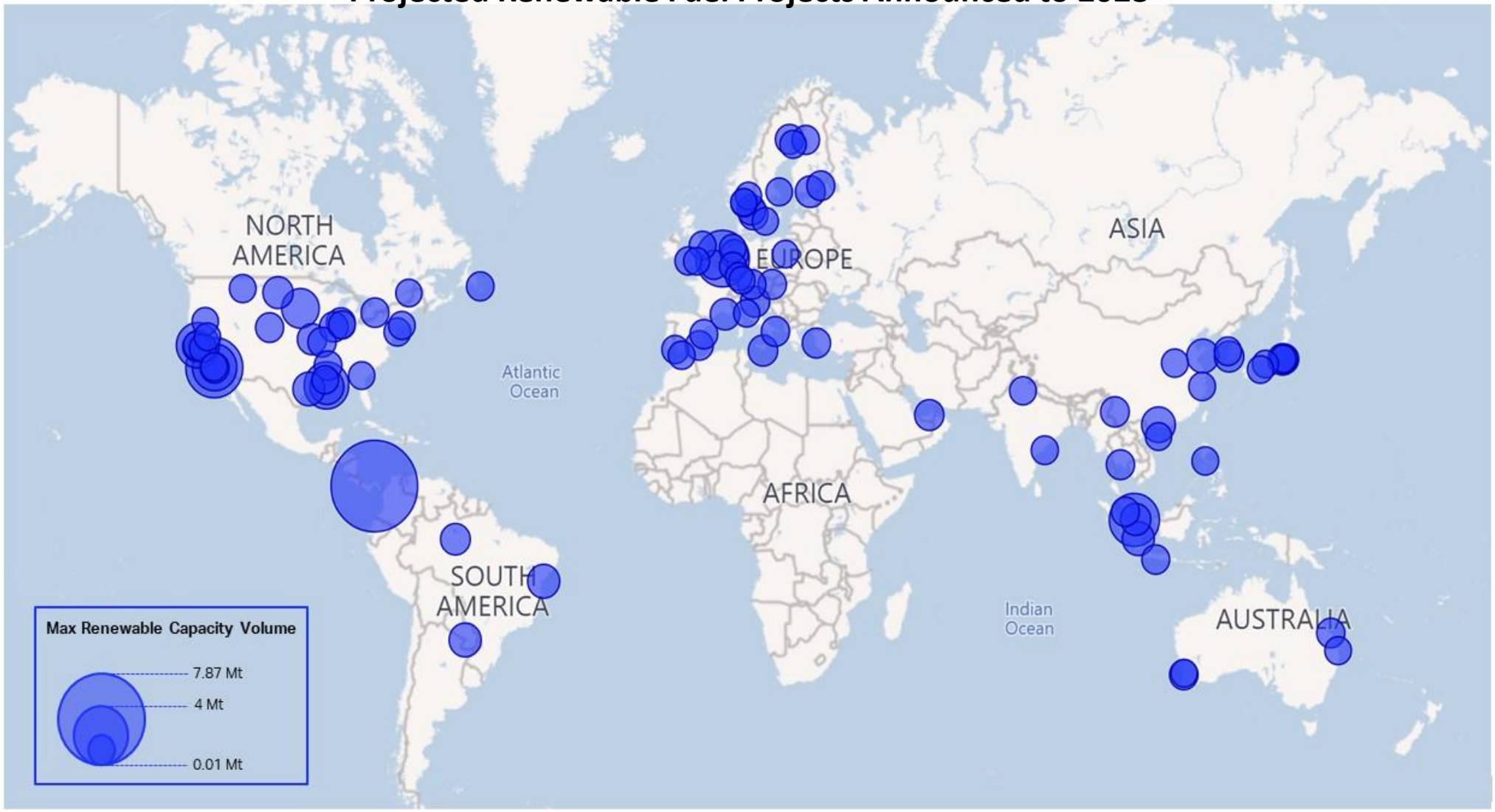
Reductions in aviation CO2 emissions in 2050, by source, Mt



Source: [IATA Net Zero Roadmaps]

We need SAF production in every possible geographical location around the world

Projected Renewable Fuel Projects Announced to 2028



Source: [IATA's Media Briefing on SAF, AGM, June 2023]

However today, SAF is only available in some part of the world

Renewable Fuel Projects Operating in 2023

Source: IATA's Media Briefing on SAF, AGM, June 2023

IATA's work on SAF accounting and reporting

A global SAF accounting framework based on robust chain of custody approaches is a **must-have** for SAF deployment and its commercial viability

A fit-for-purpose SAF accounting framework would enable airlines to **claim the environmental benefits** from **SAF purchases to meet or reduce their regulatory obligations and fulfil additional commitments**.

- ✓ Ensures immutable tracking of the environmental attributes, to enable verification.
- ✓ Provides full transparency of the claims made over any specific batch of SAF.
- ✓ Prevents double counting from double issuance, usage, or claiming.
- ✓ Allows stacking of incentives to maximize opportunities to fund SAF's higher prices.

The utilization of flexible and trusted chain of custody mechanisms such as mass balance or book and claim, **unlocks additional benefits** for increased efficiency in SAF production and transport.

- ✓ Enables SAF production where it is most efficient.
- ✓ Provides increased demand for production facilities geographically distant from larger airports.
- ✓ Avoids unnecessary transport of SAF and feedstocks, minimizing cost and the associated incremental lifecycle emissions, enabling efficient deployment.
- ✓ Promotes equal and healthy competition.

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Frequently asked questions on SAF accounting

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1

In a SAF accounting system, are the chain-of- custody models mutually exclusive – meaning that one would have to opt for either book and claim, physical segregation, or mass balance?

SAF accounting systems can accommodate **all types of chain of custody models or a mix thereof**, depending on how the SAF is supplied to its end users.

2

Do SAF accounting systems favor any particular geographic location of SAF production?

A robust SAF accounting systems will:

- ✓ **provide airlines with equal access to SAF -** a necessity when SAF is not yet available in every location around the world.
- ✓ **provide SAF producers with access to the global market** instead of depending solely on local markets.
- ✓ **contribute to global feedstock diversity** – a necessity given the projected global demand for SAF.

3

What is happening in terms of SAF accounting systems?

CORSIA already provides a robust methodology for SAF accounting.

For the successful scaling of SAF production, wider global recognition of **SAF accounting systems is necessary.**

4

How can one ensure that a SAF accounting system prevents double counting?

Inter-operability between different SAF accounting systems is key in **preventing double counting**.

IATA and the industry are already leading the effort.

IATA's initiative in advocating for a robust and global SAF accounting framework

IATA Airlines for America We Connect the World

IATA together with Airlines for America (A4A) had called upon various organizations consisting of all active and leading players in the field of decarbonizing aviation – representing all aspects of the aviation value chain from fuel providers to airlines and its aviation customers **to collaborate and develop a single set of principles for credible, robust, and transparent accounting systems for SAF and a single set of guidance for GHG accounting and reporting for SAF** applying to all actors in the value chain.

Collaboration Objective: To support the economical scale-up of SAF, identification of common principles across SAF accounting initiatives to:

enhance credibility, harmonization, and transparency	provide clarity to different stakeholder groups – air transport service providers, travel/air freight buyers, fuel producers, NGOs, assurance partners, and governments as policy makers	maximize the ability to use SAF accounting systems and registries for monitoring and validating the emissions reductions claims from SAF.

IATA's work on SAF accounting and reporting

Participants: Leading aviation value chain stakeholders active in SAF accounting and reporting

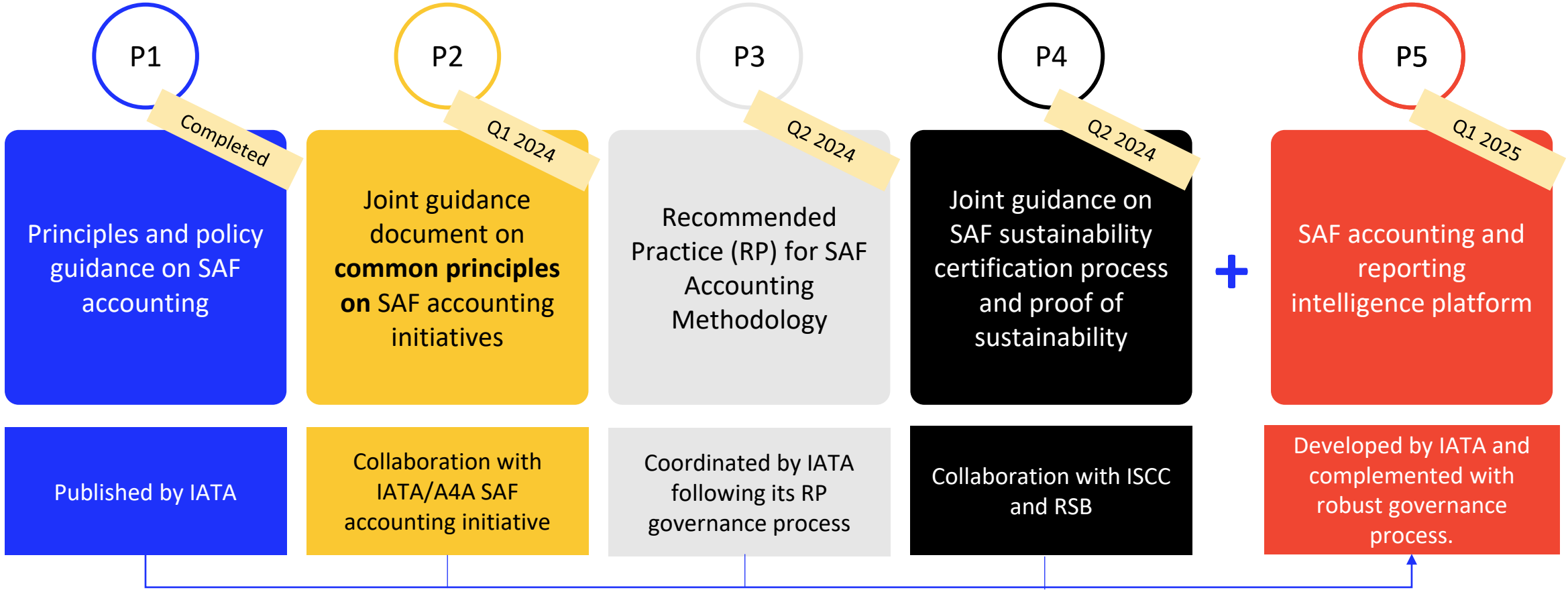
SAF accounting system owners/ creators/operators (non-fuel producers)	Fuel producers and suppliers	Airlines (SAF scope 1 buyers)	Corporates (SAF scope 3 buyers)	Advocates
• Council on SAF Sustainability (CoSAFA) • Roundtable on Sustainable Biomaterials (RSB) • International Sustainability and Carbon Certification (ISCC) • Sustainable Aviation Buyers Alliance (SABA) • Avelia (Shell / Amex collab)	• BP / AirBP • Shell • Neste • World Energy • SkyNRG	• American • Delta • Southwest • United • Singapore • IAG / BA • DP-DHL • Lufthansa • Emirates • Air France/KLM • Air Canada • JetBlue	• Not directly represented at this point of time. • SABA and Avelia indirectly represent groups of air travel buyers • AMEXGBT aggregates scope 3 demand from corporate customers • SFC indirectly represents freight forwarders	• A4A • IATA • ATAG • Smart Freight Centre (SFC)/SFC-CAT • AIREG • RMI • WEF / CST • EDF (represented by SABA) • Center of Excellence for Alternative Jet Fuels and Environment (ASCENT)

4 workstreams under the IATA/A4A collaboration to ensure consistency

Workstream	Name	Objective
1	Reporting and Targets	• pursue alignment across recommended accounting and reporting approaches prior to formal recognition, • facilitate consistent, coordinated engagement with GHG Protocol and SBTi
2	Certification	• facilitate engagement with RSB and ISCC; • pursue alignment across approaches for certifying claims about compliance with standards for book and claim accounting
3	Registries and related applications	• Align on a registry recognition framework, which will serve to ensure that to the extent that there are multiple registries, they use comparable methods and meet a set of minimum thresholds for data sharing, etc. [i.e., as defined by the RSB book and claim standard] • Understand and work to align approaches for preventing double claiming within and across registries
4	Capacity building & communications	• Develop and implement a capacity building and communication strategy • summarizing and strategically communicating pilot approaches and outcomes

IATA work on SAF accounting and reporting

Moving forward, IATA work on SAF accounting and reporting will be divided into the following projects/initiatives:



Scan me! – IATA principles and policy guidance on SAF accounting

SAF accounting principles

SAF accounting benefits

IATA's SAF Accounting and Reporting Intelligence Platform

Michael Schneider

Assistant Director,

Sustainability Programs, IATA

To establish an open and global platform to record the production, use, claiming, and crediting of SAF linked to aviation. The platform meets all criteria to track lifecycle emissions and sustainability certification throughout its entire supply chain, offering a robust, globally accepted SAF accounting and reporting framework.

Vision

Proposed Solution

- SAF accounting and reporting systems in accordance with generally accepted framework and accounting principles.
- Main features include:

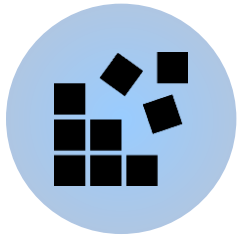
Tracking and recording of SAF certificates (environmental attributes)

SAF inventory management

Transfer of certificates to e.g., corporates

Holding of SAF certificates

Accounting of SAF Scope 1/Scope 3 emissions reduction



Master registry to claim life cycle emissions reductions under regulatory schemes.

“Transparency mode” – for governments to formally recognize SAF accounting claims.

Questions?

Name	Position	Based	Email	Topics
Azim Norazmi	Manager, Climate Policy, Sustainability & Economics (S&E) – Policy and Standards	Geneva	norazmia@iata.org	SAF accounting principles, methodology, chain of custody approaches in fuel accounting
Daniel Chereau	Head, Fuel, S&E – Energy Transition	Geneva	chereaud@iata.org	SAF accounting principles, methodology, chain of custody approaches in fuel accounting
Michael Schneider	Assistant Director, Sustainability Programs, S&E – Sustainability Programs	Geneva	SchneiderM@iata.org	IATA EcoHub, SAF accounting and reporting intelligence platform

Agenda

1. ICAO update on ACT-SAF programme and process to CAAF/3
2. Presentation of ICAO CAEP work on Book and Claim
3. IATA work on Book & Claim
4. **IBAC and CoSAFA work on Book & Claim**
5. SABA work on Book & Claim
6. RSB work on Book & Claim
7. ISCC work on Book & Claim
8. Questions & Answers
9. Closing

IBAC and CoSAFA work on Book & Claim

Business aviation and Book & Claim

- SAF is the best sustainable alternative to conventional fuel;
- Need to boost SAF production, distribution, & uptake;
- Book & Claim can be an enabler.

SAF's Implementation Challenges

- Scaling Production;
- Feedstock Availability;
- Certification & Standards;
- Infrastructure & Distribution
- Economic Viability; &
- Technological Innovation.

Business aviation and Book & Claim

Business Aviation's challenge sourcing SAF

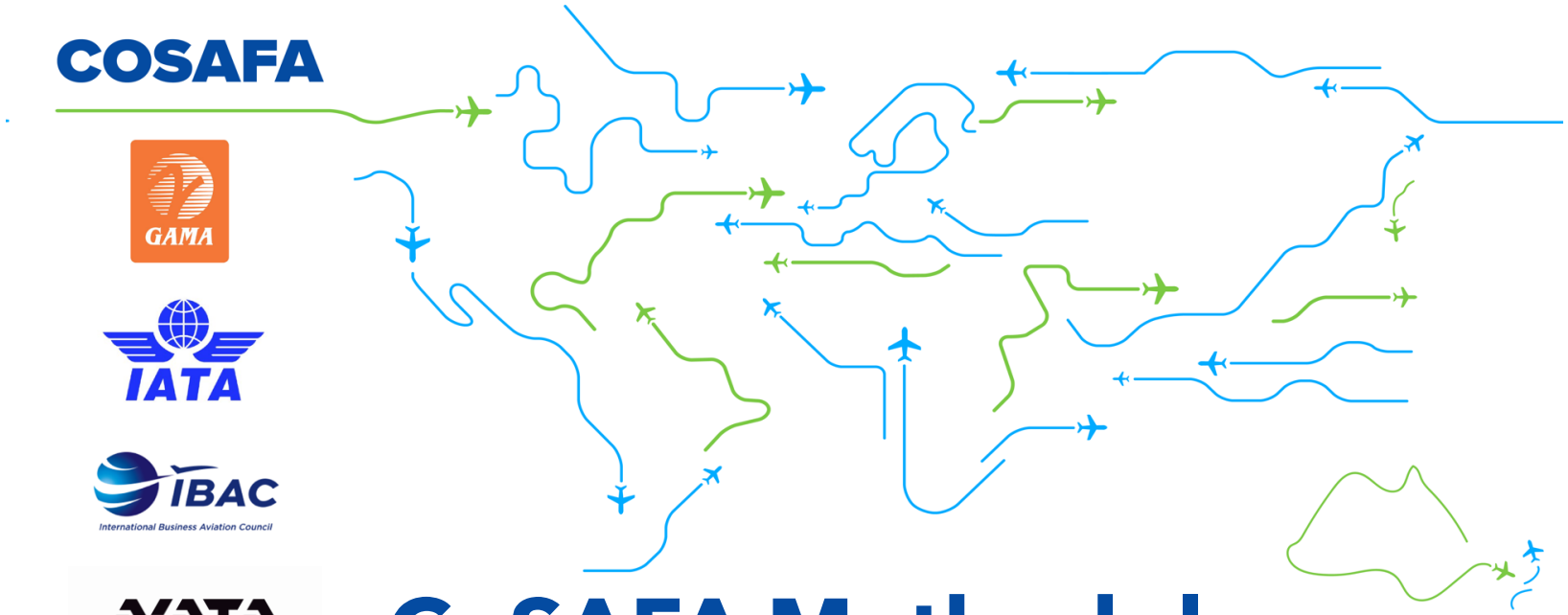
- Business aviation demand for SAF exceeds supply;
- SAF availability at smaller airports is limited compared to major airports;
- Business aviation needs a reliable SAF supply chain, accessible to a broader range of users.

Business Aviation's Access to SAF

- Business aviation: small % of av. fuel sales & emissions;
- However, business aviation also provides additional SAF funding as our customers are willing and able to pay current SAF premiums;
- Business aviation can have an outsized influence in helping grow SAF, as long as we have access to SAF market.
- Book & Claim offers practical way for business aviation operators to support and benefit from SAF even when direct access to physical SAF is limited, while also helping advance the growth & adoption of SAFs within the aviation industry;

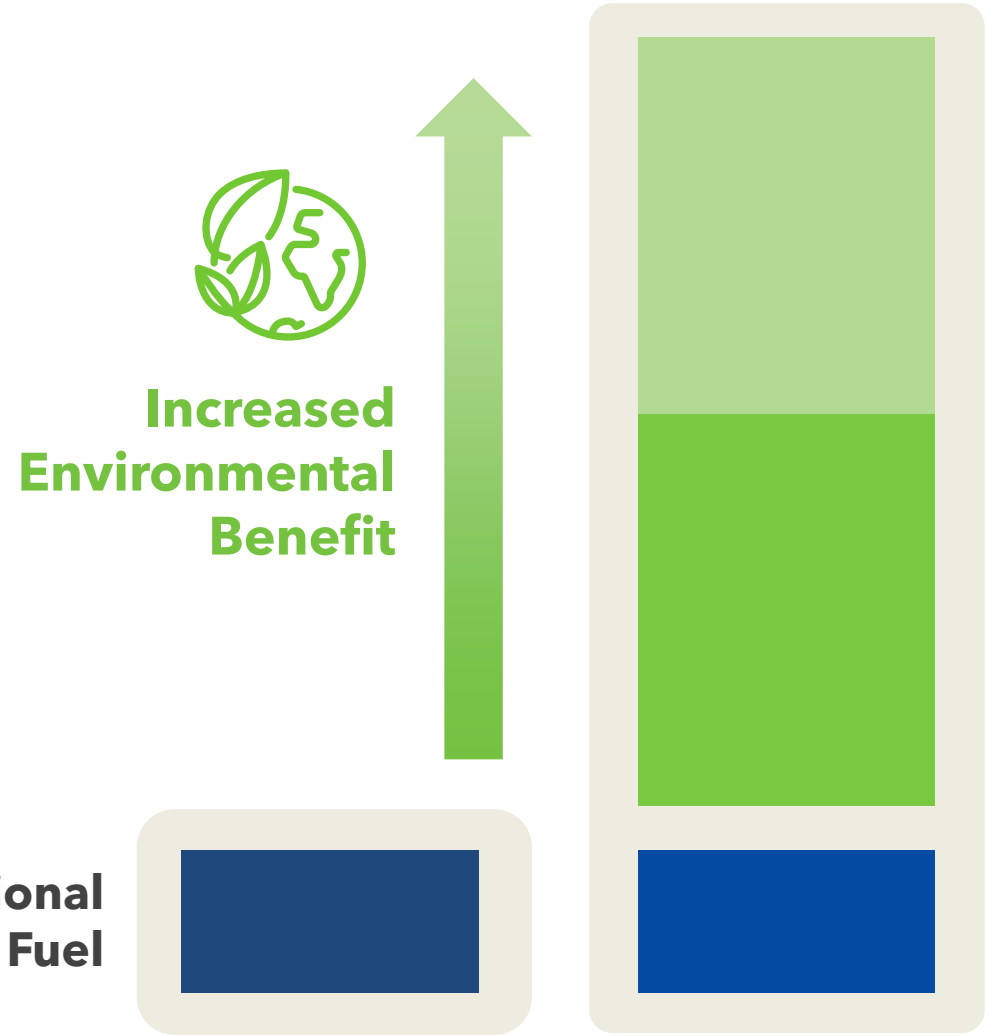
IBAC and CoSAFA

- IBAC is a founding partner of the Council on Sustainable Aviation Fuel (CoSAFA)
- IBAC is supporting CoSAFA's efforts to develop a transparent, credible Book & Claim accounting and auditing methodology.



CoSAFA Methodology – Supporting Book and Claim

What is the Value of the Environmental Attribute

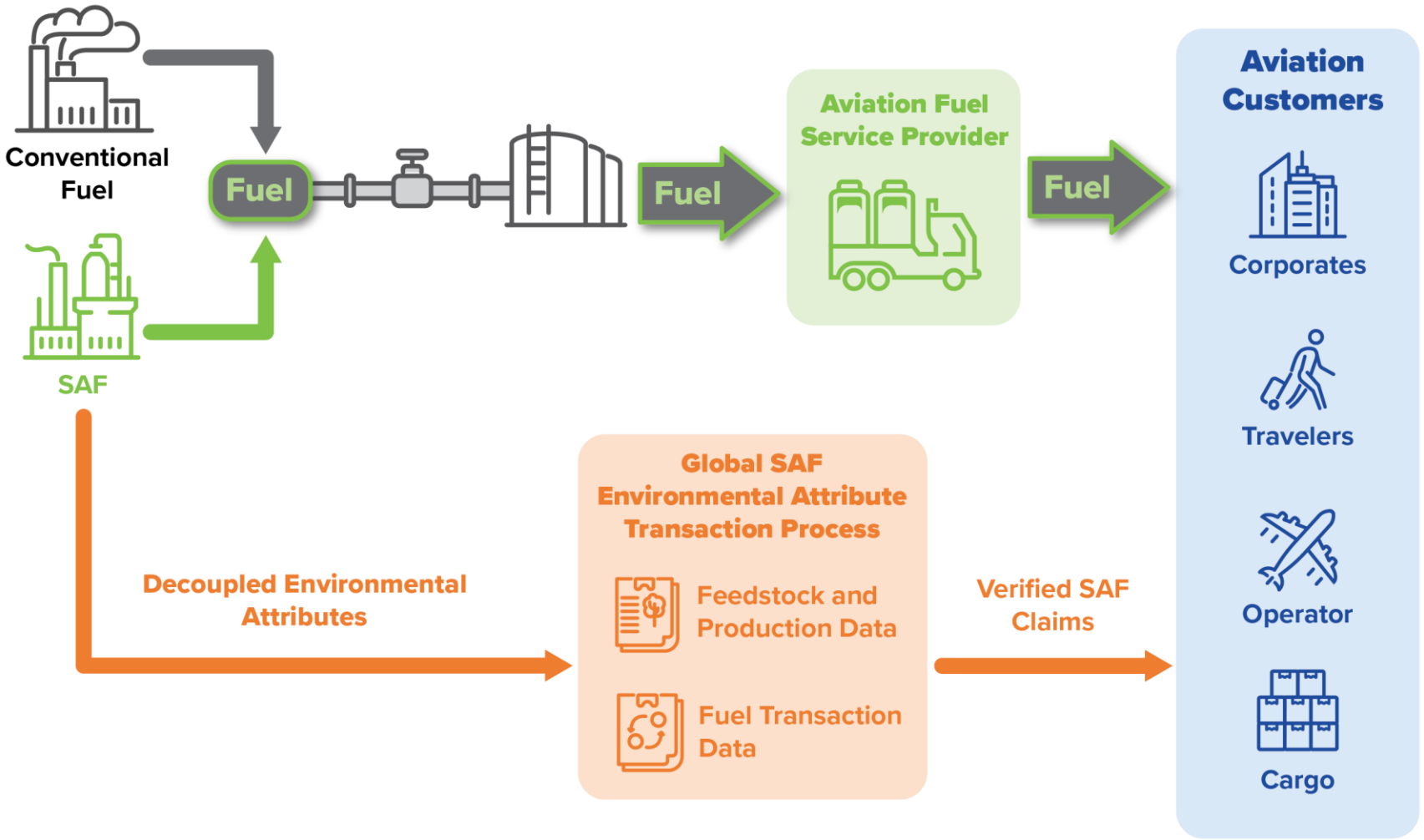


SAF Attribute

- **Producer**
  Incentives and mandates
- **Operators**
  Regulatory & voluntary compliance
- **Corporate**
  ESG reporting

SAF Fuel

Two Products: Fuel and the Environmental Attribute



Challenges of Buying SAF Environmental Attributes

1. How does a customer understand – and verify – what they are purchasing?
2. How do they know the product hasn't been previously sold or claimed?
3. How can we ensure reasonable access to a product in short supply and high demand?

Mapping the Needs of SAF Stakeholders

ACT SAF

SAF Producers	SAF Suppliers	Operators	Scope 3 Users	Compliance Programs
End State				
Sell SAF at competitive prices while maintaining revenue sufficient to operate and expand production	Purchase SAF / EA from SAF producers or other SAF suppliers and resell SAF/EA to global customers sufficient to meet customer demand and operational needs	Demonstrate credible emissions reductions in global compliance programs from purchased SAF/EA with the ability to resell or reallocate scope 3 emissions reductions to applicable scope 3 users	Demonstrate credible scope 3 emissions reduction in global scope 3 compliance programs using SAF environmental attributes that meet their corporate ESG goals	*Regulatory:* Reduce aviation emissions and encourage SAF use and production through compliance programs *Voluntary:* Encourage voluntary emissions reductions in the aviation sector
How to achieve end state				
1. Leverage Global Regulatory Programs 2. Access to customers through **global markets** that enable producers to capture appropriate premiums for a commodity in short supply and high demand	1. Create or participate in **competitive global SAF markets** to buy and sell credible SAF attributes to global customers with minimum transaction costs and a known validation process 2. Ability to sell and track individual SAF quantities with confidence of no fraudulent double counting	1. Access to competitively priced global SAF/ SAF EA through **credible SAF markets** 2. Ability to credible demonstrate and claim SAF use in a. global regulatory and voluntary programs b. ESG reporting 3. Ability to sell and allocate scope 3 SAF claims	1. Access to competitive scope 3 SAF attributes that meet their corporate SAF ESG goals **(SAF Markets)** 2. Demonstrate credible SAF use in global compliance programs	1. Enable SAF/ EA use to meet local, national, regional, and international compliance obligations or incentives 2. Confidence in SAF transactions and **SAF Markets**

Conclusion: SAF and SAF EA markets are critical for SAF growth and access.
What is needed to support the development AND credibility of SAF Markets?

Supporting SAF Markets

SAF markets should operate off a common set of easily understood principles that provide :

- ***Clarity, consistency, and comparability*** of SAF environmental information throughout the chain-of-custody
- ***Recognized and accepted by regulatory agencies*** globally –neutral feedstock, sustainability, emissions reduction, and accounting guidance
- ***Interoperable*** with
  - Individualized book and claim systems, registries, and ledgers
  - Varied compliance requirements

CoSAFA Mission

Supporting and enabling:

Global SAF producers

SAF marketplaces

SAF customers

Compliance regulations

Credible already developed registries and future registry development

Through:

Generally Accepted and Commonly Understood Principles for SAF Transactions – **Publicly available, non-proprietary, designed and managed by the aviation industry and its stakeholders.**

Accounting Market Example

International Financial Reporting Standards	Fair Rules for SAF Transactions – CoSAFA Methodology
IFRS are accounting rules developed for financial statements of publicly traded companies developed by a non-profit accounting board required in 167 jurisdictions	Non-proprietary, neutral, and globally accepted principles developed by a non-profit board and recognized by governments and regulatory entites
Ensure financial statements are transparent, consistent, and easily understood globally	Develop consistency and clarity in SAF transaction documents with robust auditing and verification procedures
Provide a common understanding of records, expense reports, and income for: • Investor • Auditors • Governments • Regulators	A common understanding of the SAF environmental attributes and emissions reduction claims for: • SAF chain of custody • Auditors • Governments • Regulators
Provides trust and credibility of global financial markets. Without these standards investors may be hesitant to believe financial disclosures slowing or reducing market transactions, affecting the economy	Provide trust and credibility for SAF purchases for operators and scope 3 buyers of valid SAF attributes without fear of fraudulent double counting/selling. **Enabling confident growth and support for SAF markets**

PTD: Product Transfer Document

Unique ID

Transaction Information

Fuel Attribute Information

Claims Accounting

Neat SAF Identification Number: PPPCCC-FF-UUDDDDDDSSSSSSSSEEEEEEEEMMRRRRRRBBB (77.777788889999101010101111) (EEEEEEE – CCCCCCC)	
Vendor	**Receiver**
Name	Name
Address	Address

Transaction Information	
Product Type	Biogenic / non-biogenic SAF
Volume Blended SAF (Indicate Units)	Gallons, Litres, etc
Volume Neat SAF (Indicate Units)	Gallons, Litres, etc
Uplift Date	dd.mm.yyyy
Uplift Location	ICAO code
Method of Transfer	Physical uplift or Book and Claim
Aircraft	Tail number of aircraft that received fuel (Not required)
Blend Ratio	29.7/70.3

Fuel Attribute Information			
Producer / Location/Date	**Feedstock**	**Feedstock Region**	**Sustainability Certifier and type**
Name and Address dd.mm.yy	Ie. FOG/ Tallow	Ie. Canada	Ie. ISCC CORSIA, etc.
Conversion Process	**Carbon Intensity (neat) /Calculation Method**	**Lower Hearing Value**	**Compliance Eligibility**
ie. HEFA	ie. 19.5 gCO2e/MJ CORSIA	Ie. 44.1 MJ/kg	LCFS, RFS, CORSIA, etc.

Carbon footprint is decreased XXX gCO_2e per gallon or Litre		
Final Accounting		
Production credit or mandate claimed,	**What program (list all)**	**year**
Ie. Yes	LCFS, RFS, etc.	2023
Regulatory credit claimed	**What program (list all)**	**year**
ie. Yes	ie. CORSIA	2024
Voluntary credit claimed (If applicable Scope and Category)	**What program (list all)**	**Year**
Ie. Scope 1 or Scope 3 Cat 6	SBTi	2023
Yellow boxes will be completed by end users		

Unique ID: Tracking

PPPCCC-FF-UUDDDDDDSSSSSSSSEEEEEEEEMMRRRRRBBB

1. SAF Producer [ticker symbol e.g. CVX (first three if a 4 letter ticker)]
2. Production location
    a. Country (3 digits)
    b. Facility ID (2 digits)
    c. Unit ID (2 digits)
3. Production Date (yymmdd)
4. Batch Unit Range Start-End 00000-99999XX
    a. 1 Batch Unit = 1 avoided kg CO_2e. This enables batches of SAF to be divided and sold in 1 kg CO_2e increments. The entire range of batch units is the total amount of CO_2e per batch in kg
    b. Model used for CO2 calculation IC / CG
        i. CG = California Greet
        ii. IC = ICAO CORSIA
        iii. OT = Other (must be indicted on PTD)
5. Ratio of avoided kg CO_2e per unit of Neat SAF (units below)
    a. Indicates the kg CO_2e to 2 decimal places
    b. The letter following the number indicates the volume units being used
        i. A=Litres
        ii. B=Gallons
        iii. C=Tons
    c. E.g. 1500B would indicate 15.00 kg CO_2e per gallon of neat SAF
    d. To establish the CO2e of uplifted SAF, the Ratio would be divided by the Blend Percentage
    e. E.g. (15.00 kg / 0.30 blend = 4.50 kg avoided per blended gallon)
6. Blend Percentage of uplifted SAF with one decimal place
    a. The percentage of Neat SAF (e.g. 300 indicates 30.0% SAF & 70.0% fossil Jet-A
    b. 100% Neat SAF would be indicated by a 000

Sub Identifier 1: Characteristics

Example: 37.13IC$_7$*FOGS$_8$*HEFA$_9$*ISCC$_{10}$*BO$_{11}$

7. CI reduction value per quantity of NEAT SAF in:
    a. gCO$_2$e/MJ [00.00]
    b. Calculation method (same units as indicted in main ID)
        i. CG = California Greet
        ii. IC = ICAO CORSIA
8. Feedstock [4 digits alpha numeric]
    a. FOGS = Fats, Oils, and Greases
    b. ETHL = Corn grain
    c. OSED = Oil Seeds
    d. ALGE = Algae
    e. AGRS = Agricultural Residue
    f. FRRS = Forestry Residues
    g. WDWS = Wood mill waste
    h. WDBM = Woody Biomass
    i. MSWS = Municipal Solid Waste Streams
    j. WTWS = Wet Wastes (manures, Wastewater treatment sludge)
9. Conversion process [4 digits alpha numeric if 4]
    a. HEFA = Hydroprocessed Esters and Fatty Acids
    b. FTXX = Fisher- Tropsch
    c. SPKA = FT Synthesized Paraffinic Kerosene Plus Aromatics
    d. ATJX = Alcohol to Jet
    e. SIPX = Synthesized Isoparaffins
    f. CHJX = Catalytic Hydrothermolysis Jet Fuel
    g. COPS = Co-processing
10. SAF Certifier [4 digits alpha numeric]
    a. ISCC = International Sustainability Carbon Certification
    b. TRSB = The Roundtable on Sustainable Biomaterials
    c. OTHR = Other. The name must be listed on the PTD and proof of sustainability within the PoEA.
11. Biogenic or non-biogenic [2 digits alpha numeric]
    a. BO = Biogenic
    b. NB = Non-biogenic

Sub Identifier 1: Eligibility

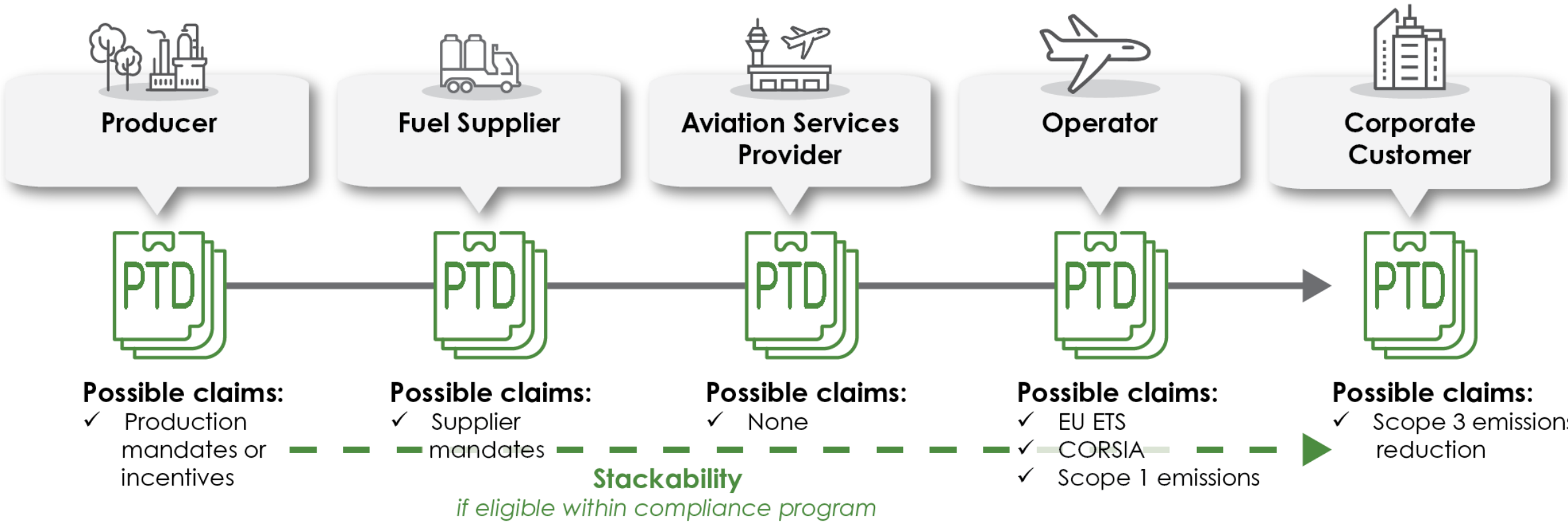
Prior to dash
- 1 = Eligible for program
- 0 = non-eligible for program

After dash
- 5 = The SAF has been used for compliance in that program = 5
- 0 = Was never eligible = 0 (Same as prior to dash)
- 9 = Not used to make claim or no longer eligible.

ex. $1_A1_B1_C0_D0_E0_F0_G1_H$ – $5_A5_B5_C0_D0_E0_F0_G9_H$

A. CA LCFS
B. RFS
C. CORSIA
D. EUETS
E. UKETS
F. RED
G. OTHR* must be indicated what program on the PTD
H. Voluntary program – A 1 or a 3 and category number will be added after number 5 if used for this program

Sample Transaction



Producer:

- Fuel Supplier
- FBO
- Operator

Unique ID

- Start the Unique ID

~~Transaction Information~~

- Vendor and receiver information only

Fuel Attribute Information

- All fields completed

Claims Accounting

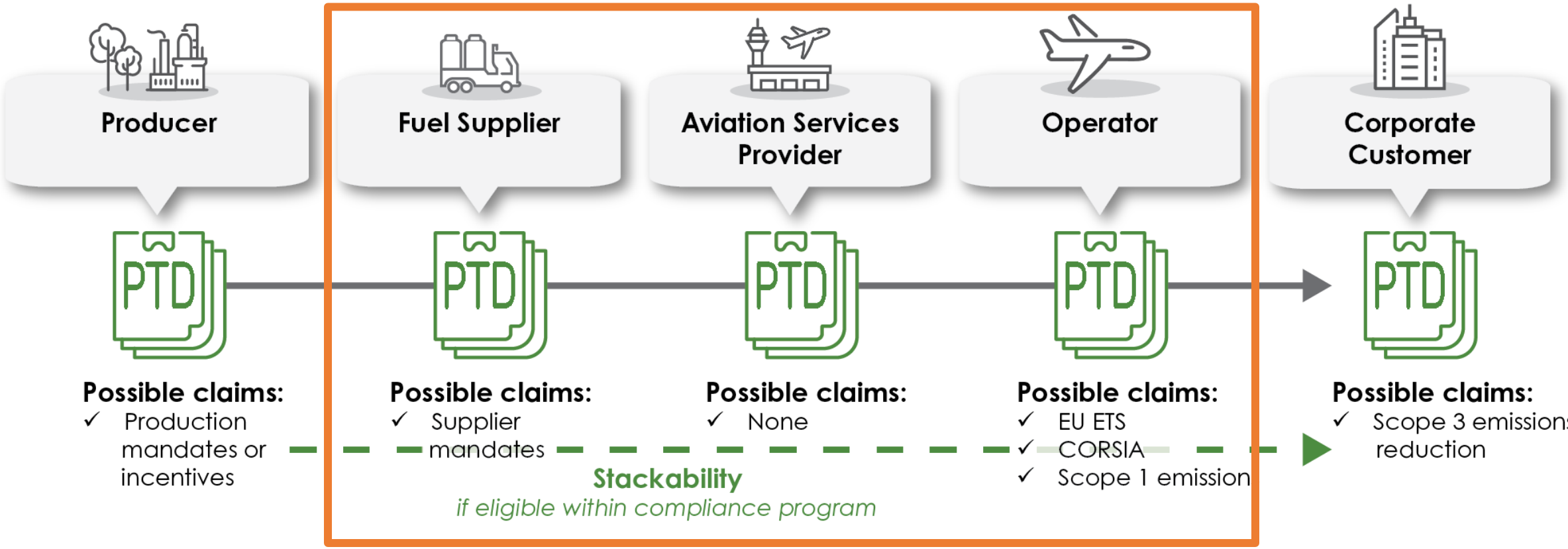
- Any claims the producer made with the fuel indicated

Neat **SAF Identification Number:** PPPCCC-FF-UUDDDDDDSSSSSSSSEEEEEEEEMMRRRRRBBB (77.777788889999101010101111) (EEEEEEE – CCCCCCC)	
Vendor	**Receiver**
Name	Name
Address	Address
Transaction Information	
Product Type	Biogenic / non-biogenic SAF
Volume Blended SAF (Indicate Units)	Gallons, Litres, etc
Volume Neat SAF (Indicate Units)	Gallons, Litres, etc
Uplift Date	dd.mm.yyyy
Uplift Location	ICAO code
Method of Transfer	Physical uplift or Book and Claim
Aircraft	Tail number of aircraft that received fuel (Not required)
Blend Ratio	29.7/70.3

Fuel Attribute Information			
Producer / Location/Date	**Feedstock**	**Feedstock Region**	**Sustainability Certifier and type**
Name and Address dd.mm.yy	Ie. FOG/ Tallow	Ie. Canada	Ie. ISCC CORSIA, etc.
Conversion Process	**Carbon Intensity (neat) /Calculation Method**	**Lower Hearing Value**	**Compliance Eligibility**
ie. HEFA	ie. 19.5 gCO2e/MJ CORSIA	Ie. 44.1 MJ/kg	LCFS, RFS, CORSIA, etc.

Carbon footprint is decreased XXX gCO_2e per gallon or Litre		
Final Accounting		
Production credit or mandate claimed,	**What program (list all)**	**year**
Ie. Yes	LCFS, RFS, etc.	2023
Regulatory credit claimed	**What program (list all)**	**year**
ie. Yes	ie. CORSIA	2024
Voluntary credit claimed (If applicable Scope and Category)	**What program (list all)**	**Year**
Ie. Scope 1 or Scope 3 Cat 6	SBTi	2023
Yellow boxes will be completed by end users		

Sample Transaction



Fuel Supplier:

- FBO
- Operator

Unique ID

- Divide batch unit range for specific sale
- Indicate any changes in eligibility

Transaction Information

- Applicable transaction information

Fuel Attribute Information

- All fields remain unchanged from producer

Claims Accounting

- Producer claims remain
- Add any claims made by supplier

Neat SAF Identification Number:
PPPCCC-FF-UUDDDDDDSSSSSSSSEEEEEEEEMMRRRRRBBB (77.777788889999101010101111) (EEEEEEE – CCCCCCC)

Vendor	Receiver
Name	Name
Address	Address

Transaction Information	
Product Type	Biogenic / non-biogenic SAF
Volume Blended SAF (Indicate Units)	Gallons, Litres, etc
Volume Neat SAF (Indicate Units)	Gallons, Litres, etc
Uplift Date	dd.mm.yyyy
Uplift Location	ICAO code
Method of Transfer	Physical uplift or Book and Claim
Aircraft	Tail number of aircraft that received fuel (Not required)
Blend Ratio	29.7/70.3

Fuel Attribute Information

Producer / Location/Date	Feedstock	Feedstock Region	Sustainability Certifier and type
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Conversion Process	**Carbon Intensity (neat) /Calculation Method**	**Lower Hearing Value**	**Compliance Eligibility**
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Carbon footprint is decreased XXX gCO_2e per gallon or Litre

Final Accounting

Production credit or mandate claimed,	What program (list all)	year
Ie. Yes	LCFS, RFS, etc.	2023
Regulatory credit claimed	**What program (list all)**	**year**
ie. Yes	ie. CORSIA	2024
Voluntary credit claimed (If applicable Scope and Category)	**What program (list all)**	**Year**
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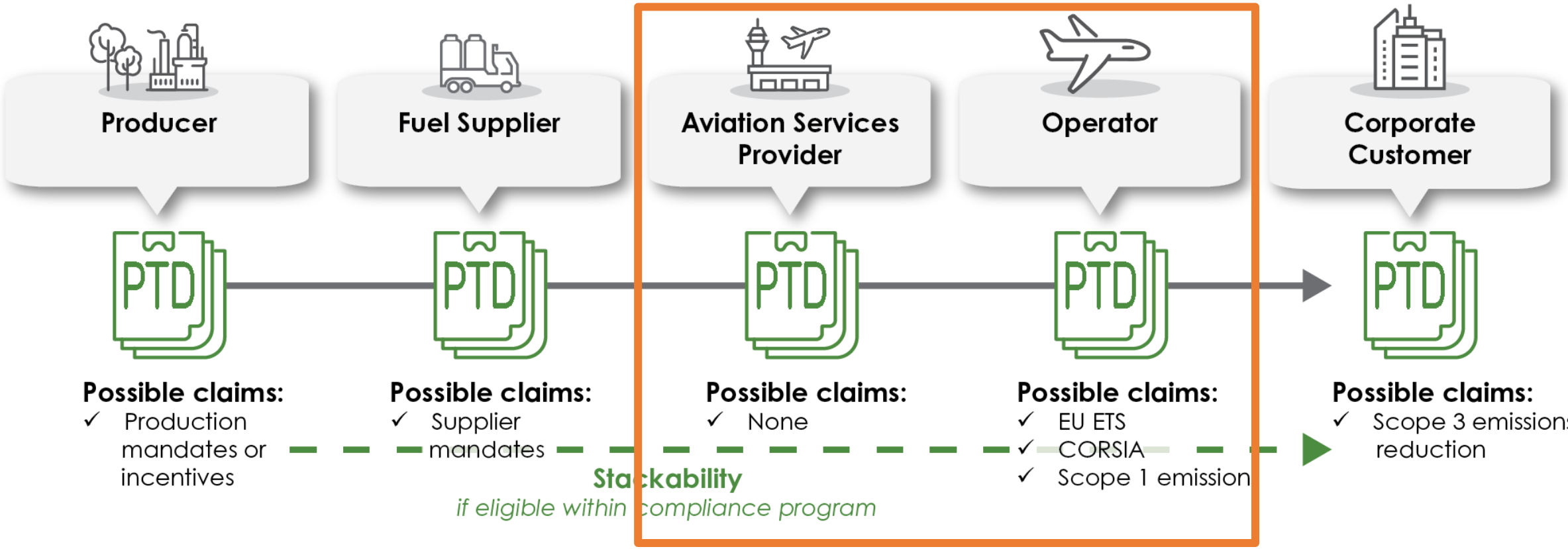
Yellow boxes will be completed by end users

Sample Transaction



FBO:

- **Operator**

Unique ID

- Divide batch unit range for specific sale
- Indicate any changes in eligibility

Transaction Information

- Applicable transaction information

Fuel Attribute Information

- All fields remain unchanged from producer

Claims Accounting

- Producer and supplier claims remain
- FBO no additional claims

Neat **SAF Identification Number:** PPPCCC-FF-UUDDDDDDSSSSSSSSEEEEEEEEMMRRRRRBBB (77.777788889999101010101111) (EEEEEEE – CCCCCCC)	
Vendor	**Receiver**
Name	Name
Address	Address

Transaction Information	
Product Type	Biogenic / non-biogenic SAF
Volume Blended SAF (Indicate Units)	Gallons, Litres, etc
Volume Neat SAF (Indicate Units)	Gallons, Litres, etc
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Uplift Location	ICAO code
Method of Transfer	Physical uplift or Book and Claim
Aircraft	Tail number of aircraft that received fuel (Not required)
Blend Ratio	29.7/70.3

Fuel Attribute Information			
Producer / Location/Date	**Feedstock**	**Feedstock Region**	**Sustainability Certifier and type**
Name and Address dd.mm.yy	Ie. FOG/ Tallow	Ie. Canada	Ie. ISCC CORSIA, etc.
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Final Accounting		
Production credit or mandate claimed,	**What program (list all)**	**year**
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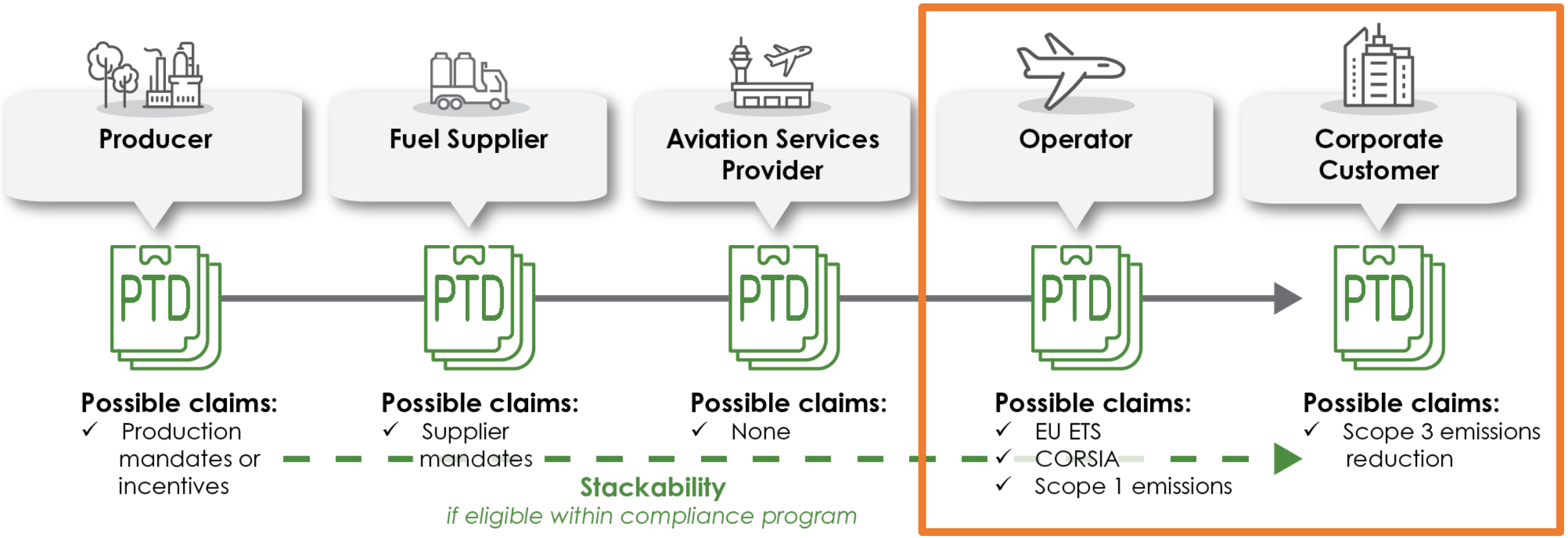

Operator:

- **Scope 3 customer**

Unique ID

- Divide batch unit range for specific sale
- Indicate any changes in eligibility

Transaction Information

- Applicable transaction information

Fuel Attribute Information

- All fields remain unchanged from producer

Claims Accounting

- Producer and supplier claims remain
- Operator indicates any final claims made

Neat **SAF Identification Number:** PPPCCC-FF-UUDDDDDDSSSSSSSSEEEEEEEEMMRRRRRRBBB (77.777788889999101010101111) (EEEEEEE – CCCCCCC)	
Vendor	**Receiver**
Name	Name
Address	Address
Transaction Information	
Product Type	Biogenic / non-biogenic SAF
Volume Blended SAF (Indicate Units)	Gallons, Litres, etc
Volume Neat SAF (Indicate Units)	Gallons, Litres, etc
Uplift Date	dd.mm.yyyy
Uplift Location	ICAO code
Method of Transfer	Physical uplift or Book and Claim
Aircraft	Tail number of aircraft that received fuel (Not required)
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Name and Address dd.mm.yy	Ie. FOG/ Tallow	Ie. Canada	Ie. ISCC CORSIA, etc.
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Voluntary credit claimed (If applicable Scope and Category)	**What program (list all)**	**Year**
Ie. Scope 1 or Scope 3 Cat 6	SBTi	2023
Yellow boxes will be completed by end users		

Up Next for CoSAFA

- **~~May 23:~~** ~~Publicly release V1.0 of Global Methodology~~ **complete**
- **Sept:** Public working group for direct feedback and input into the CoSAFA methodology. **Summary and recordings posted to website**
- **2023:** Test pilots at industry events, refinement, and methodology updates. Q4 V2.0
- **Ongoing:** Engagement and feedback from regulatory entities to ensure methodology incorporates compliance requirements
- **Ongoing:** Engagement with other frameworks and book and claim systems

THANK YOU

Madison Carroll

Executive Director

Council on Sustainable Aviation Fuels Accountability

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https://cosafamethod.org/

Linkedin.com/company/cosafa

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2201 Wilson Boulevard
Suite 530
Arlington, VA 22201

Agenda

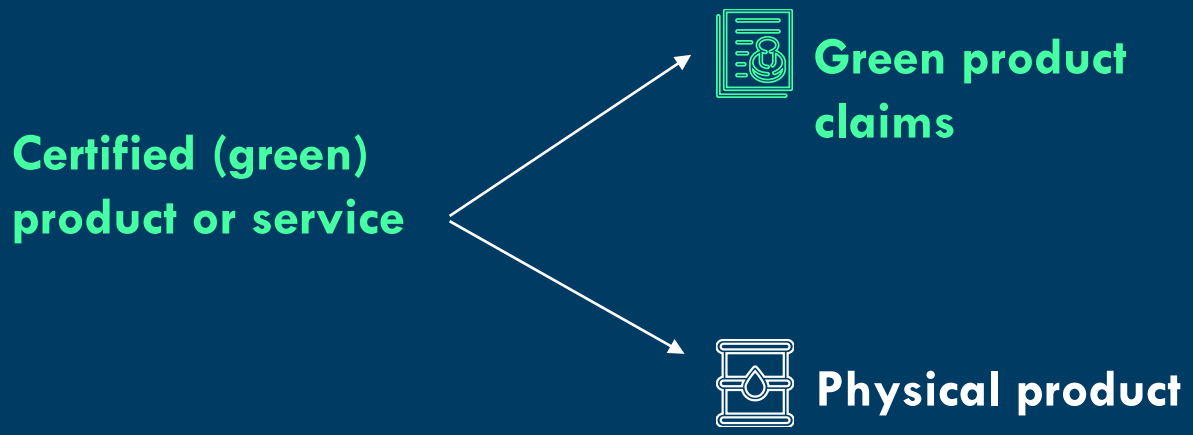
1. ICAO update on ACT-SAF programme and process to CAAF/3
2. Presentation of ICAO CAEP work on Book and Claim
3. IATA work on Book & Claim
4. IBAC and CoSAFA work on Book & Claim
5. **SABA work on Book & Claim**
6. RSB work on Book & Claim
7. ISCC work on Book & Claim
8. Questions & Answers
9. Closing

SABA work on Book & Claim

SABA work on Book & Claim

What is book and claim and where is it useful?

Book and claim is a chain of custody model where the claims made about a product or service are not necessarily physically connected to the flow of products in a supply chain.



Book and claim is a particularly **helpful tool for voluntary indirect procurement** – i.e. when buyers want to purchase green products to decarbonize their supply chains, but:

- **do not have physical access** to certified green products
- **would never ordinarily purchase the product,** but rather a service as a function of that product

What's the opportunity and impact?

Develop a book and claim system that appropriately verifies and values decarbonized products

→

Buyers can **confidently invest in decarbonized products** and services to meet their climate targets

Suppliers can **create a secondary value stream to secure advance offtake agreements** for their products

→

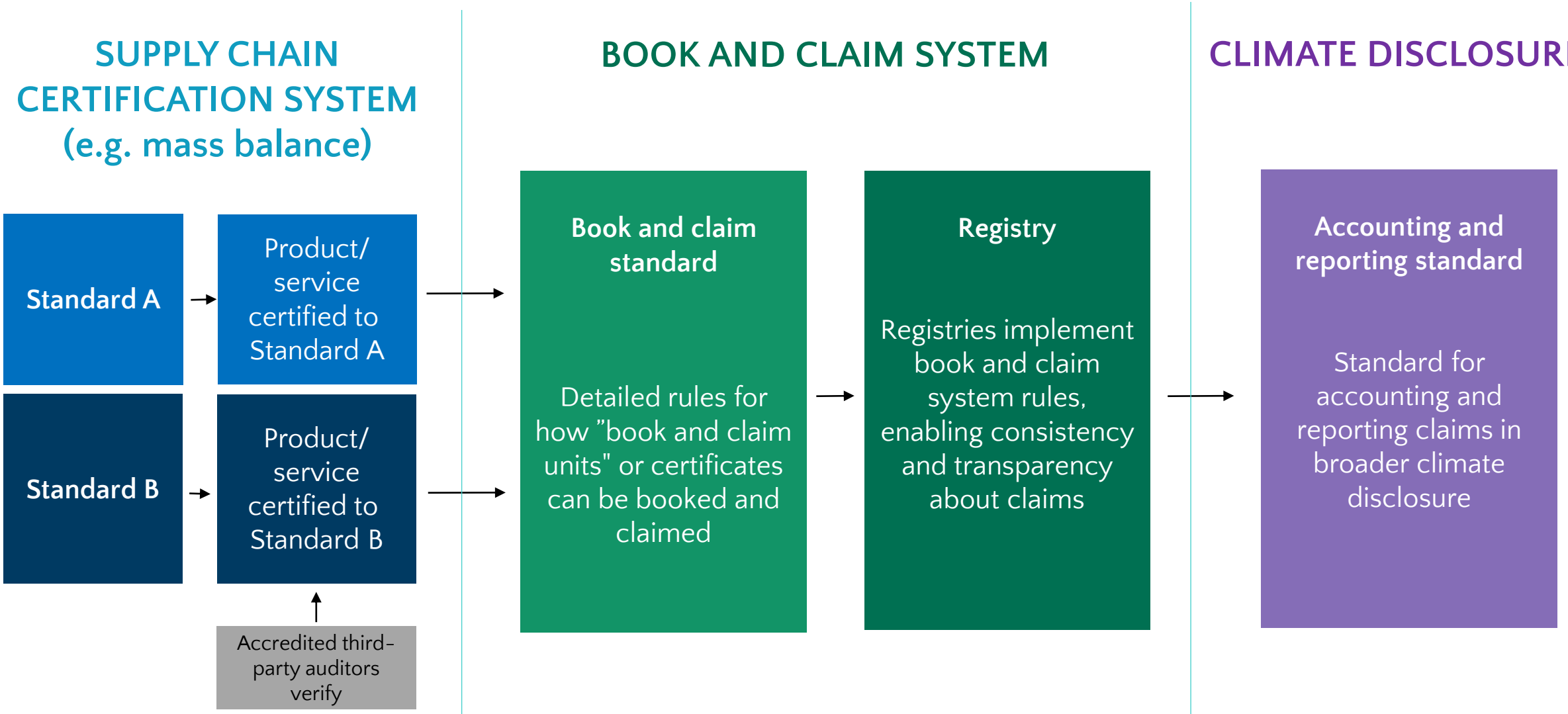
Buyers can confidently **plan to meet their climate targets**

Suppliers can **create secure project financing** and **build more capacity**

→

We speed up deployment and **decarbonization** through voluntary interventions

Credible market infrastructure is critical to build trust and enable indirect procurement at scale



SABA

SUSTAINABLE AVIATION BUYERS ALLIANCE

A joint initiative of EDF Environmental Defense Fund, RMI Energy. Transformed.

With expert support from NEOTERIC Energy & Climate

Customers

American Express Global Business Travel
Autodesk
Bain & Company
Bank of America
BCG
Cisco
Deloitte.
Disney
JPMorgan Chase & Co.
McKinsey & Company
Meta
Microsoft
Morgan Stanley
novo nordisk
Google
Netflix
okta
salesforce
workday
Zurich

Aviators

Alaska Airlines
amazon
GE Aviation
jetBlue
United Airlines
ups
Boeing
BOOM

SABA is providing the tools and support that buyers need to invest in SAF at scale

SUSTAINABILITY FRAMEWORK

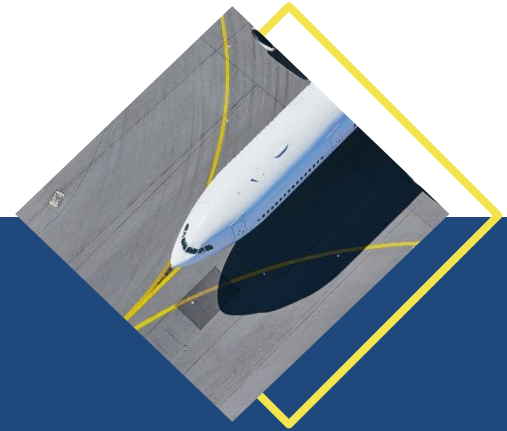
Supports buyers' investments in high integrity SAF and prevents unintended environmental consequences.

SABA published V1 of the SAF Sustainability Framework in December 2022, V2 in September 2023.

SAF CERTIFICATE REGISTRY

Allows buyers to make transparent emissions reduction claims related to their SAF investment.

The SAFc Registry will go live for public use in Q4 2023.



ACCOUNTING GUIDANCE

Provides guidance on how to measure and report aviation emissions involving SAF.

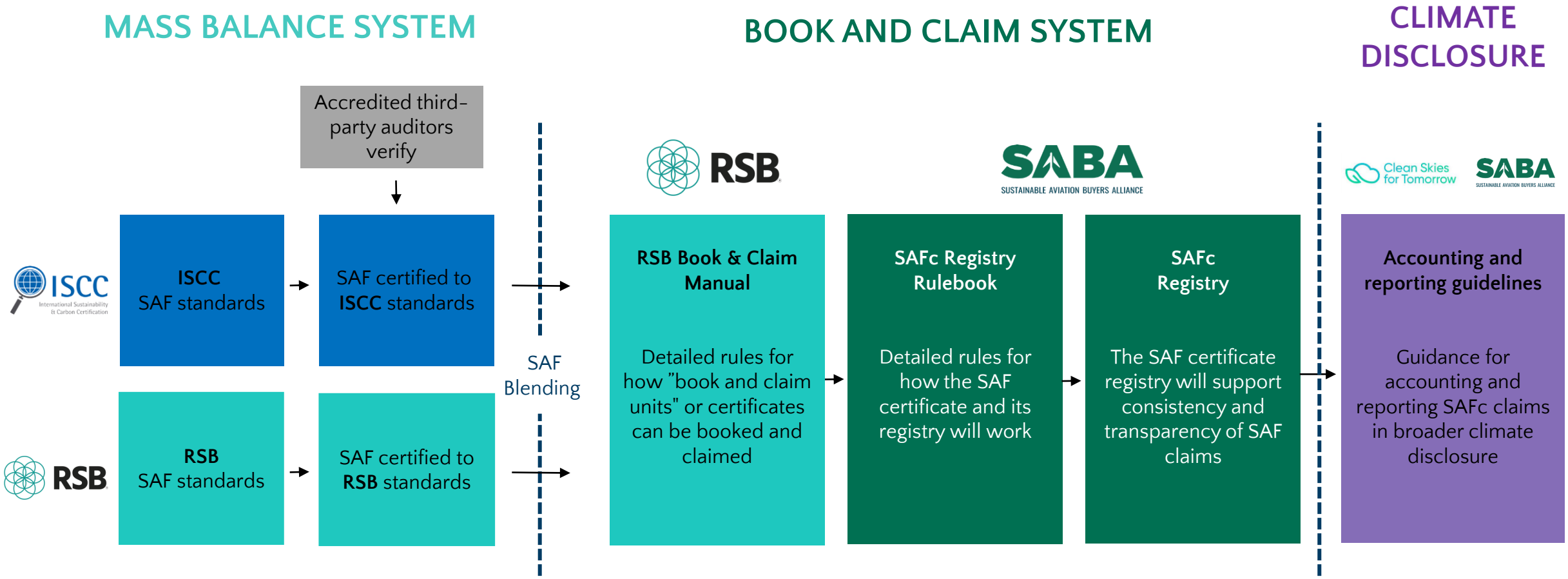
SABA collaborated with WEF CST to publish guidance in October 2022. This guidance will be regularly updated.

COLLECTIVE PROCUREMENT

Competitive, collective procurement to standardize and simplify the procurement process for companies.

SABA successfully completed its first collective procurement process in early 2023 and is now running a multi-year procurement process.

SAF certificates (SAFc) build from existing certification systems to provide a key investment tool for customers



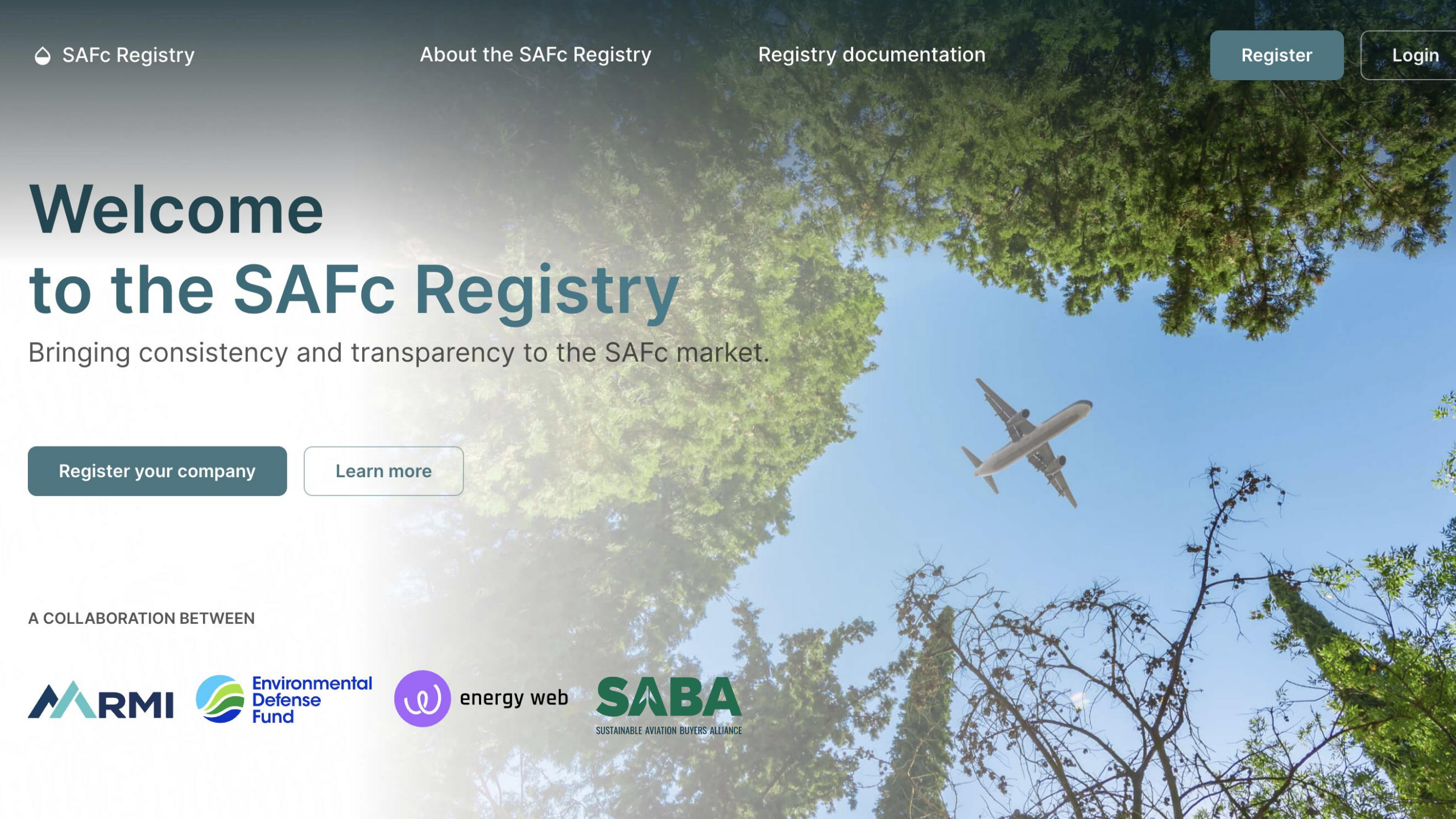
Welcome to the SAFc Registry

Bringing consistency and transparency to the SAFc market.

Register your company
Learn more

A COLLABORATION BETWEEN

RMI
Environmental Defense Fund
energy web
SABA
SUSTAINABLE AVIATION BUYERS ALLIANCE



The SAF REGISTRY is designed to enhance user trust by ensuring:

1. **Consistency**,

   by implementing standardized processes for registering, transferring and retiring certificates

2. **Sustainability,**

   by providing certified data on sustainability attributes of each batch of fuel and/or transport solution, e.g. emissions abatement, certifications, etc.

3. **No double counting**,

   or that valid claims are only made once for every intervention (i.e. ton of SAF), *including managing double counting between voluntary and compliance use*.

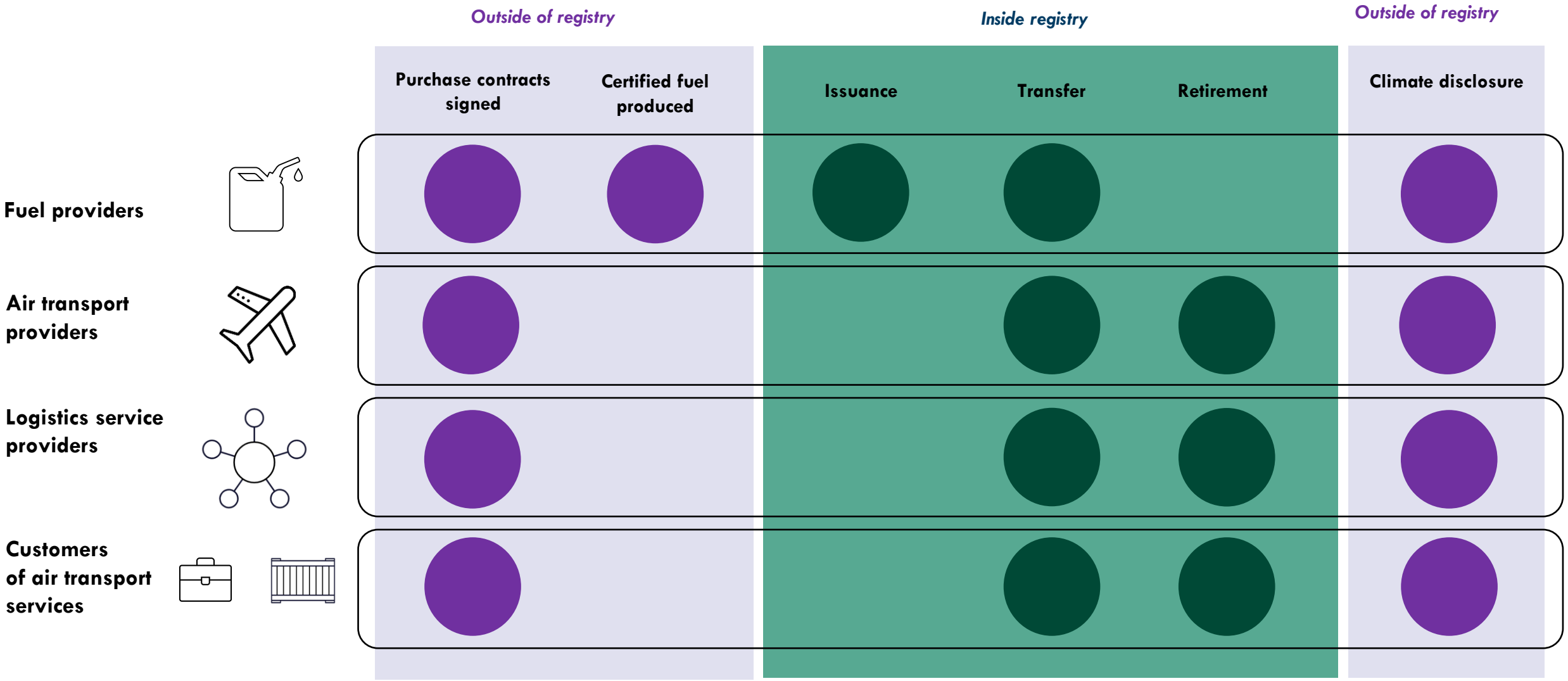
4. **Transparency,**

   by providing a transparent ledger to support climate disclosure of claims by transport providers, customers, and logistics service providers

5. **Independent nonprofit ownership** and **multilateral governance,**

   to ensure that changes are proactively made to the system with user buy-in and in tandem with best practices.

The SAFc REGISTRY links procurement and disclosure



SAF REGISTRY Basics

Unit type is determined by:

Units	Sustainability tier	Usability tier	Assurance level
SAFcA for air transport providers 	**SCS-eligible** Certified to any ISCC or RSB standard across supply chain	**Voluntary** Not used towards a compliance obligation	**Validated** Certification is valid [default]
SAFcE for consumers of aviation services and logistics service providers 	**SABA-eligible** Meets threshold SABA (similar to SBTi) criteria	**Compliance** Used towards an emissions reduction obligation by a fuel provider and/or airline for a blending mandate or other ineligible scheme (CORSIA, some incentives)	**Revalidated** After a year, certification is still valid (automatic check)
	SABA-preferred Meets SABA preferred criteria (more on ILUC, displacement)		**Verified** Certification body confirms that information is up to date and correct

The SAFc REGISTRY gives users flexibility while checking usability

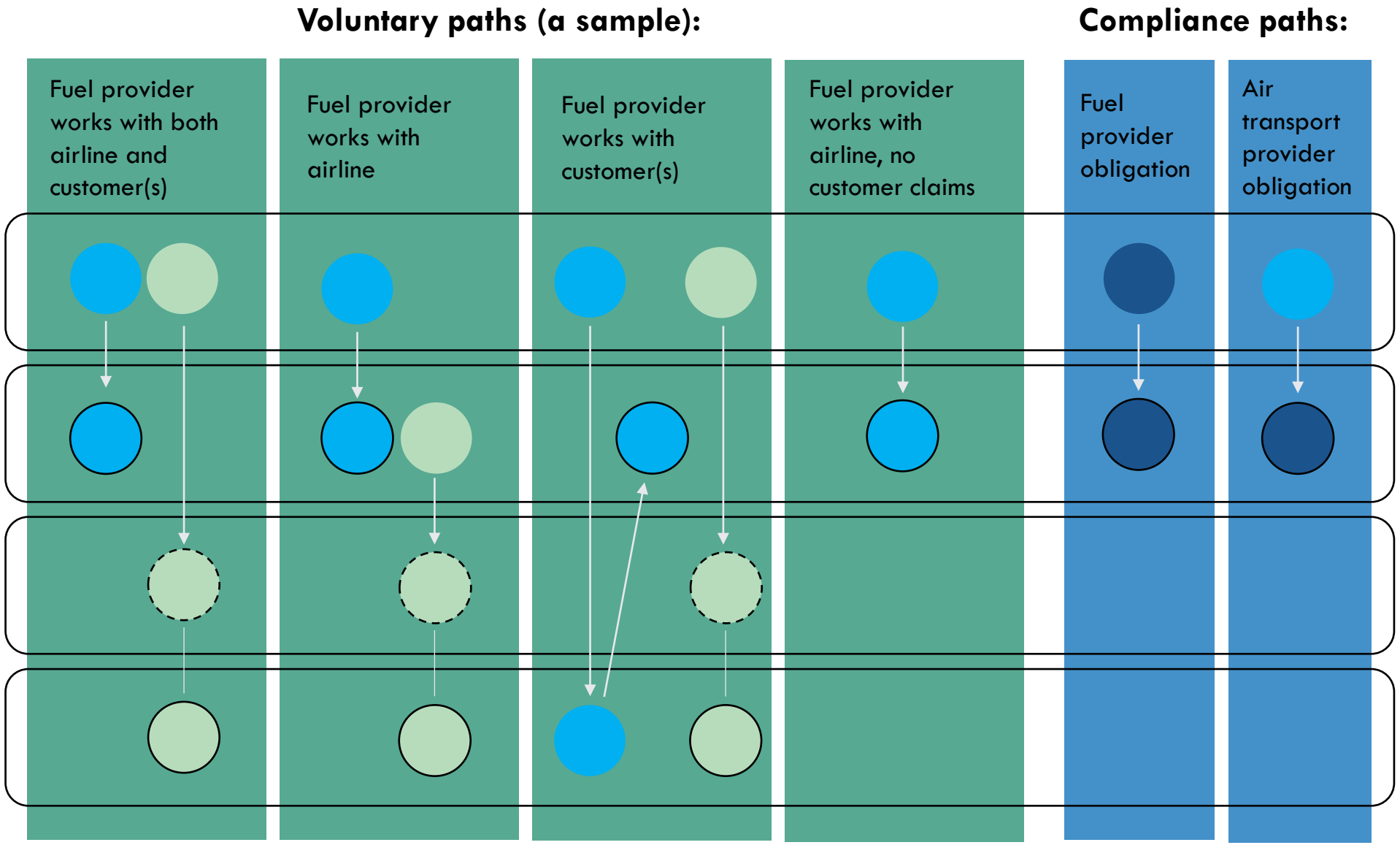
- Voluntary SAFcA
- Compliance SAFcA
- Voluntary SAFcE
- Retired in the name of

Fuel providers

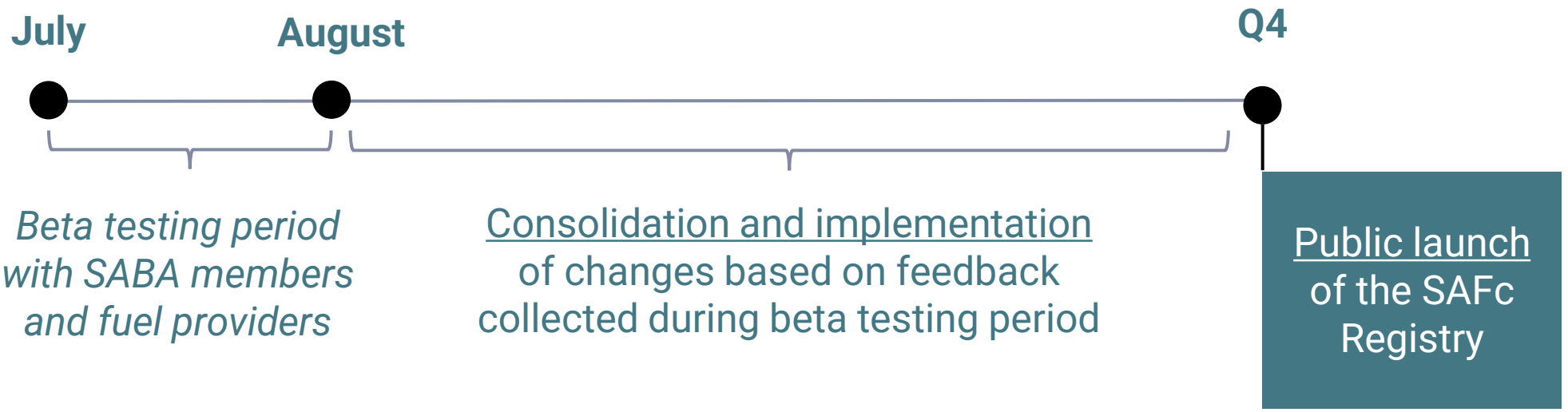
Air transport providers

Logistics service providers

Customers of air transport services



SAFc REGISTRY Timeline

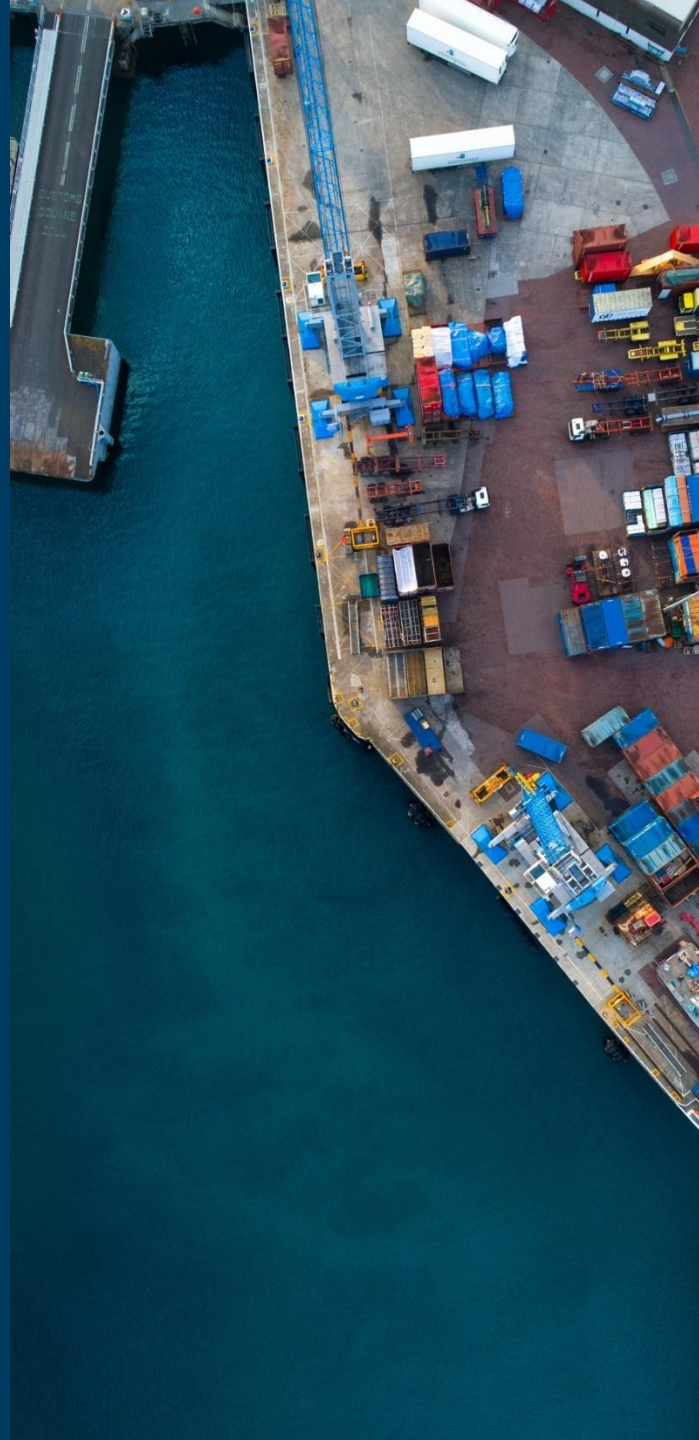


Book & Claim Community for Heavy Transport

Smart Freight Centre (SFC) and RMI are partnering as secretariat to connect, support, and catalyze efforts across numerous stakeholders towards the development of a unified book and claim chain of custody framework for transport decarbonization.

Program objectives

- **Serve as a central hub**. Bring together actors developing book and claim systems and offerings to help enable book and claim to function at scale.
- **Reduce duplication**. Facilitate work across book and claim stakeholders to avoid overlap and to identify and resolve barriers and gaps.
- **Communicate and advocate.** Create a clear narrative about how book and claim can help accelerate heavy transport decarbonization and how book and claim stakeholders are working together to realize this goal.

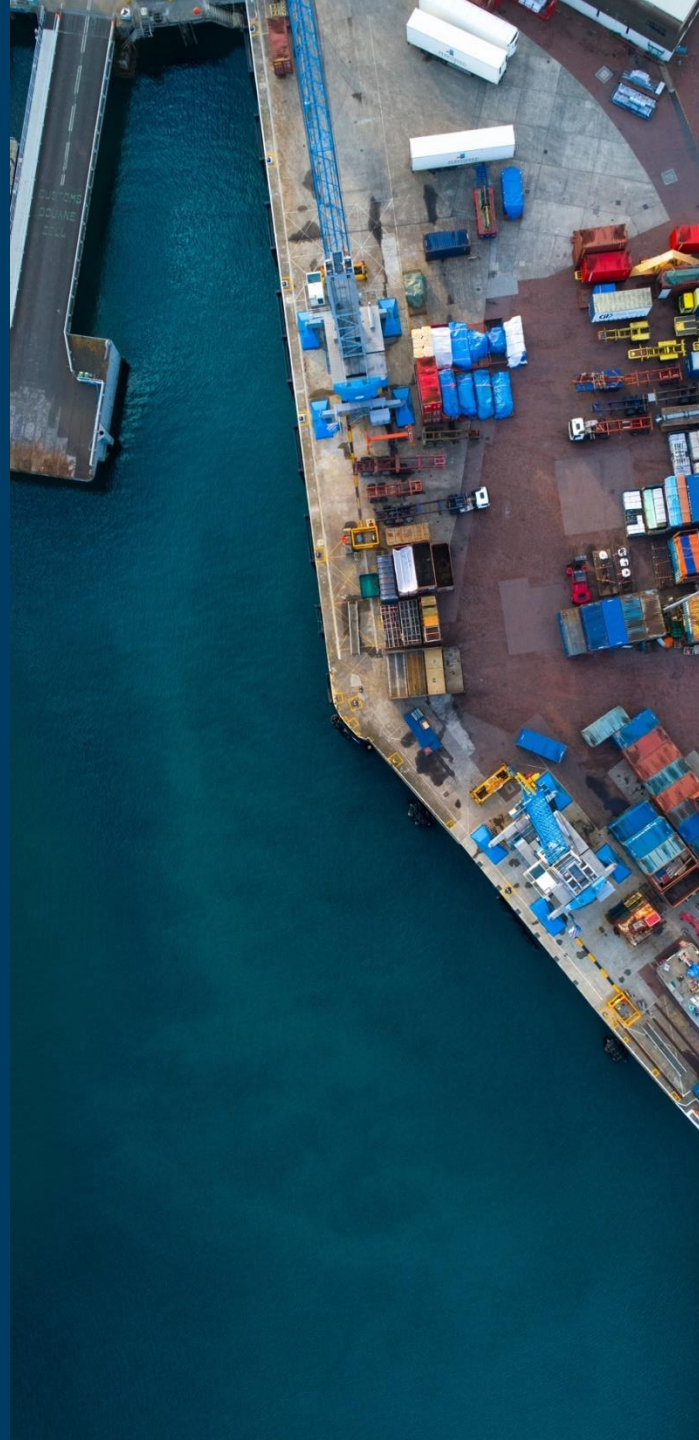


For further information

flysaba.org

and

bookandclaimcommunity.org



RSB work on Book & Claim

RSB Book & Claim Goals

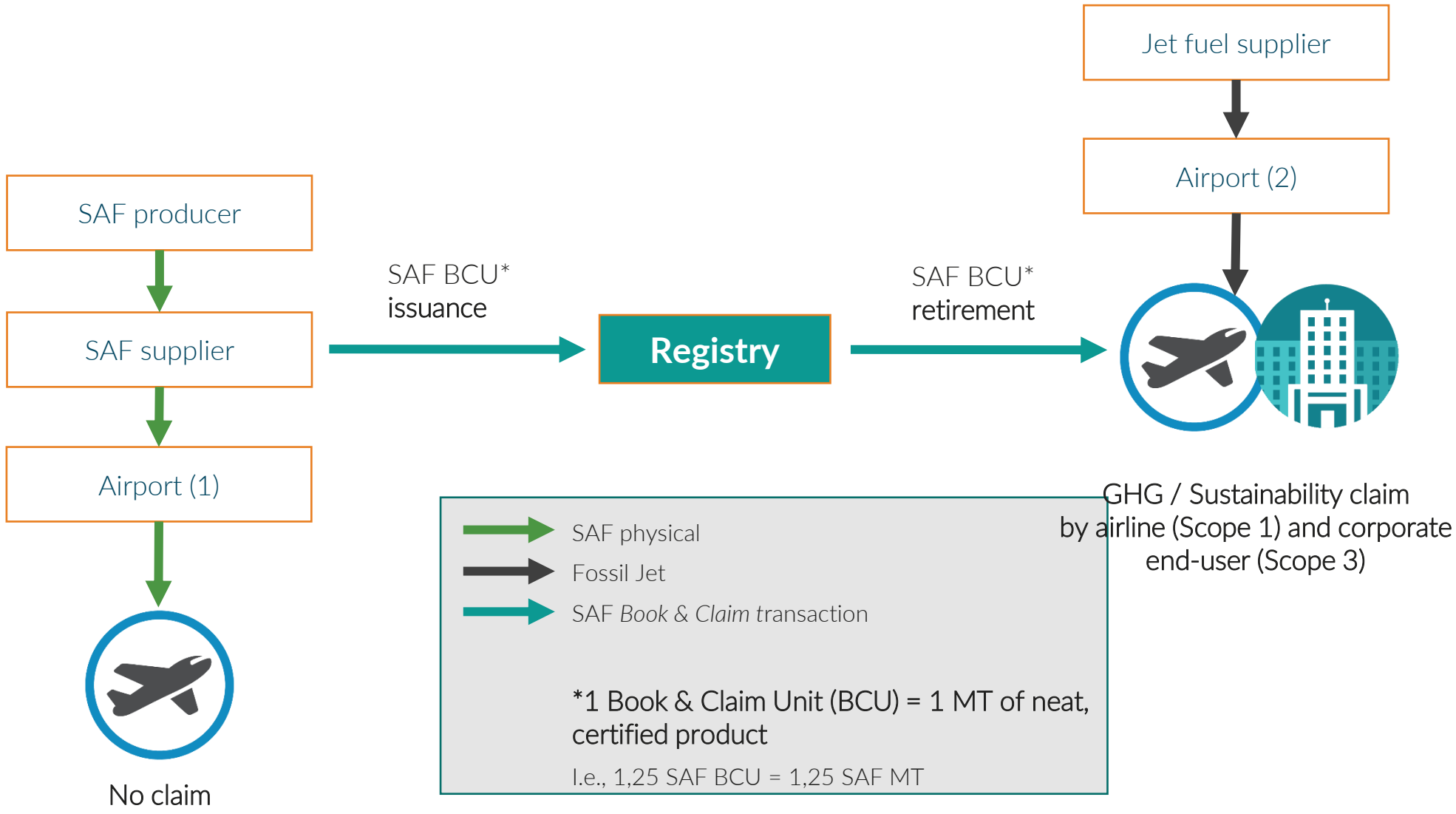
Accelerate the decarbonisation of hard-to-abate sectors

Enable cost-sharing of Sustainable Fuels' price premiums

Bridge limited supply locations vs increasing global demand

Meet growing demand from corporates for **in-sector** solutions to decarbonise their aviation and shipping emissions

Book & Claim Simplified Process



ICAO ENVIRONMENT

RSB Book & Claim System

ACT SAF

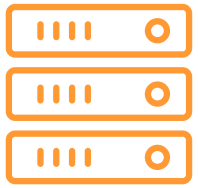
Integrative elements developed to foster the complex scaling of sustainable fuels

RSB B&C Recognition

- Public release of V1.0 planned for Q1 2024
- Promote an ecosystem approach to the growing market of independent registries
- ensures that registry operators meet technical and chain-of-custody requirements

RSB B&C Manual

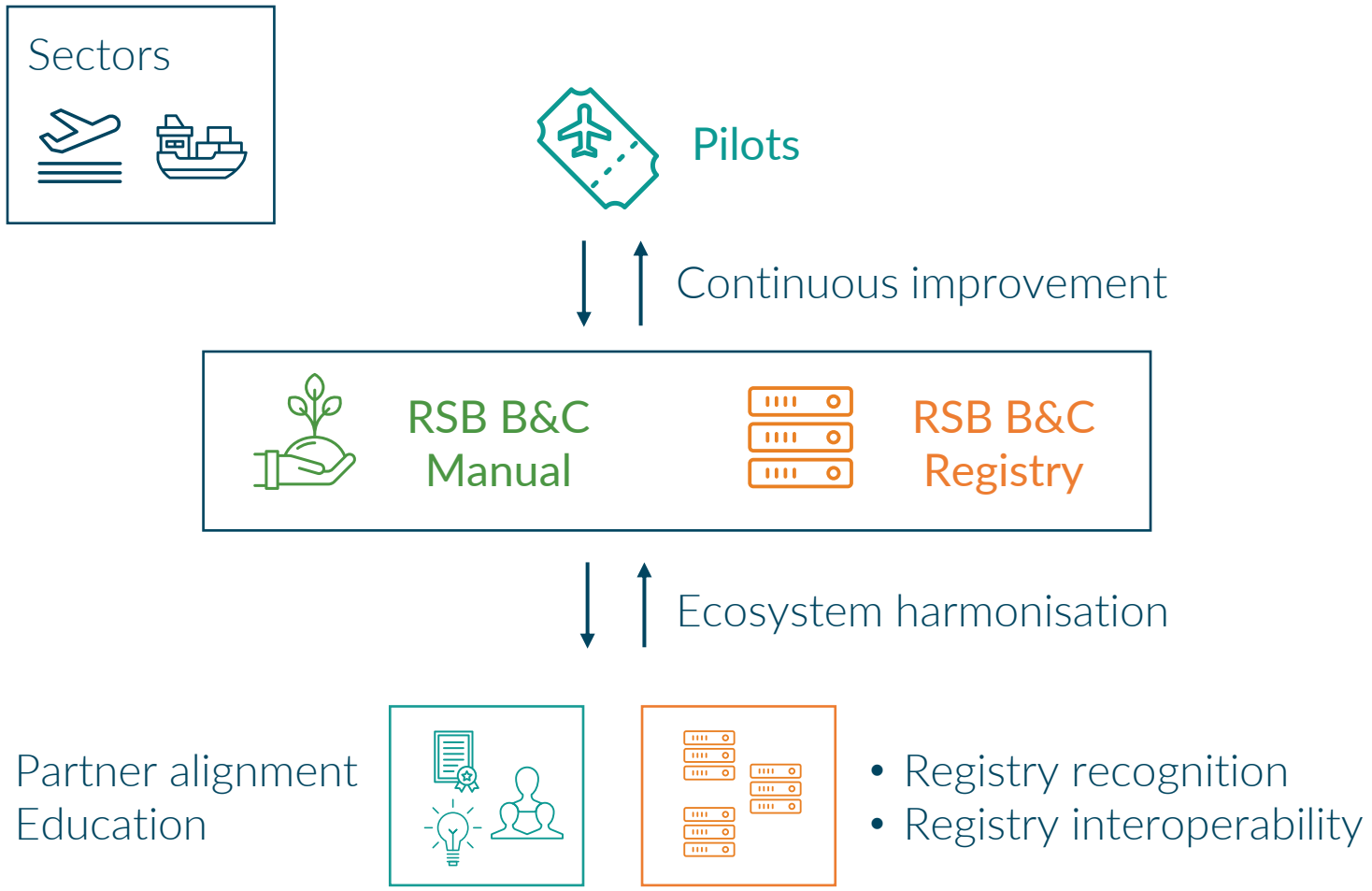
- How to register, transfer, retire BCUs, incl. sustainability thresholds, certification, double counting, additionality
- V3.0 approved by the RSB Board on 24 March 2023
- Update to V4.0 in 2024 to cover marine sector



RSB B&C Registry

- Web-based registry launch in Q4 2023
- Secure and credible space for RSB members and partners to participate in book and claim
- Test environment for new scenarios and share learnings

RSB Book & Claim System



RSB value

1. Genuine stakeholder engagement and consensus-building
   - Industry
   - Environmental organisations
   - Policymakers
   - Protocols (e.g., SBTi)
2. Practical knowledge of 'applied' book and claim through pilots
3. Independent / non-profit
4. Claims based on third-party certification
5. Focus on system harmonisation

RSB Pilot Use Cases and Partners

1. Accelerate decarbonisation

Achieve 100% SAF flights (mix of mass balance and book and claim SAF purchase)

2. Bridge limited supply locations

Airline purchase of SAF without physical connection to supply

3. Corporate travel emission reduction

Corporate customers purchase of SAF to claim the environmental benefits (i.e. GHG reductions) to reduce their aviation-related emissions

air bp
Microsoft
UNITED AIRLINES
AIRBUS
TotalEnergies
SABA
SUSTAINABLE AVIATION BUYERS ALLIANCE
SINGAPORE AIRLINES
ETIHAD AIRWAYS
world energy
4AIR
Shell

RSB's Double Counting Mitigation

	Double issuance	Double use	Double claiming
Definition	More than 1 unit issued for the same emission reduction	Same unit used more than once (i.e., sold to more than 1 buyer)	Same unit used to meet both domestic and international GHG targets, or two or more companies claiming ownership for the same GHG emission reduction within the same scope.
Risk mitigation	BCU Registrations by SAF supplier verified by third-party audits RSB Registry Audit RSB Book & Claim Recognition (for independent registries) *Ambition: interoperable Registry ecosystem*	Registry Public Retirement Statement table RSB Registry Audit	Public Retirement Statement table (including information on tax credits and incentives) Transparent GHG disclosure by value chain actors (RSB Book & Claim Manual Section 6) Additionality approach (RSB Book & Claim Manual Section 7)

Key Requirements - Certification

SAF/SMF must be certified by the RSB or another EU RED or ICAO CORSIA recognized scheme

Crops

Transport

Refining

Blending

Wastes

RSB Book and Claim Registry System Users

Supplier that issues SAF BCU

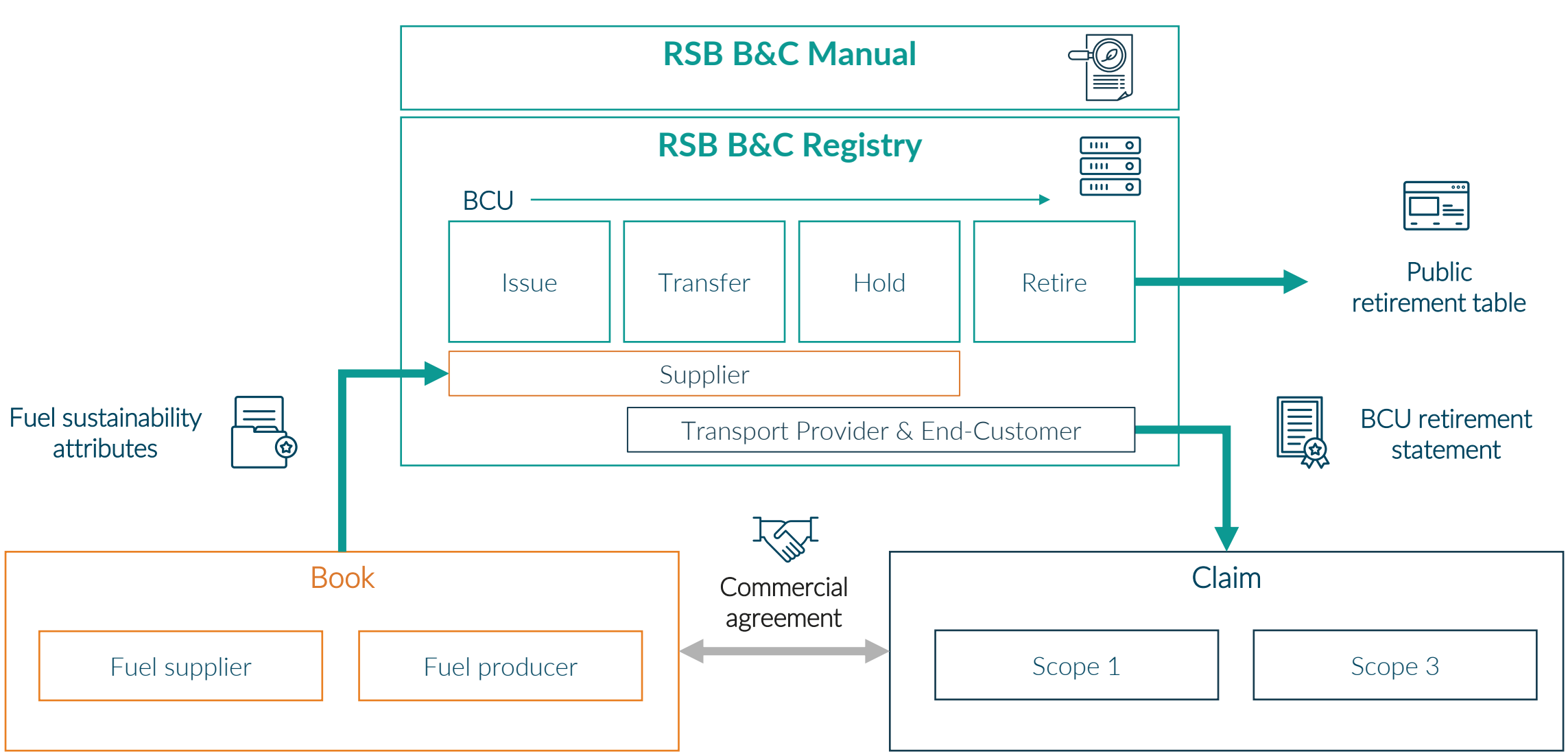
Airline

Corporate

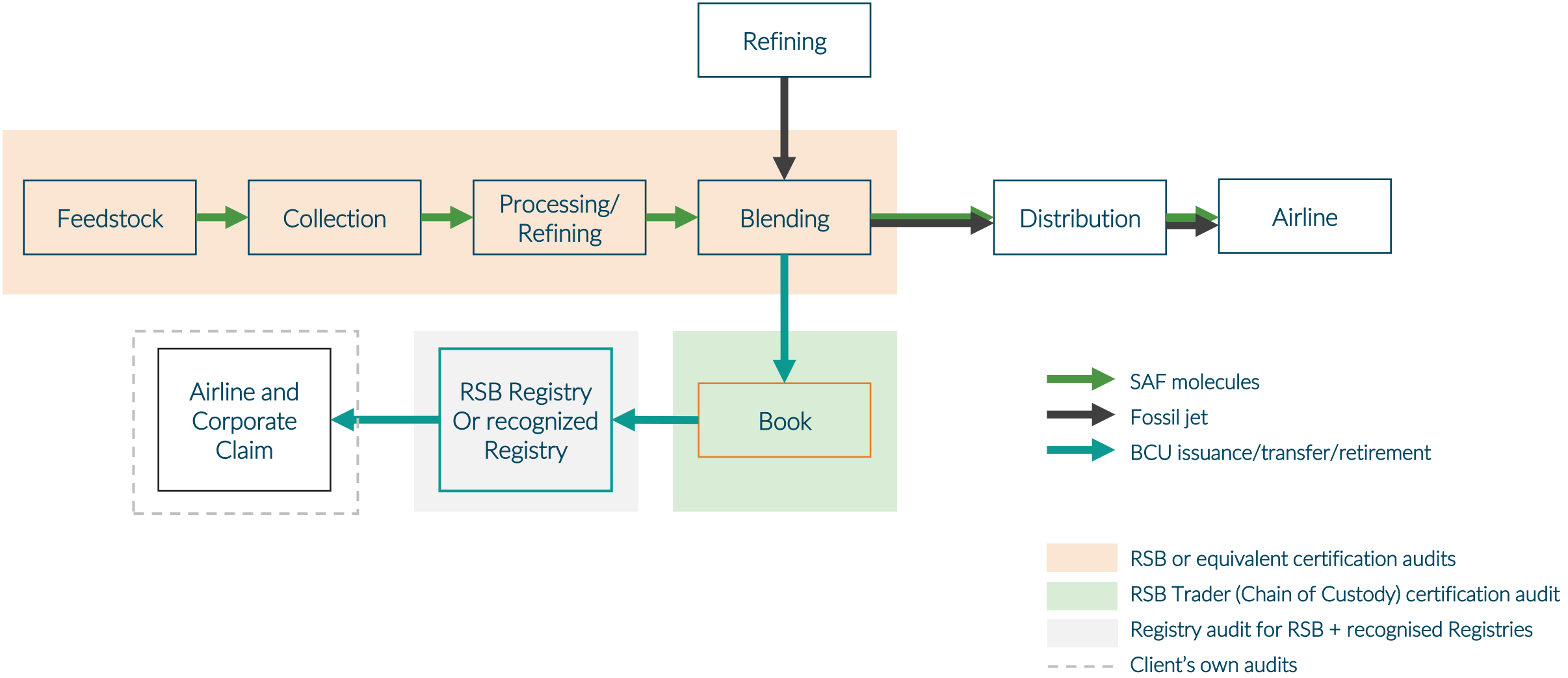
RSB Trader (Chain of Custody) Certification

RSB CERTIFIED

RSB Book & Claim Registry



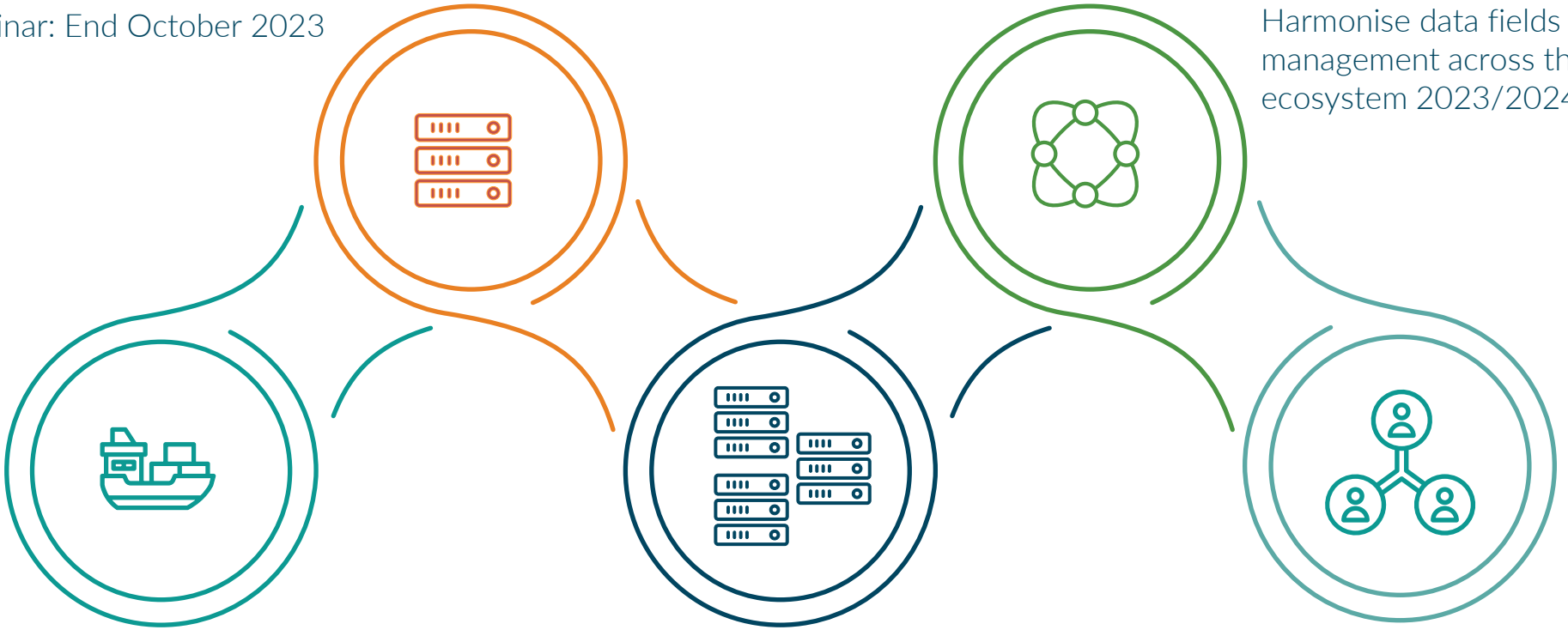
RSB Auditing Model



RSB Book & Claim Outlook

RSB B&C Registry

Launch & Webinar: End October 2023



Data harmonization

Harmonise data fields and data management across the registry ecosystem 2023/2024

System expansion shipping

- Design of pilots: 2023
- Implementation & consultations: 2024
- Amendment to B&C Manual (V4): 2025

System recognition procedure

- Stakeholder consultations: closed 25 Sept 2023
- RSB Board approval: Q1 2024

Interoperability

Evaluate and develop system of registry interoperability 2024/2025

Thank you!

For more information visit
rsb.org/programmes/book-and-claim/

Or email us at
bookandclaim@rsb.org

Key contacts
Arianna.Baldo@rsb.org **(manual / partnerships)**
Max.Eichelbaum@rsb.org **(registry / partnerships)**

Agenda

1. ICAO update on ACT-SAF programme and process to CAAF/3
2. Presentation of ICAO CAEP work on Book and Claim
3. IATA work on Book & Claim
4. IBAC and CoSAFA work on Book & Claim
5. SABA work on Book & Claim
6. RSB work on Book & Claim
7. **ISCC work on Book & Claim**
8. Questions & Answers
9. Closing

ISCC work on Book & Claim

Any book & claim system should follow key principles

SAF is certified to meet stringent, internationally recognized sustainability criteria

Only SAF that is CORSIA or EU RED certified is eligible for entering the system

Alignment with established GHG accounting frameworks and industry guidance where possible

System design largely follows principles laid down in the Science-based targets initiative's (SBTi) aviation sector guidance and GHG Protocol accounting standards

SAF is additional, as it generates atmospheric benefits beyond mandated and incentivized volumes

Only SAF volumes that have not been counted towards SAF mandates or counted under incentive schemes (e.g. 'opt-in') are eligible for entering the system

Practical to incorporate into existing certification processes

Simple integration into existing certification process (SAF suppliers, certification bodies)

Ease of registry use, import/export functions

Features safeguards to help mitigate the risk of double counting

Credit registrations audited by third-party certification bodies

Public retirement table

Communication between registries

ISCC's Credit Transfer System features two major elements

ISCC Credit Transfer System

ISCC Credit Transfer System Document

Defines

- **Guiding Principles** for the System
- Requirements for **organisations to participate**
- Requirements for **credit registration, transfer and retirement**
- Requirements for **audit & verification**

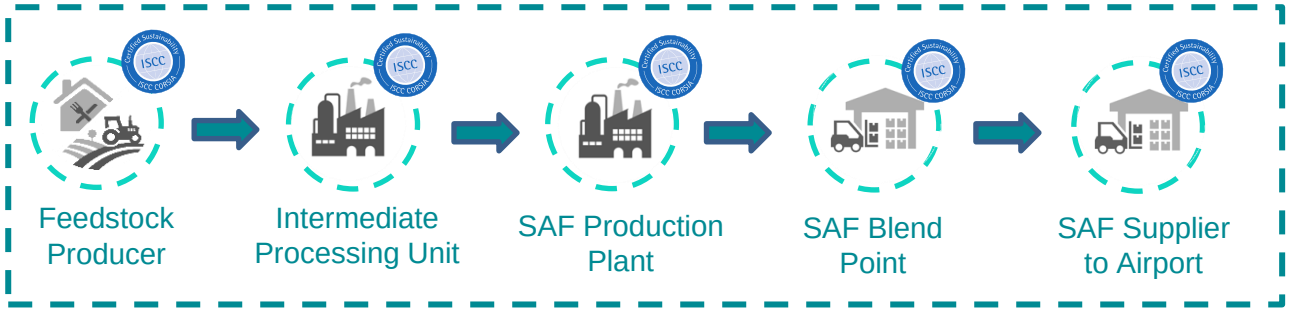
ISCC Credit Transfer Registry

Standardized electronic database for

- Digitally **tracking credit registration, transfer and retirement**
- Generating **retirement declarations to substantiate** emission reductions **claims**
- **Providing public information** about SAF claims made through the Registry

Book & claim systems should build on robust mass balance certification

Mass balance certification (e.g. CORSIA, EU RED)



Mass balance certification …

- ✓ follows the physical flow of sustainable material from feedstock to supply to the airport, lending credibility to all claims made based on that mass-balanced SAF
- ✓ ensures feedstock production adheres to strict sustainability criteria
- ✓ ensures that GHG emissions are consistently and transparently accounted for in the SAF's whole life cycle

Book & claim systems must work for all involved stakeholders

SAF suppliers

- ✓ Straightforward, „plug-and-play“ system that complements the existing ISCC supply chain certification systems
- ✓ Simple integration into existing certification via add-on audit as part of regular audits

Airlines

- ✓ Practical and hassle-free way of recording credible emissions reductions from SAF, integration into credible corporate traveler programs towards end-customers
- ✓ Possibility for future use of credit transfers in regulated markets (e.g. CORSIA)*

Aviation end-customers

- ✓ Sourcing of credible emissions reductions based on SAF that meets strict sustainability criteria
- ✓ Clear documentation for each SAF batch in the form of a retirement declaration, to substantiate claims in GHG emissions reporting

Certification bodies

- ✓ Straightforward integration of credit transfer system auditing into certification body‘s existing certification services
- ✓ Streamlined access to required audit documentation via dedicated certification body accounts in the registry

* Please note that applicability of credit transfers depends on acceptance by competent authorities in regulated markets

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Questions and Answers

Closing Remarks

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