

REGIONAL GREEN AIRPORTS SEMINAR

Hosted by the Ministry of Transport of the Republic of
Uzbekistan

Book & Claim:
**A chain of custody supporting
the scale up of SAF**





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Objectives and agenda

The objectives of this presentation are to:

- Present why SAF environmental attributes are important and how their transfer along the SAF value chain must be controlled and verified,
- Introduce the Book & Claim chain of custody model: definition, features and mechanism;
- Present the Airbus Book & Claim Demonstrator (ABCD), lessons learned and opportunities for Airports.

01

How do we guarantee that SAF is SAF?

02

What is Book & Claim?

03Airbus' activities around Book & Claim:
Airbus Book & Claim Demonstrator



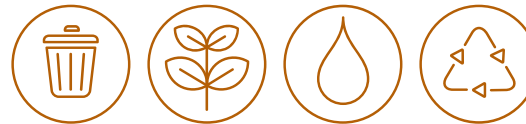
How do we guarantee that SAF is SAF?

- What is Sustainable Aviation Fuel?
- Traceability through documentation
- Chain of custody models

What is SAF?

SUSTAINABLE AVIATION FUEL...

Synthetic Aviation Fuel
made from conversion processes
of renewable feedstocks



Meeting sustainability
criteria, including minimum
GreenHouse Gases
emissions



Conventional Aviation Fuel



Certified against technical
standards such as:

ASTM D1655 - Jet A/A1
GB 6537-2018 - Jet N°3
Def Stan 91-091 - Jet A1

... is a blend of **Synthetic Aviation Fuel** with a
minimum of 50% of Conventional Aviation Fuel.

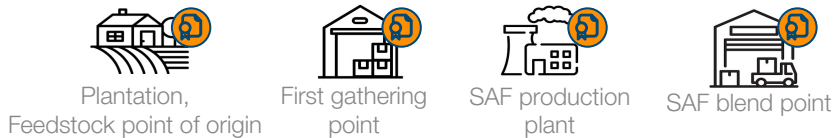
How do we guarantee that SAF is in fact sustainable?

1

Provide compliance of the given sustainability criteria



Individual certification
of every element of the supply chain



2

Ensure all the relevant product properties and related sustainability characteristics are forwarded through the supply chain to the end-user



Traceability

Chain of custody

Physical segregation

Mass balance

Book and Claim

Certification and Chain of custody

'Traceability' and 'chain of custody' to prove the sustainability of SAF

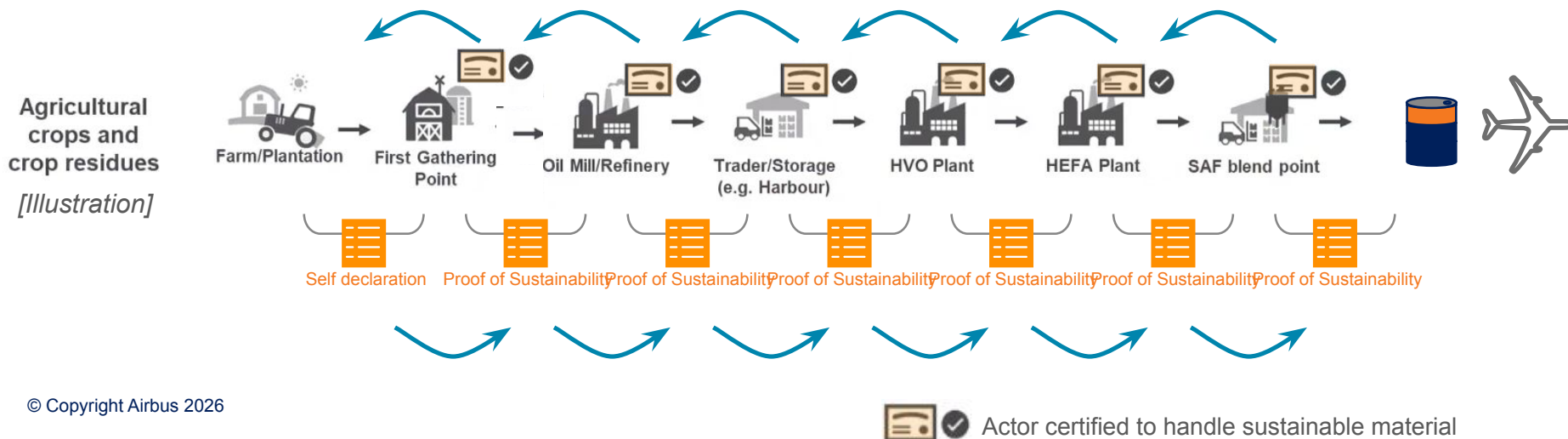
Traceability

Ability to identify and trace the origin, processing history, distribution, location of products and materials through supply chains (ISO)

Chain of custody (CoC)

Method of transferring, monitoring and controlling inputs and outputs and related specific information as they move through the supply chain

- ✓ Gives the possibility of **tracing the physical flow of product back and forth throughout the supply chain** from origin to final delivery
- ✓ Gives the possibility of assigning **sustainability characteristics to individual consignments of material**



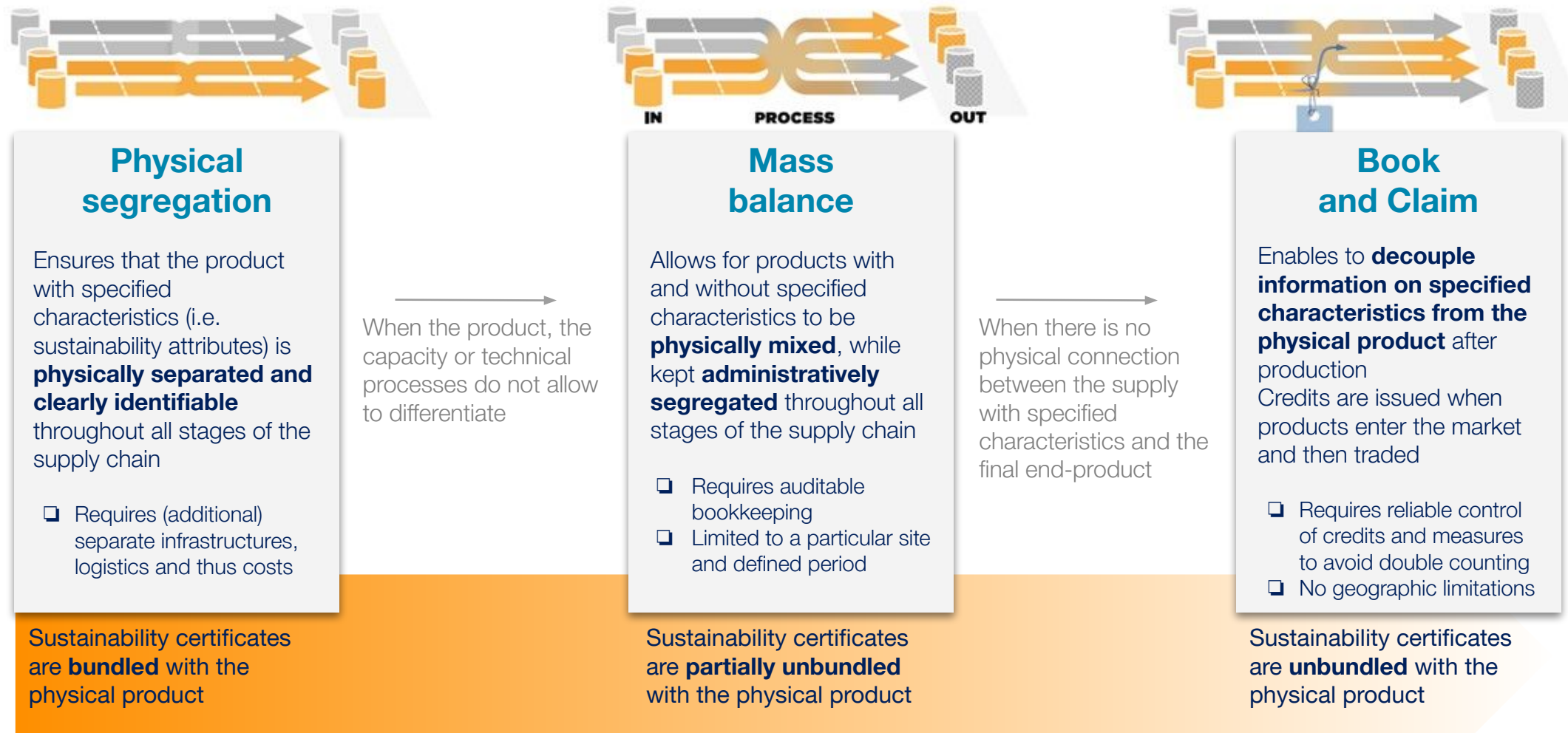
Traceability through documentation

SAF traceability throughout the supply chain and until the final delivery needs to be properly documented

Sustainability	Financial	Quality
Documentation to allow the claim (proving the sustainability and GHG saving criteria)	Documentation to allow the customers pay for the fuel	Documentation to prove the usage of JetA1
- Qty of SAF purchased - Blend % - Pathway - NCV (Net Calorific Value) - Emissions form source stream (gCOe/MJ) → % CO2 savings	- Qty of fuel purchased - Type of fuel (CAF/SAF) - Price - Date	Technical characteristics of the fuel used (appearance, composition, volatility, fluidity, combustion, corrosion, contaminants, water separation, conductivity, lubricity, additives...)
 Certification body (i.e. ISCC) PoS	 Fuel Receipt	 Certificate of Analysis (CoA) / Certificate of Quality (CoQ)
 Supplier CoS (or PoS equivalent)	 Delivery note	
	 Supplier's invoice	

Overview of the different chain of custody models

- Sustainability certificates can be either bundled with the physical product or unbundled from it



What is Book & Claim?

- Context
- Definition
- Key features
- Step by step approach
- Main challenges of B&C

In 2025, SAF accounted for
0.6%
of global jet fuel production,
doubling the amounts produced
in 2024

Currently, SAF is
3 to 5
times more expensive than
conventional (fossil-based)
aviation fuel



Despite a growing
interest, SAF is still
of out of reach for
potential
customers

Sources: [IATA, SAF Production Growth Rate is Slowing Down, Essential to Correct Course Ahead of e-SAF Mandates](#) (Dec.2025)
[IATA, Facts Sheet: Net zero 2050: sustainable aviation fuels](#) (Dec.2024)
[ICAO SAF Airports map](#) (March 2026)

How does “book & claim” fit into this picture?

Book and Claim

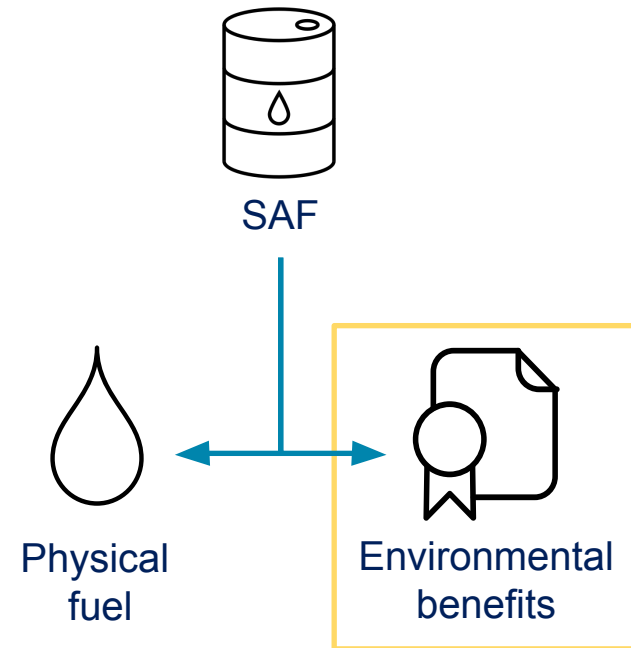
*“It is a chain of custody model
in which the administrative record flow does
not necessarily connect to the physical flow of
a product throughout the supply chain”*

ISO 22095:2020



Provides a solution to the logistical challenge of
bringing SAF to market

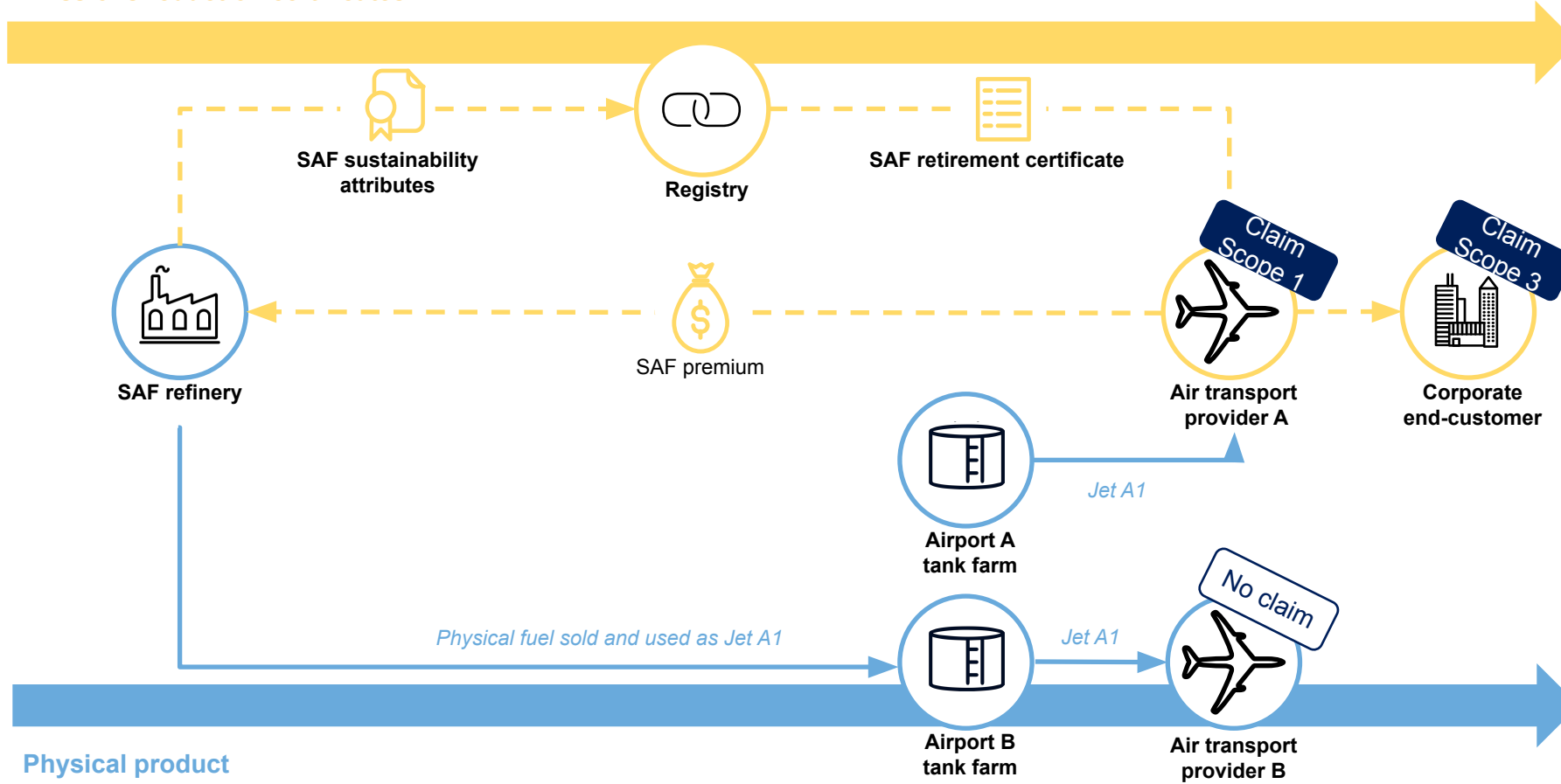
by allowing customers to purchase SAF without
being physically connected to a SAF supply site



**Transferred separately via a
dedicated registry**

SAF Book & Claim

Emissions reduction certificates



What is Book & Claim

Common elements of current B&C initiatives

Methodology

B&C principles
Registry rulebook
Accounting and reporting protocols

Registry

Record of the transactions and transfer of physical fuel and sustainability attributes

Verification

Ensure compliance with the methodology



Common design features include:

- Security
- Differentiated users' capabilities
- Auditability
- Communication/comparison/with other registries

Source: ICAO, Act-SAF #6 "SAF accounting and Book & Claim systems" (Oct. 2023)

Emerging Book & Claim initiatives





Organization	Methodology	Registry	Verification
Aireg	Conceptualization / Under design		
Clean Skies for Tomorrow	Publication / Implementation		
Environmental Defense Fund	Publication / Implementation		
SBTi	Conceptualization / Under design		
Smart Freight Centre and MIT	Publication / Implementation		
4AIR		Publication / Implementation	
Airline's Programs		Publication / Implementation	
Avelia		Publication / Implementation	
Board Now		Publication / Implementation	
FBO		Publication / Implementation	
Evident (Fly-i)		Publication / Implementation	
SABA	Publication / Implementation	Publication / Implementation	
COSAFA	Publication / Implementation		Conceptualization / Under design
ISCC	Publication / Implementation	Publication / Implementation	Publication / Implementation
RSB	Publication / Implementation	Publication / Implementation	Publication / Implementation
IATA CADO	Publication / Implementation	Publication / Implementation	Conceptualization / Under design

- Various aviation stakeholders are developing **SAF reporting and accounting initiatives** (i.e., in form of the book & claim systems)
- According to ICAO, these initiatives intend to **primarily cover Scope 3 emissions** from aviation end-users (corporate, business and individual travel)
- Different elements are being covered by each SAF Book & Claim initiative
- Researched initiatives are currently at various stages of implementation

 Conceptualization / Under design
 Publication / Implementation

B&C initiatives

Certification

SAF is eligible for Book & Claim when it:

- Comes from an actor who holds a valid certificate (eg. by ISCC or RSB)
- Has a Proof of Sustainability document (PoS)

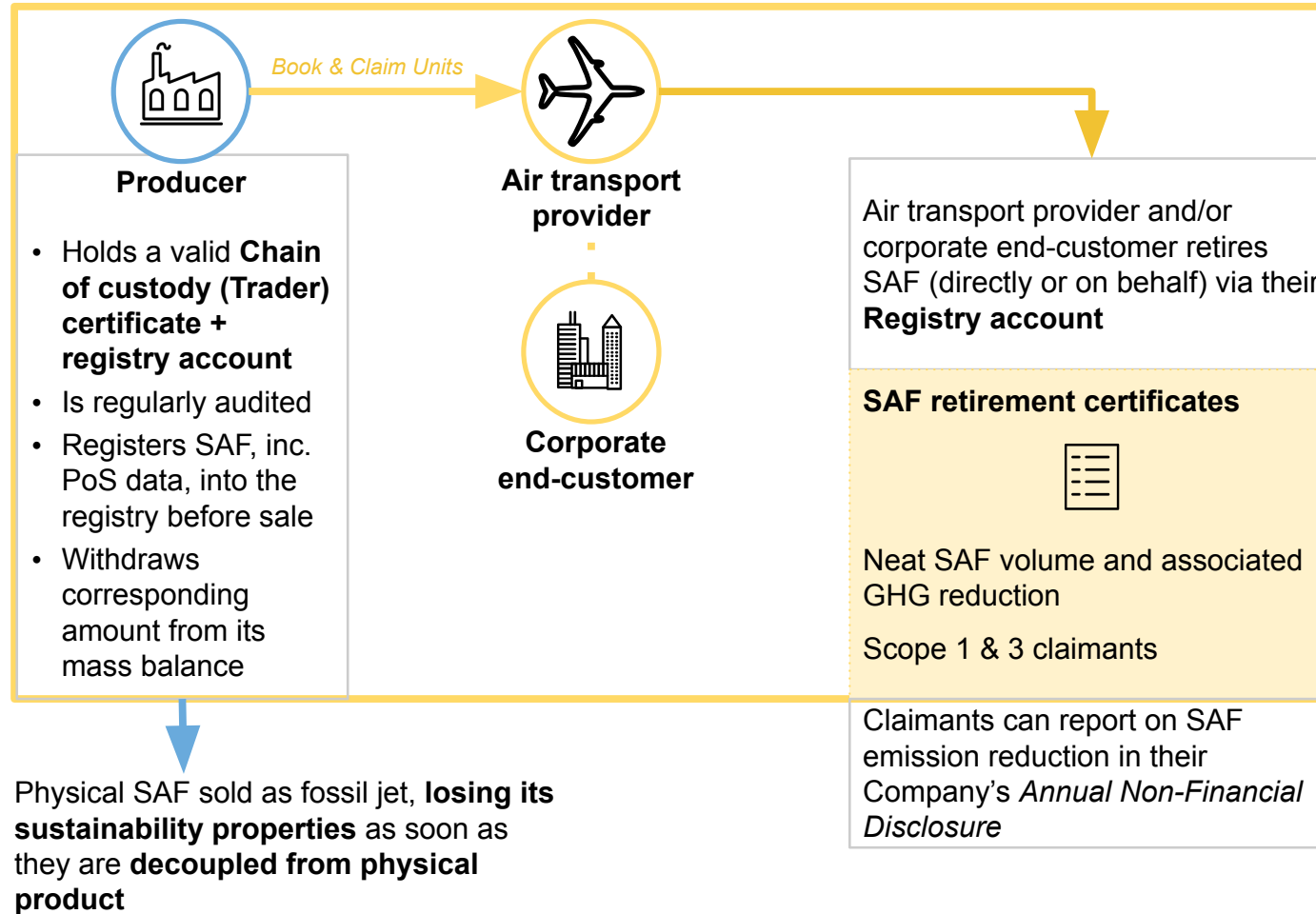
Registration

Transfer

Claim

Book & Claim Registry

With specified rules defined in a manual



Recap: B&C step by step

Benefits

Aggregation: bridging limited supply locations to the global growing demand for SAF as well as generating more visible and stable demand for sustainable fuel producers

Accessibility: facilitating procurement of SAF for end-customers and air transport providers

Proven design: similar energy certificates have been in use analogous industries for over 10 years

GHG and cost savings: lowering the total cost of SAF procurement by optimising geographical supply/demand imbalances, saving up on cost and on GHG emissions



Pain points

Governance: currently, certificates cannot be used to claim against voluntary or mandatory targets, limiting use to reputational claims

Awareness: lack of common understanding & knowledge of B&C concept tends to hinder offerings and inhibit demand uptake from airlines and end-customers

System design: complexity required to set-up a globally-recognized B&C framework, which is currently exposing the ecosystem to risks of double counting and lack of credibility

Main opportunities and challenges of B&C

Frameworks on GHG accounting and target setting

Voluntary carbon accounting frameworks are beginning to recognize SAF certificates, but their use remains conditional and is still evolving

Framework	GHG Protocol	SBTi Corporate Net Zero Standard v2 (June 2026)	SBTi Aviation Standard (2021)
Role	GHGP sets the foundations of any GHG emissions related measurement, accounting and reporting methodologies for all Companies, across their respective full value chain	Defines how companies set and validate emissions-reduction targets aligned with climate science	Defines how companies set and validate emissions-reduction targets aligned with climate science <u>for their air travel emissions only</u>
Perimeter	All companies	All companies	Airlines and users of aviation services
Position on SAF certificates	SAF certificates should be reported outside the GHG inventory. SAF can reduce reported emissions only where a clear physical link exists between fuel uplift, combustion, and emissions (e.g. airline Scope 1, physically traceable fuel use).	CNZS v2 explicitly recognizes energy certificates for all SBTi-committed companies (including SAF purchased via Book-and-Claim) as tools for sector-level interventions. <u>Conditions of allowance will be clarified in the coming months.</u>	To recognize SAF, companies must set an emissions-reduction target on emissions from air travel reported in Scopes 1, 3.3, 3.4, 3.6, or 3.9. If so, they can use SAF certificates to reduce air travel emissions, provided they have direct traceability with the airline/SAF producer and meet ICAO sustainability criteria.
Current chain of custody allowed	SAF certificates using a Book-and-Claim approach are not allowed within GHG inventory.	SAFc can be considered 'energy certificates' and recognized if aligned with SBTi requirements.	SAF can be used in a Book-and-Claim approach if direct traceability to the airline/SAF producer and sustainability criteria are met.
Expected evolutions	Ongoing work on the use of market instruments, especially the possibility of disclosing both a physical GHG inventory and a market-based GHG inventory	Conditions of allowance will be clarified in the coming months.	SBTi is working on a Net Zero Aviation Standard , with a pilot testing phase starting in early 2027.

Airbus' activities around Book & Claim

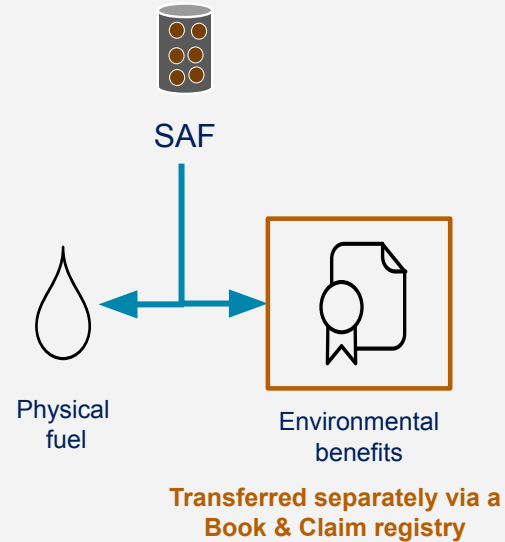
Airbus Book & Claim Demonstrator



Airbus' ambition

Deploying the Airbus SAF Book & Claim Demonstrator project

TEST the BOOK & CLAIM SYSTEM



DEMONSTRATE, COMMUNICATE and ADVOCATE

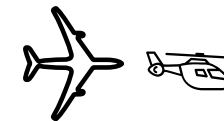
Book & Claim provides a solution to the logistical challenge of bringing SAF to market by allowing customers to purchase SAF without being physically connected to a SAF supply site.

ABCD aims to simplify the overall supply and operations of SAF Book & Claim certificates, understanding and exploring the flow of SAF environmental attributes using a robust registry.

Airbus as an
aggregation and facilitation partner to supply and retire SAF certificates



SAF supplier



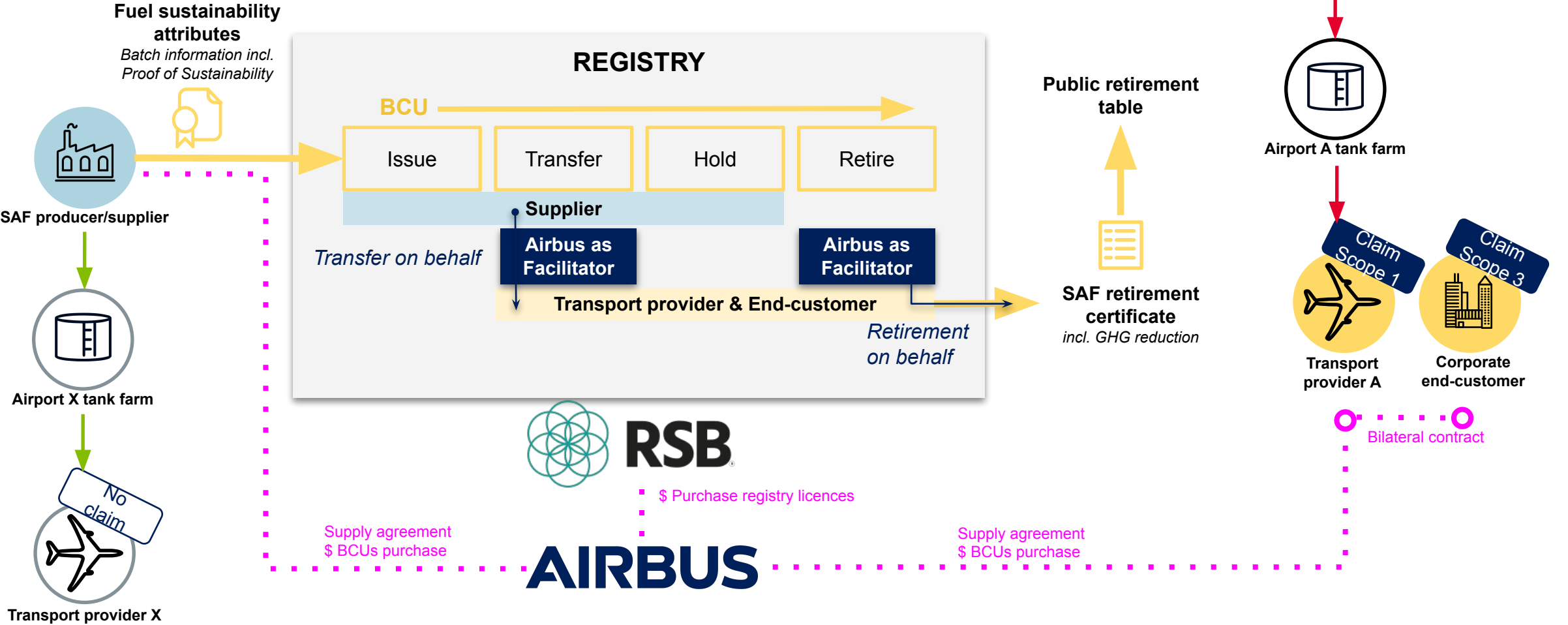
Airbus' customers
(as transport providers)



Their corporate clients
(as aviation end-customers)

AIRBUS

Overview



1 Book and Claim Unit (BCU)
= 1 tonne of pure certified SAF

- Flow of Book & Claim certificates
- Jet A1
- SAF molecules (sold as Jet A1 without sustainability attributes)
- ● Financial flow

Learning from the ABCD experience: airports, acting as “SAF BCUs Facilitators”

Opportunity:

Leveraging the “Facilitator Role” for Airports:

Use case: An airport develop a **voluntary SAF offering** to its customers.

Airports would aggregate data and act as a “**BCUs Facilitator**” towards its Customers, provided that all safeguards are guaranteed:

- **economic operator (ie. airport) certification,**
- **Methodology,**
- **Registry**
- **and verification.**

Lessons learned:

1. KEEP IT SIMPLE

Make the process as simple as possible, whilst also maintaining accuracy and transparency

2. GOOD THINGS TAKE TIME

Book & Claim recognition is still ongoing there is still work to do to achieve alignment and galvanise the aviation industry behind book and claim.

→ SAF molecules (sold as Jet A1 without sustainability attributes)

Financial flow

Thank you
