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RSB Book & Claim System

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Conexão SAF/GT Regulação; 21 May 2025

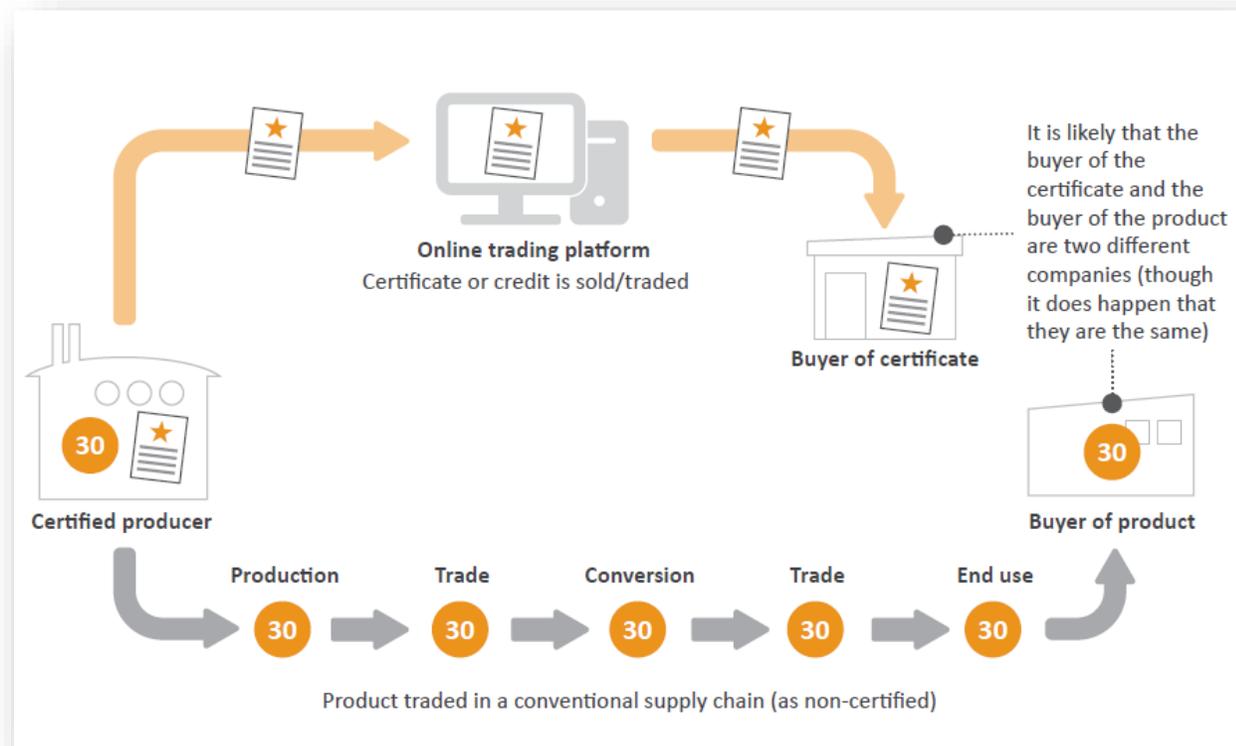


Book & Claim Introduction

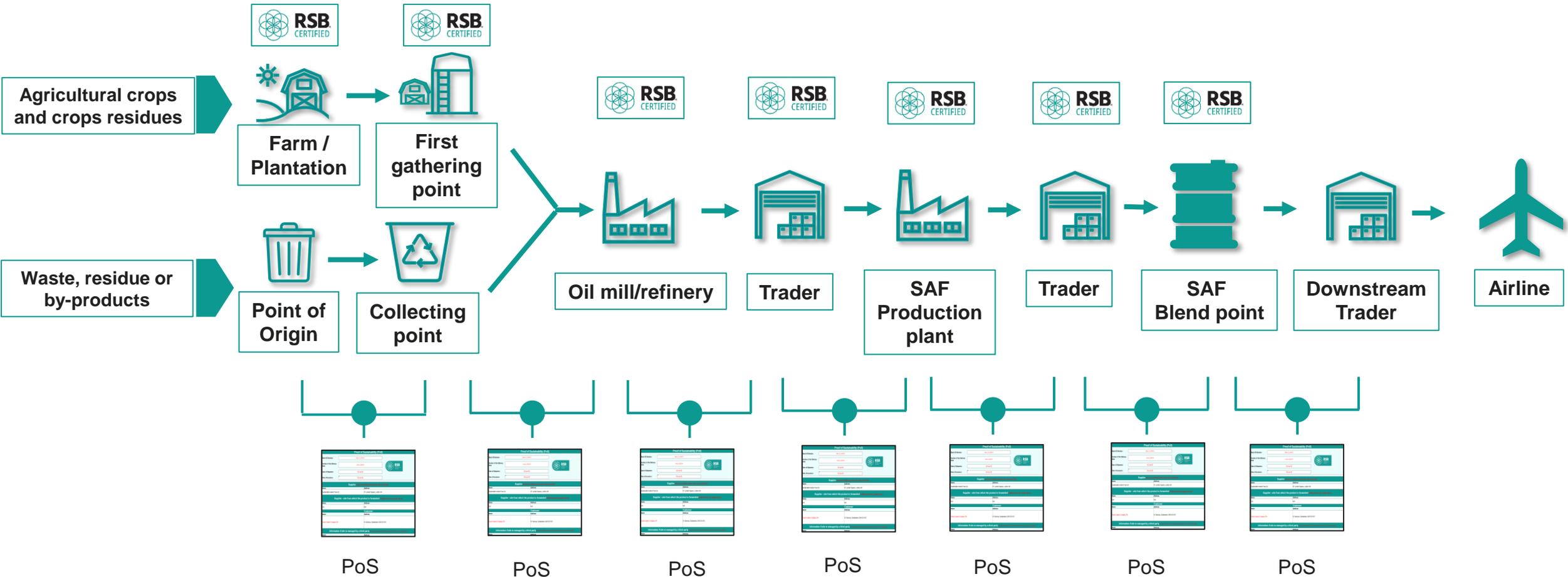


Book & Claim

- Book and claim is a chain-of-custody model, in which the administrative record flow does not necessarily connect to the physical flow of material or product throughout the supply chain.
- It allows a customer to decouple specific attributes from the physical product – like its sustainability benefits – and transfer them separately via a dedicated registry.



Sustainability Certification and Flow of Sustainability Information



Book & Claim for hard-to-abate sectors



It connects limited supply locations with global demand (without creating bespoke logistics).



It enables the exclusive allocation of a green fuel's sustainability benefit to those companies interested and willing to pay for it.
(Scope 1 + Scope 3)



It responds to the demand for **in-sector solutions** to decarbonise their aviation and maritime emissions.



It helps to accelerate the decarbonisation of hard to abate sectors such as aviation and shipping.



Understanding GHG Emissions - Scope 1, 2 & 3

Scope 1 – Direct Emissions

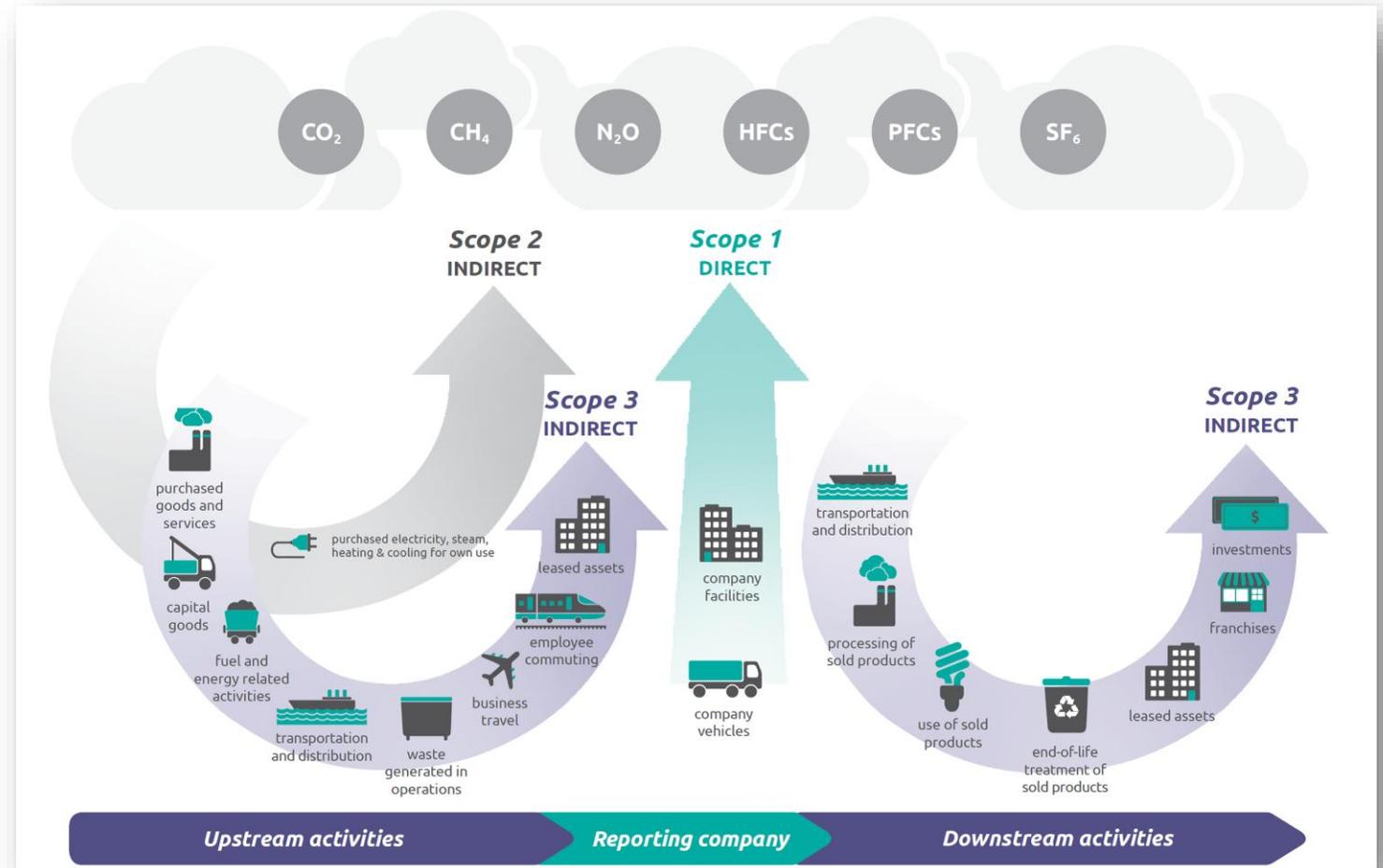
- Emissions from sources owned or controlled by the company.

Scope 2 - Indirect Energy Emissions

- Emissions from the generation of purchased electricity, steam, heating, or cooling consumed by the company.

Scope 3 – Indirect Value Chain Emissions

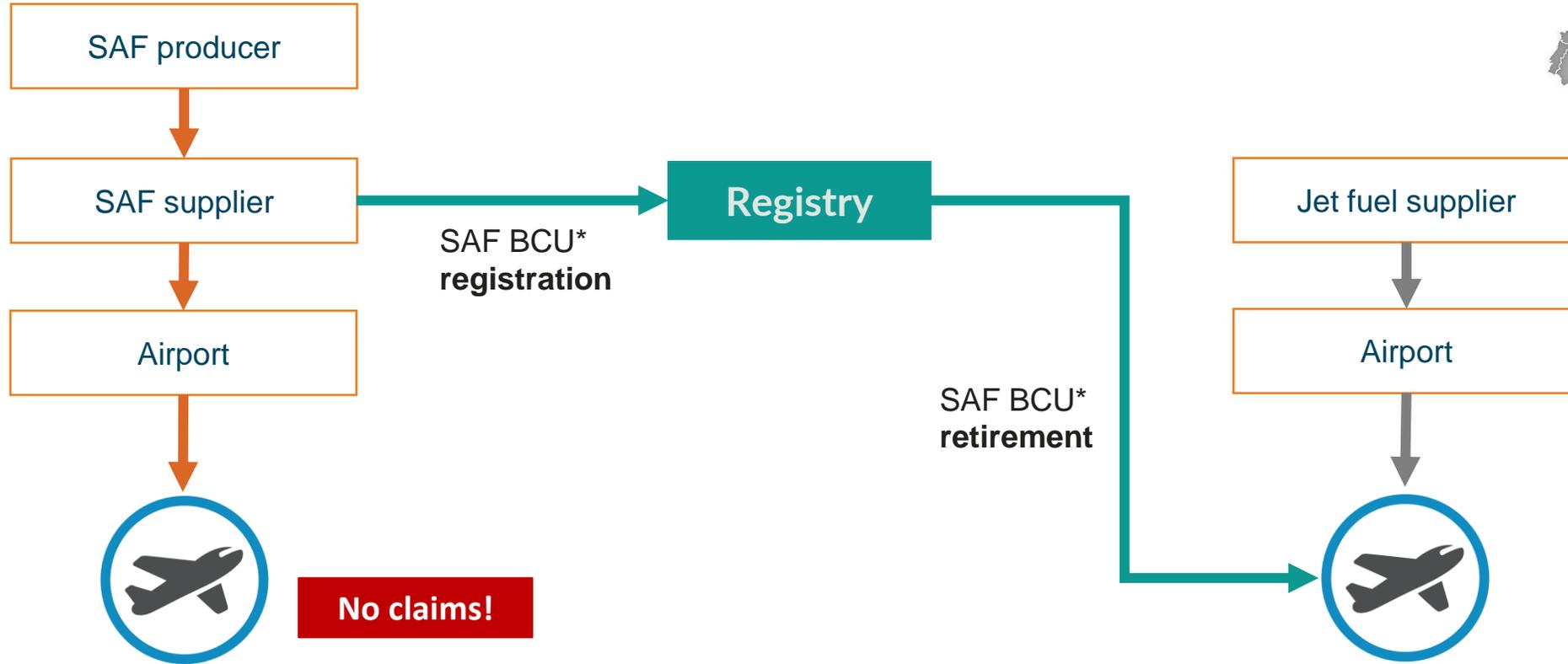
- All other indirect emissions occurring in the company's value chain.



Source: GHG Protocol



B&C Simplified Process



- SAF physical
- Fossil Jet
- SAF Book & Claim transaction

*1 Book & Claim Unit (BCU) = 1 MT of neat, certified product
 I.e., 1,25 SAF BCU = 1,25 SAF MT



Book & Claim Components

Book & Claim Manual



It sets out the requirements for registering, transferring, and retiring the sustainability attributes of physical products. It includes aspects related to sustainability certification, data points, claims, double counting, and additionality.

Book & Claim Registry



A secure cloud application for tracking and transferring sustainability attributes globally, enabling transparent and credible Book & Claim transactions.

Certification System



Sustainability Certification system that is built on robust and recognised standards and undergoes regular independent audits, instilling trust and confidence in users.

Governance System

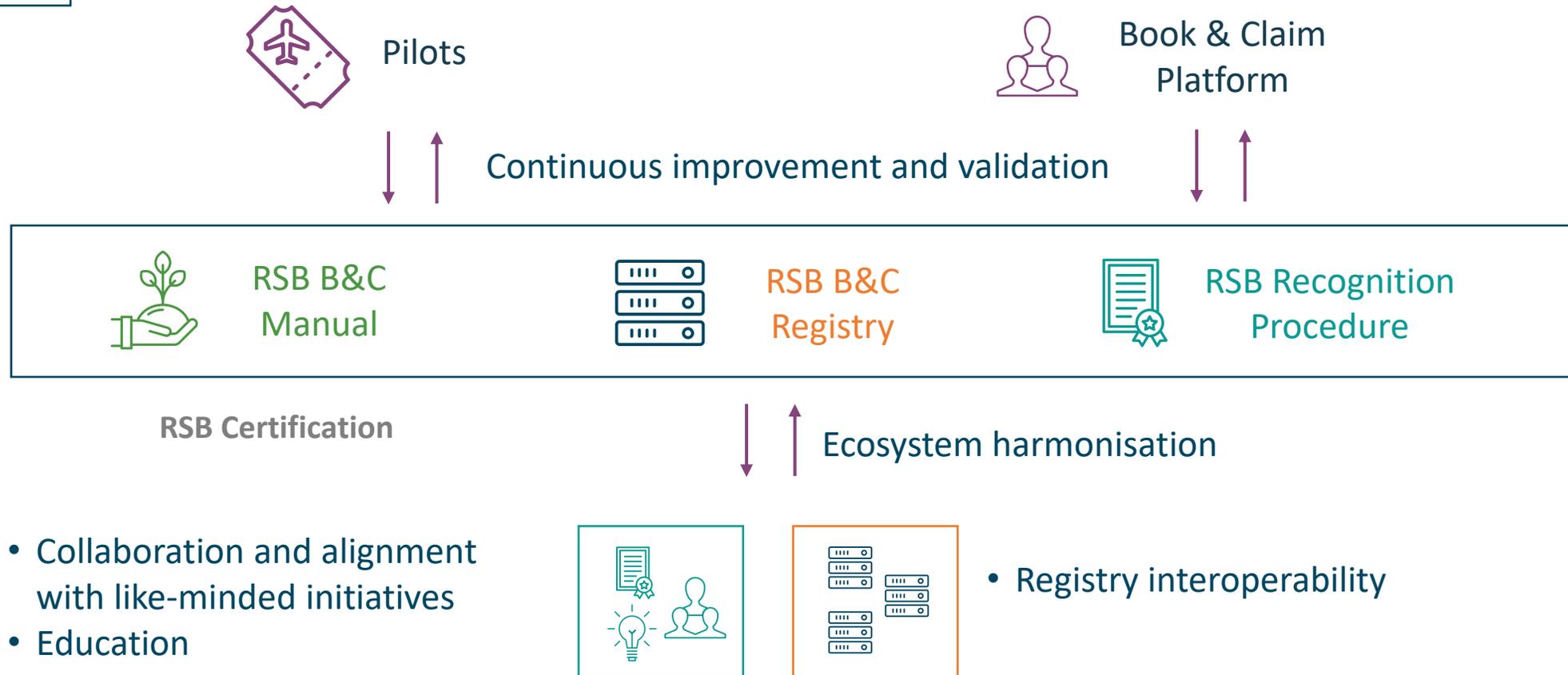


It is essential to oversee all Book & Claim activities, ensuring transparency and credibility. Regularly review and update rules and requirements, establish protocols for accurate tracking, verification, and reporting of B&C transactions.





RSB's Book & Claim Programme



The RSB B&C System and RSB Registry

Backed by **RSB's globally recognised sustainability standard.**

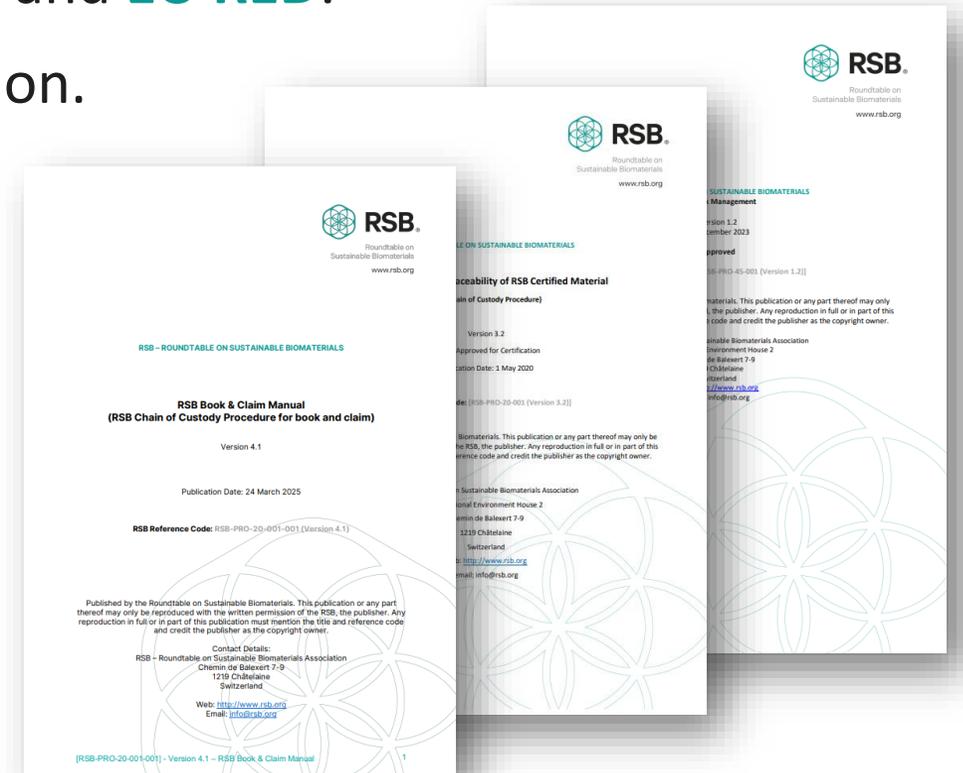
Aligned with international regulations, such as **CORSIA** and **EU RED.**

Consistent with **GHGP** and **SBTi principles** in consultation.

Access the RSB Materials for B&C Certification:



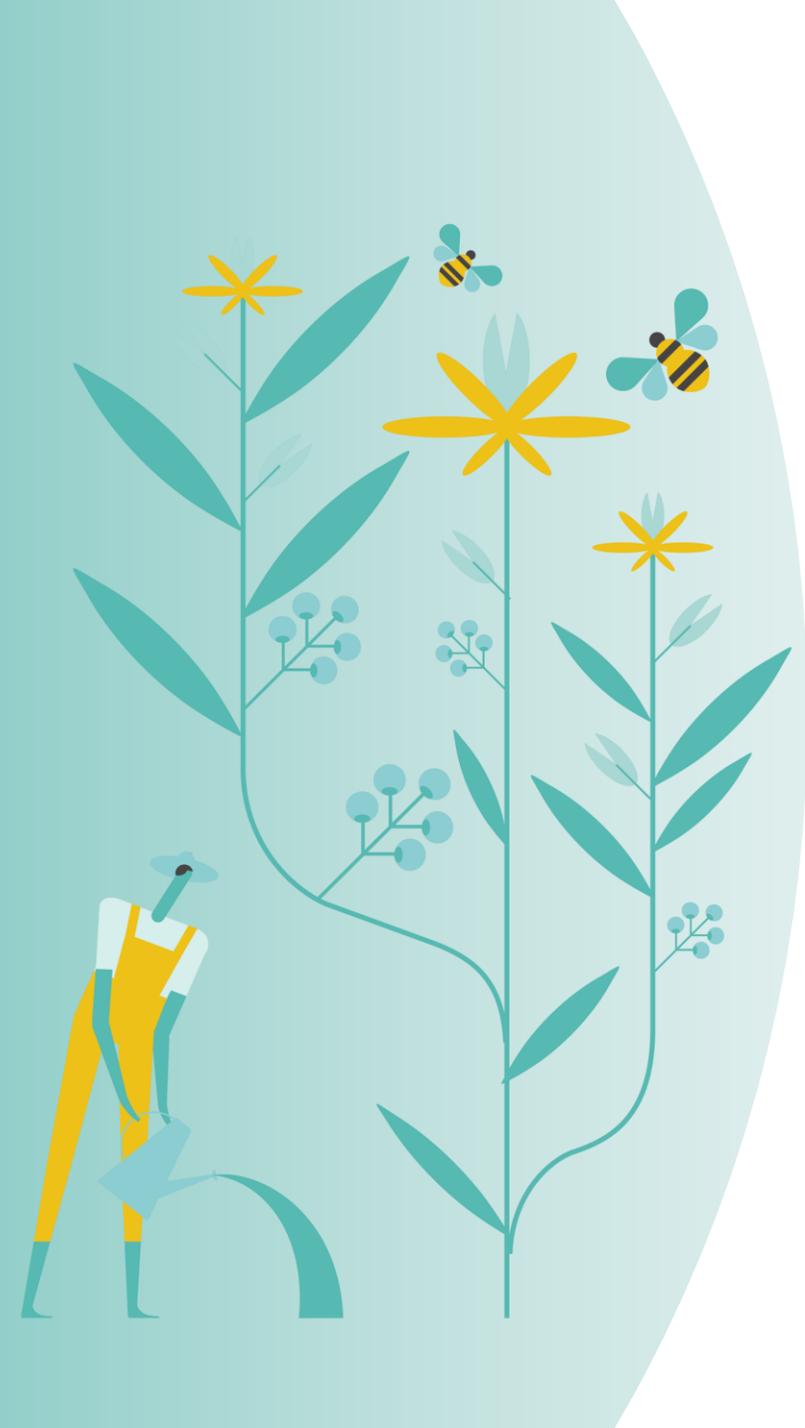
- RSB Book and Claim Manual
- RSB Procedure for Traceability (Chain of Custody)
- Procedure for Registry Book & Claim Recognition
- RSB Procedure for Communication and Claims
- RSB Procedure for Participating Operators
- RSB Procedure for Risk Management



Our approach to mitigate double counting

	DOUBLE ISSUANCE	DOUBLE USE	DOUBLE CLAIM
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).	The same unit is used to meet both domestic and international GHG targets, or two or more companies claim ownership for the same GHG emission reduction within the same scope.
RISK MITIGATION	<ul style="list-style-type: none"> • BCU Registrations by Suppliers verified by third-party audits • RSB Registry Audit • RSB Book & Claim Recognition Procedure (for independent Registries) • Ambition: interoperable Registry ecosystem 	<ul style="list-style-type: none"> • Public Retirement Statement table (Scope 3 buyer can be anonymised) • RSB Registry Audit 	<ul style="list-style-type: none"> • 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)



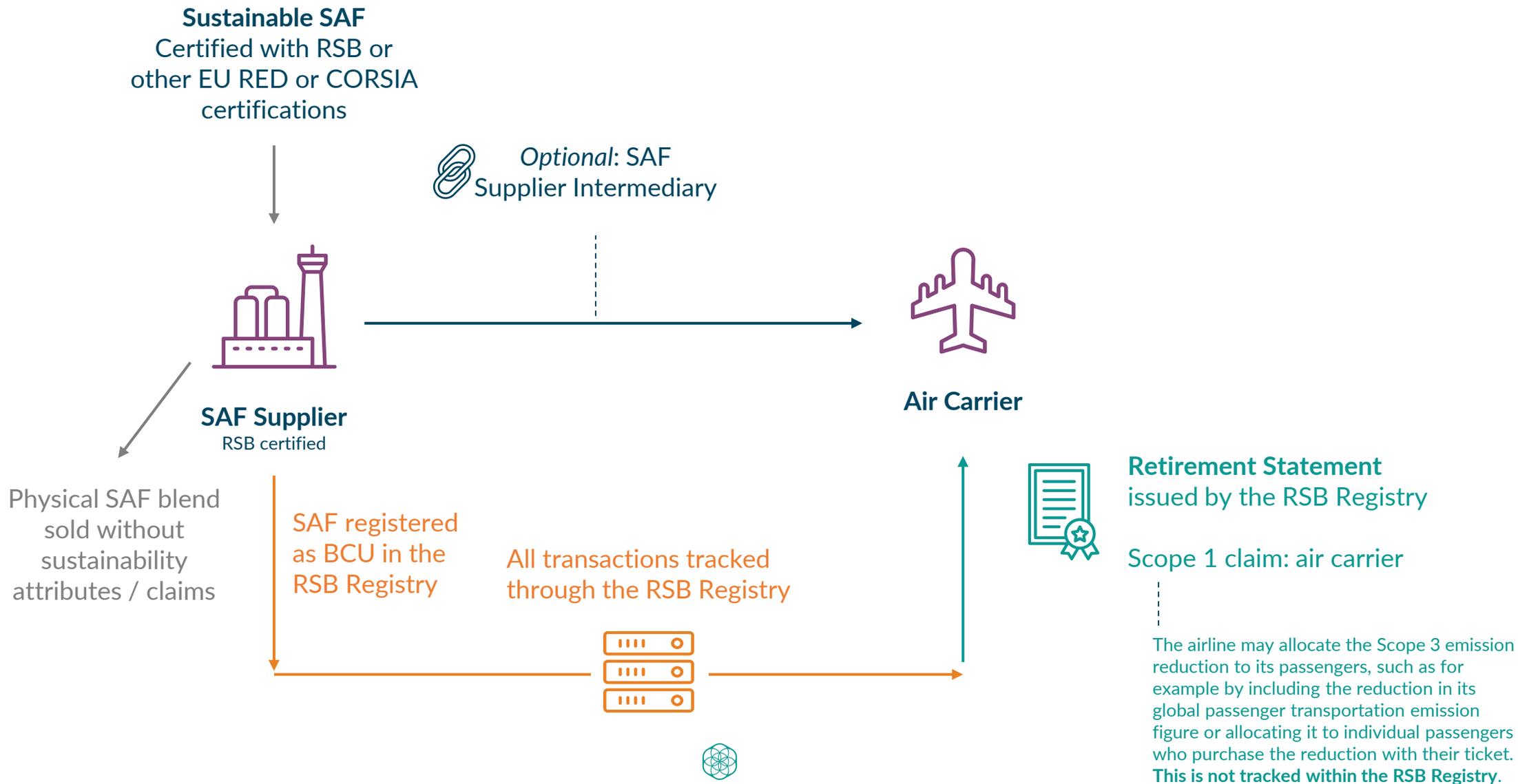


Use cases currently covered in the RSB Book & Claim System

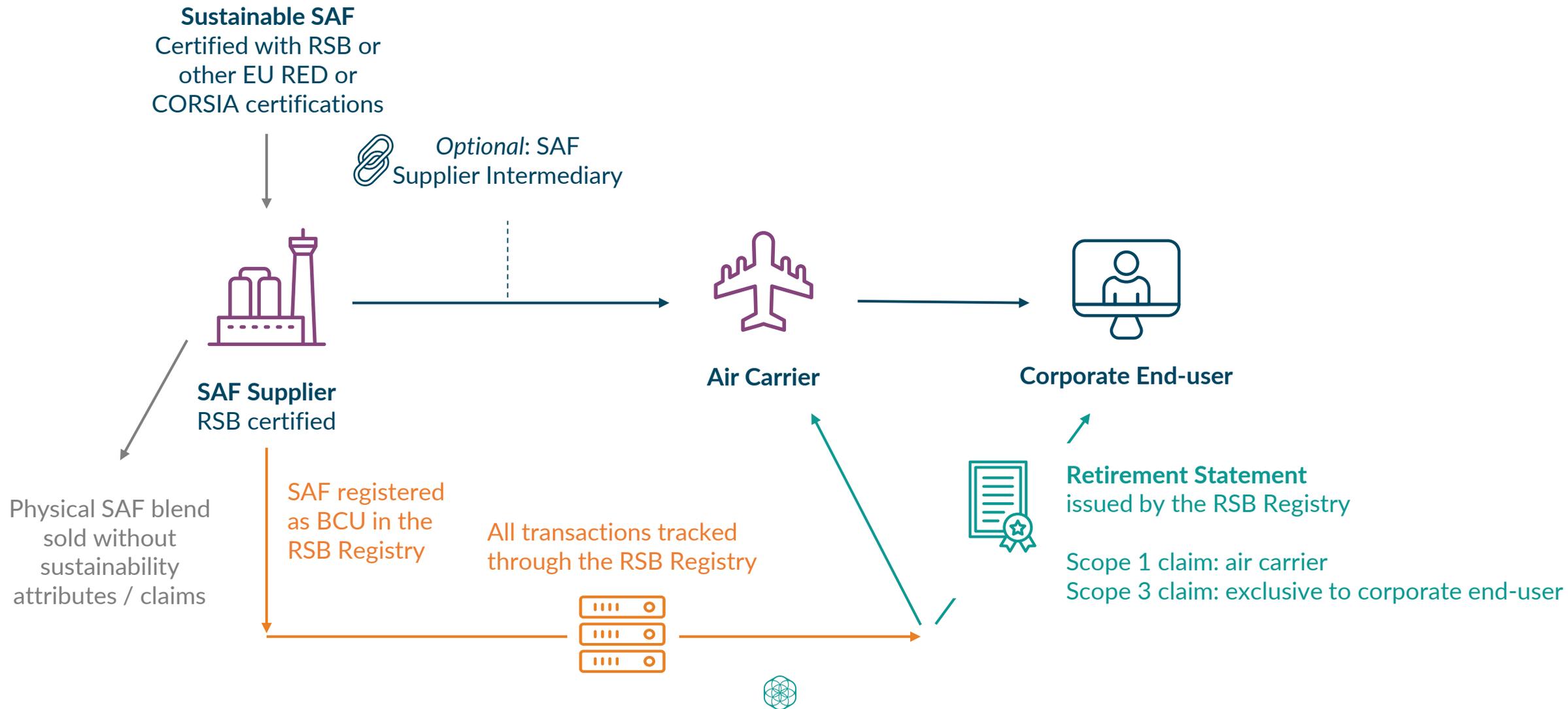


***New use cases are regularly piloted by the RSB, and will be added with future system updates**

RSB Book & Claim System – Use case 1



RSB Book & Claim System – Use case 2



RSB Book & Claim System – Use case 3

Sustainable SAF
Certified with RSB or other EU RED or CORSIA certifications

 *Optional: SAF Supplier Intermediary*



SAF Supplier
RSB certified



Air Carrier



Freight Forwarder



Corporate End-user

Physical SAF blend sold without sustainability attributes / claims

SAF registered as BCU in the RSB Registry

All transactions tracked through the RSB Registry

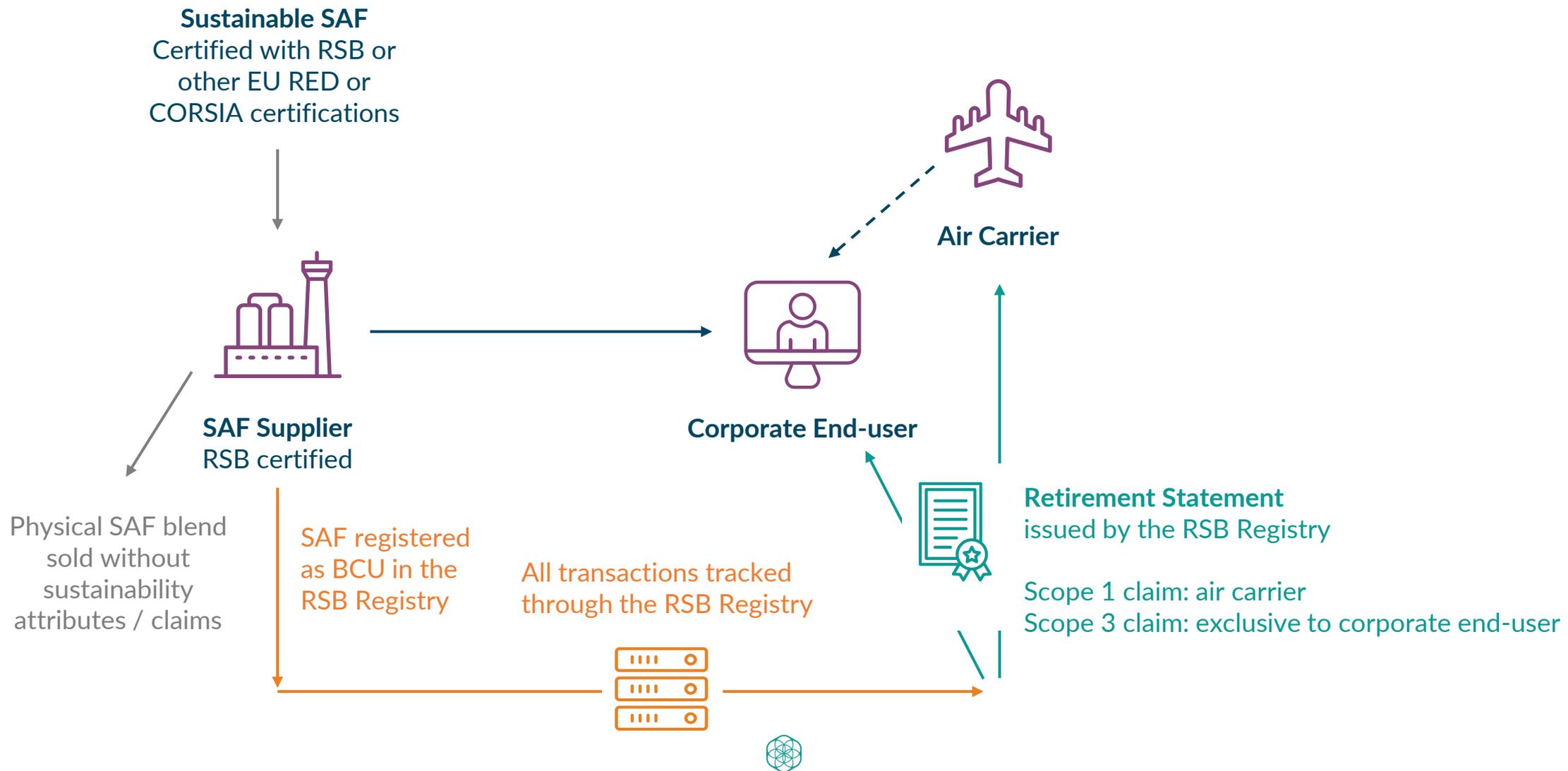


Retirement Statement
issued by the RSB Registry

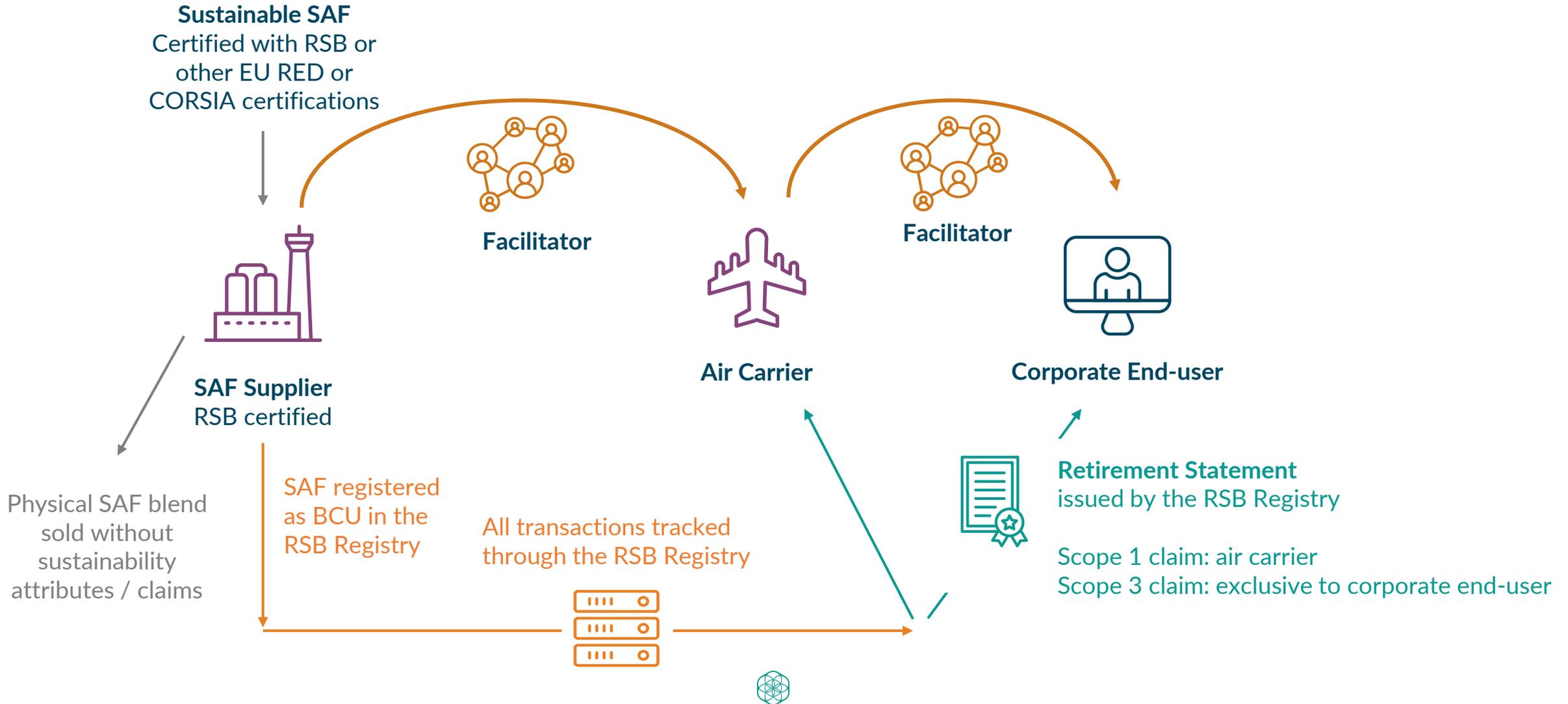
Scope 1 claim: air carrier
Scope 3 claim: freight forwarder
Scope 3 claim: exclusive to corporate end-user



RSB Book & Claim System – Use case 4



RSB Book & Claim System – Use case 2 (with Facilitator)



Retirement Statements Publicly Available



RSB

Book & Claim Registry

Contact us

Sign Up

Log in

Introduction

Resources

Public Retirements

Public BCU Retirement Statements

Date and Time



Search

	BCU ID	Statement ID	Date of issue	Product	Amount BCUs	Scope 1	Scope 3	Certificate
-	RSB-BCU-SAF-25-02-004 (1)	-	-	SAF	50.000	1 company	1 company	-
	RSB-BCU-SAF-25-02-004-0002	RSB-BCU-RS-25-03-0143	27.03.2025	SAF	50.000	GOL LINHAS AEREAS S.A	Microsoft	 
+	RSB-BCU-SAF-25-01-001 (1)	-	-	SAF	0.928	1 company	1 company	-
+	RSB-BCU-SAF-24-12-082 (1)	-	-	SAF	23.614	1 company	1 company	-

<https://registry.rsb.org/registration>



Retirement Statement

Number: **RSB-BCU-RS-25-02-0124**
 Date of issue: **28th February 2025**



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 www.rsb.org

The RSB confirms that the following Book & Claim Units (BCUs) have been retired from circulation in the RSB Book & Claim Registry:

BCU ID **RSB-BCU-SAF-24-07-093-0002**

Product type	Amount of BCUs ¹	CO ₂ eq reduction (t)
Sustainable Aviation Fuel (SAF)	90.835	296.151
		=3.260 CO ₂ eq reduction ² (t)/BCU
Scope 1		
Transport service provider		
DHL International GmbH		

Sustainability Information

Energy Content of Product (MJ)	4,027,625 (44,340 MJ/t)
Mass of Product (t)	90.835
Sustainability Certification	RSB CORSIA
Fossil baseline of reference (gCO ₂ eq/MJ)	89.00
GHG LCA value (gCO ₂ eq/MJ)	15.47
GHG emission reduction (%)	82.618
Feedstock (raw material)	Tallow
Feedstock conversion process	HEFA
Blended, Unblended or Co-processed	-
Feedstock country of origin	United States of America
Year of Production	2024
Country of blending	United States of America
Location of physical product delivered (if known)	Bob Hope Airport KBUR US
Country where BCU will be claimed	Germany
Type of reporting	Voluntary
Information on eligible incentives used	California LCFS, US RFS (RIN), US IRS BTC

NB: The entities listed on the retirement statement shall take their own independent advice on the legal, accounting and/or regulatory application of the claims set out in the retirement statement against voluntary GHG emission reduction schemes.

Note:

A full stop or period in a number denotes a decimal point, and a comma separates thousands.
 t = metric tonne = 1000 kg
 MJ = megajoule
 gCO₂eq = grams of carbon dioxide equivalents, a metric used to compare the emissions of various greenhouse gases based on their global warming potential.

Scan to view on public retirement table



or click here

¹ 1 BCU is equivalent to 1 tonne of neat, certified product. 1 tonne (t) = 1 metric ton (MT) = 1000 kg

² The absolute GHG emission reduction expressed in tonnes of CO₂eq is calculated using certified GHG values submitted during BCU registration. Please refer to the RSB Book & Claim Manual (v3, March 2023, Section 4 "Requirements for BCU Retirement") for more information.

Retirement Statement

Number: **RSB-BCU-RS-25-03-0143**
 Date of issue: **27th March 2025**



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The RSB confirms that the following Book & Claim Units (BCUs) have been retired from circulation in the RSB Book & Claim Registry:

BCU ID **RSB-BCU-SAF-25-02-004-0002**

Product type	Amount of BCUs ¹	CO ₂ eq reduction (t)
Sustainable Aviation Fuel (SAF)	50.000	190.962
		=3.819 CO ₂ eq reduction ² (t)/BCU
Scope 1	Scope 3	
Transport service provider	Corporate end-user	
GOL LINHAS AEREAS S.A	Microsoft	

Sustainability Information

Energy Content of Product (MJ)	2,150,000 (43,000 MJ/t)
Mass of Product (t)	50.000
Sustainability Certification	ISCC EU RED
Fossil baseline of reference (gCO ₂ eq/MJ)	94.00
GHG LCA value (gCO ₂ eq/MJ)	5.18
GHG emission reduction (%)	94.489
Feedstock (raw material)	UsedCookingOil
Feedstock conversion process	HEFA
Blended, Unblended or Co-processed	Co-processed
Feedstock country of origin	Indonesia
Year of Production	2023
Country of blending	Spain
Location of physical product delivered (if known)	Sevilla Airport LEZL ES
Country where BCU will be claimed	Brazil
Type of reporting	Voluntary
Information on eligible incentives used	-

NB: The entities listed on the retirement statement shall take their own independent advice on the legal, accounting and/or regulatory application of the claims set out in the retirement statement against voluntary GHG emission reduction schemes.

Note:

A full stop or period in a number denotes a decimal point, and a comma separates thousands.
 t = metric tonne = 1000 kg
 MJ = megajoule
 gCO₂eq = grams of carbon dioxide equivalents, a metric used to compare the emissions of various greenhouse gases based on their global warming potential.

Scan to view on public retirement table



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¹ 1 BCU is equivalent to 1 tonne of neat, certified product. 1 tonne (t) = 1 metric ton (MT) = 1000 kg

² The absolute GHG emission reduction expressed in tonnes of CO₂eq is calculated using certified GHG values submitted during BCU registration. Please refer to the RSB Book & Claim Manual (v3, March 2023, Section 4 "Requirements for BCU Retirement") for more information.



Summary of requirements for BCU retirement

System User type	Relevant emission Scope	Can retire BCU	Mentioned on a retirement statement	Mentioned on the public retirement statement table	Receives a copy of a retirement statement	Can resell the BCU after it has been retired
Supplier	None	On behalf of other System Users, with their permission	No	No	No	No
Intermediary	None	On behalf of other System Users, with their permission	No	No	No	No
Transport Service provider	Scope 1 and Scope 3 for WTT emissions ³³	Yes. For own or shared use with Logistics Service Provider and/or Corporate End-User.	Yes	Yes	Yes	No
Logistics Service Provider	Scope 3	Yes. Shared use only (with Transport Service Provider or Transport Service Provider and Corporate End-User)	Yes	Yes	Yes	No
Corporate End-User	Scope 3	Yes. Shared use only (with Transport Service Provider or Transport Service Provider and - Logistics Service Provider)	Yes	Option to be anonymised	Yes	No
Facilitator	None	On behalf of other System Users, with their permission	No	No	No	No



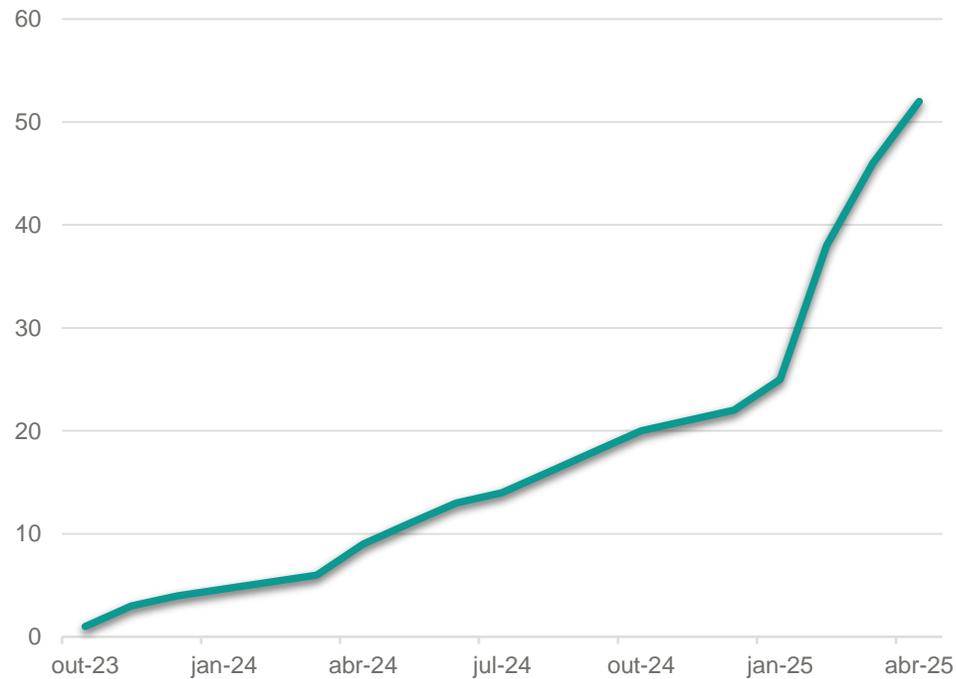


RSB Book & Claim in numbers

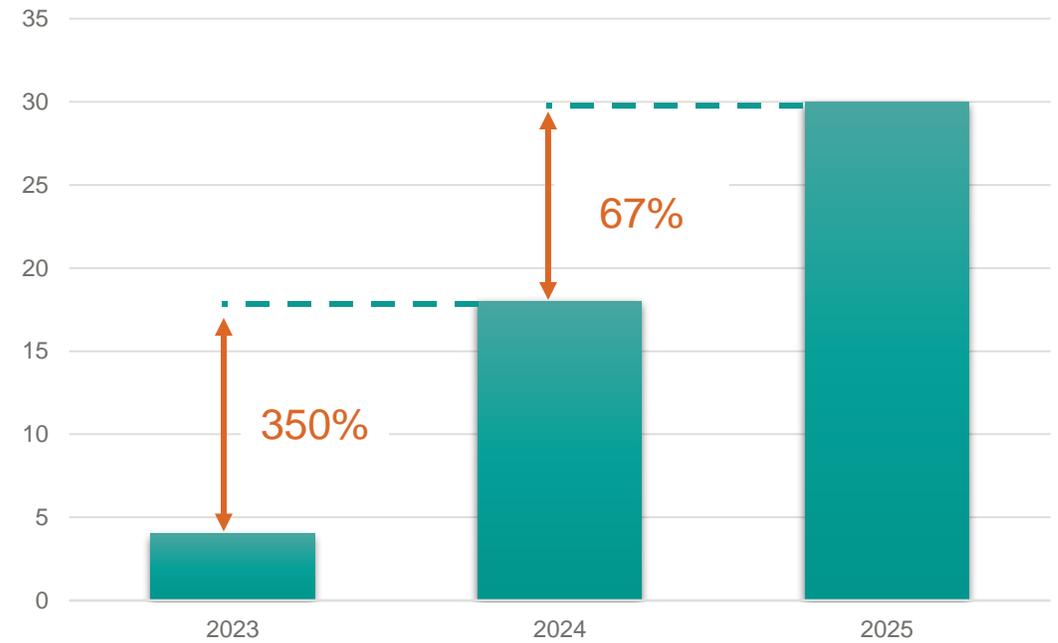


The Book & Claim system is recognised in the market and, its use is growing.

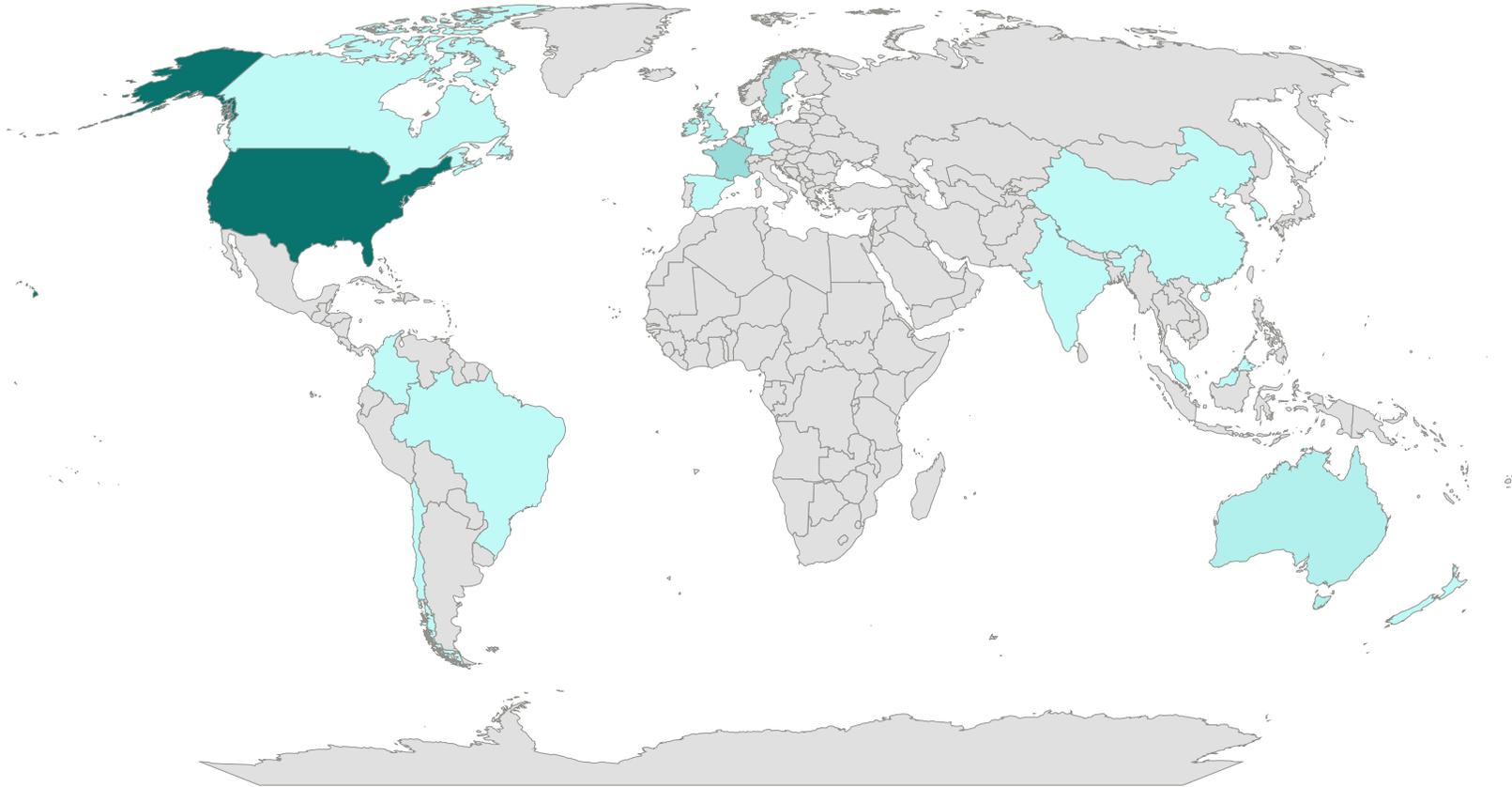
Number of Accounts (cumulative)



Accounts per year



The RSB Book & Claim system has a global presence.



Accounts from 22 countries.

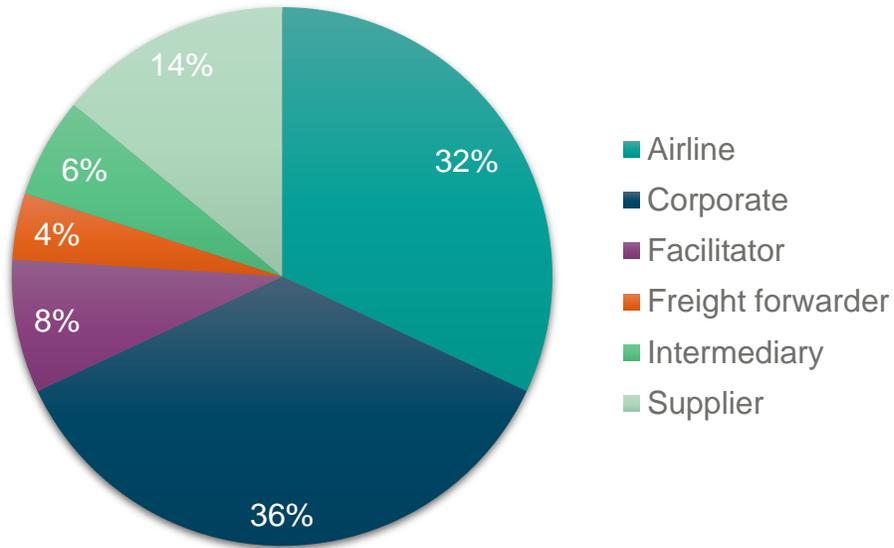
30% of accounts are from the USA.

Similar account numbers for airlines and corporations.



It connects supply to demand and supports real impacts.

Account types



16 Airlines
18 Corporates
7 Suppliers

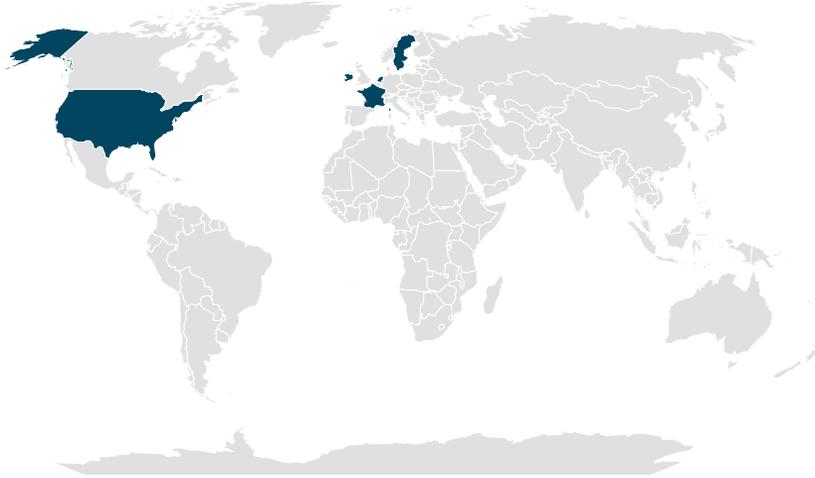
160
Retirements
7,2 thousand
tonnes of SAF

19,7
thousand tonnes
of CO₂ saved



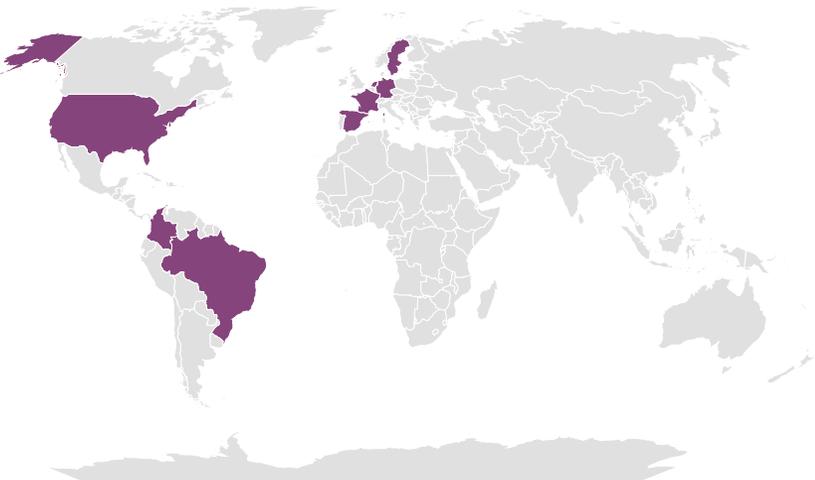
It connects supply to demand and supports real impacts.

Suppliers



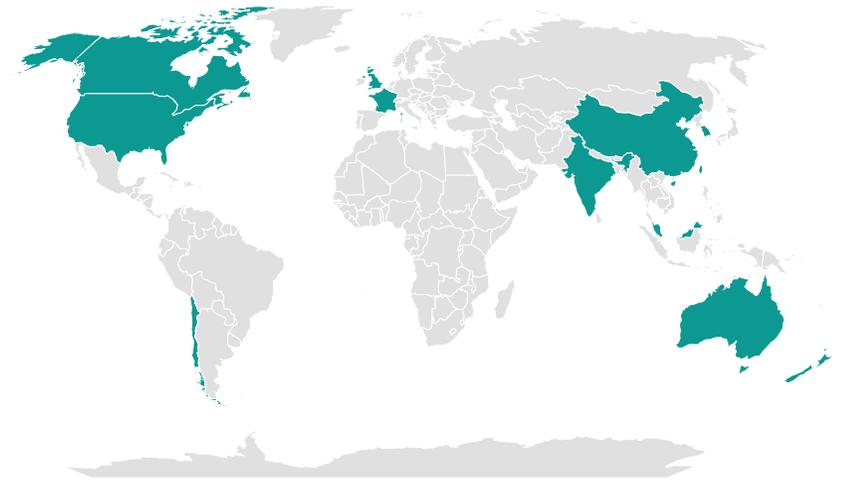
160 retirements
Scope 1

Demand (Scope 1)

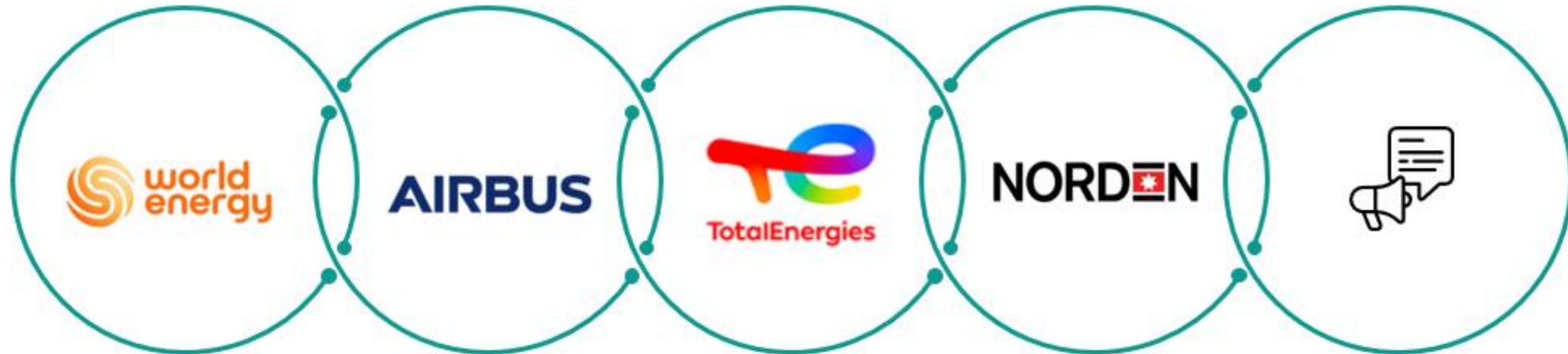


135 retirements
Scope 3

Demand (Scope 3)



Ongoing & New Pilots



DSR

Demand Signal Recognition
Methodology – Impact claim for supply delivered through a long-term contract

FACILITATOR

Establishing a role in the registry for a facilitator / aggregator

SUPPLIER TO CORPORATE

Enabling the transfer of BCUs from a supplier to a corporate end-user

MARITIME

The first RBS B&C maritime pilot

FREIGHT

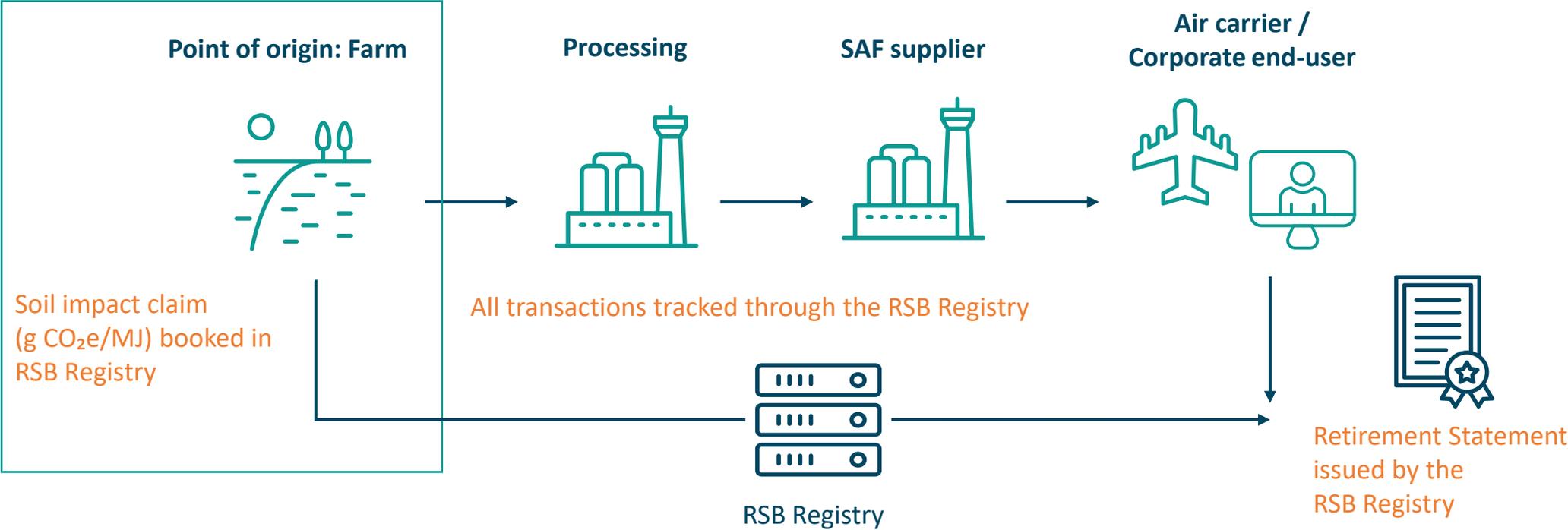
Maritime and Aviation Freight Pilot - to be announced soon



Example: improved agricultural management practices (second crops, cover crops....)

Soil Carbon Accumulation (SCA):

✓ SCA = XX g CO₂e/MJ -> soil impact claim



Example: Retirement Statement Including Impact Claims

Retirement Statement

Number: **RSB-BCU-RS-25-03-0048**

Date of issue: **4th March 2025**



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The RSB confirms that the following Book & Claim Units (BCUs) have been retired from circulation in the RSB Book & Claim Registry:

BCU ID RSB-BCU-SAF-25-02-001-0008

Product type	Amount of BCUs ¹	CO ₂ e _q reduction (t)
Sustainable Aviation Fuel (SAF)	950.999	0.021 <small>=0.000 CO₂e_q reduction² (t)/BCU</small>

Scope 1	Scope 3
Transport service provider MC TSP	Corporate end-user Anonymous

Sustainability Information

Energy Content of Product (MJ)	475 (0 MJ/t)
Mass of Product (t)	950.999
Sustainability Certification	RSB CORSIA
Fossil baseline of reference (gCO ₂ e _q /MJ)	89.00
GHG LCA value (gCO ₂ e _q /MJ)	45
GHG emission reduction (%)	49.438
Feedstock (raw material)	BrassicaCarinataOil
Feedstock conversion process	SIP
Feedstock country of origin	Albania
Year of Production	2024
Country of blending	Spain
Location of physical product delivered (if known)	Kukës Airport LAKU AL
Country where BCU will be claimed	Albania
Type of reporting	Voluntary
Information on eligible incentives used	-

NB: The entities listed on the retirement statement shall take their own independent advice on the legal, accounting and/or regulatory application of the claims set out in the retirement statement against voluntary GHG emission reduction schemes.

Note:

X: Full stop or period in a number denotes a decimal point, and a comma separates thousands.

t = metric tonne = 1000 kg

MJ = megajoule

gCO₂e_q = grams of carbon dioxide equivalents, a metric used to compare the emissions of various greenhouse gases based on their global warming potential.

Scan to view on public retirement table



or click here

¹ 1 BCU is equivalent to 1 tonne of net, certified product. 1 tonne (t) = 1 metric ton (MT) = 1000 kg

² The absolute GHG emission reduction expressed in terms of CO₂e_q is calculated using certified GHG values submitted during BCU registration. Please refer to the RSB Book & Claim Manual (v3, March 2023, Section 4 "Requirements for BCU Retirement") for more information.

Page 1: Statement with company, product and GHG information

Retirement Statement

Number: **RSB-BCU-RS-25-03-0048**

Date of issue: **4th March 2025**



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The RSB confirms that the following impact indicators are associated with the retired Book & Claim Units (BCUs) and have been recorded in the Book & Claim Registry. These indicators reflect the environmental benefits as reported and verified through the BCU registration process.

Impact Indicator	Water Savings Crops
Land/Parcel Name	Testcrops
Project Name	testprojectcrops
Quaternary Number	32434gr
Average Water Gains per ha	3
Total Water Gains	3
Total Cleared Area	3

Impact Indicator	Water Savings IAPS
Land/Parcel Name	Test1
Project Name	Testproject
Quaternary Number	234ddd
Average Water Gains per ha	678
Total Water Gains	678
Total Cleared Area	664

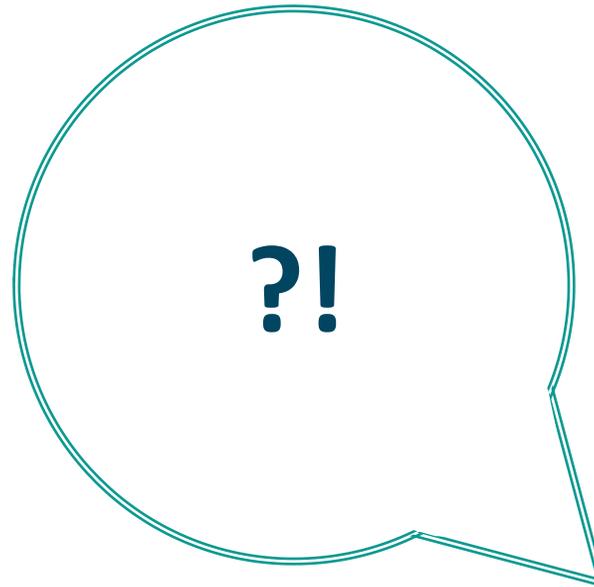
Impact Indicator	Soil Carbon
Land/Parcel Name	testcarbon
Project Name	testprojectcarbon
Average Soil Carbon Accumulation per ha	566
Soil Health Increase	444% Improvement
Planted Crops	Grain crops Rice

Impact Indicator	Soil Health
Land/Parcel Name	testhealth
Project Name	projecthealth
Average Soil Carbon Accumulation per ha	244
Soil Health Increase	555% Improvement
Planted Crops	Sugarcane

Page 2: Relevant impact indicator information (e.g. water LCA, soil carbon) added



Questions?



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