

RSB[®]

Roundtable on
Sustainable Biomaterials

www.rsb.org

RSB Certification ICAO Webinar

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26 June 2024

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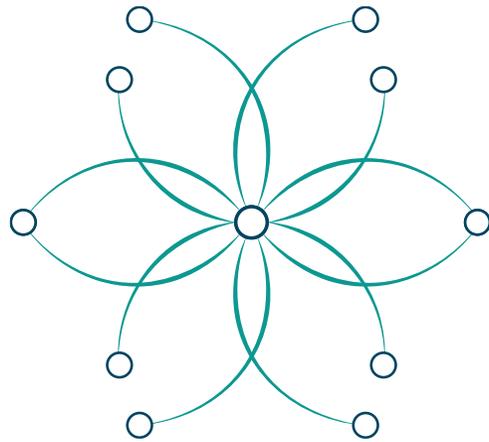


Section 1

Introduction to RSB



Our mission



To advance the just and sustainable transition to net-positive world – where climate change has been mitigated, biodiverse ecosystems restored, and livelihoods enhanced.

Our activities



Certification

Providing clarity on what good looks like



Implementation

Building capability to make change happen



Convening

Enabling collaboration for greater impact





**Our global membership is highly diverse
A wide range of organisations across supply chains, regions and industries**



The RSB Principles & Criteria



Section 2

RSB and SAF in Africa

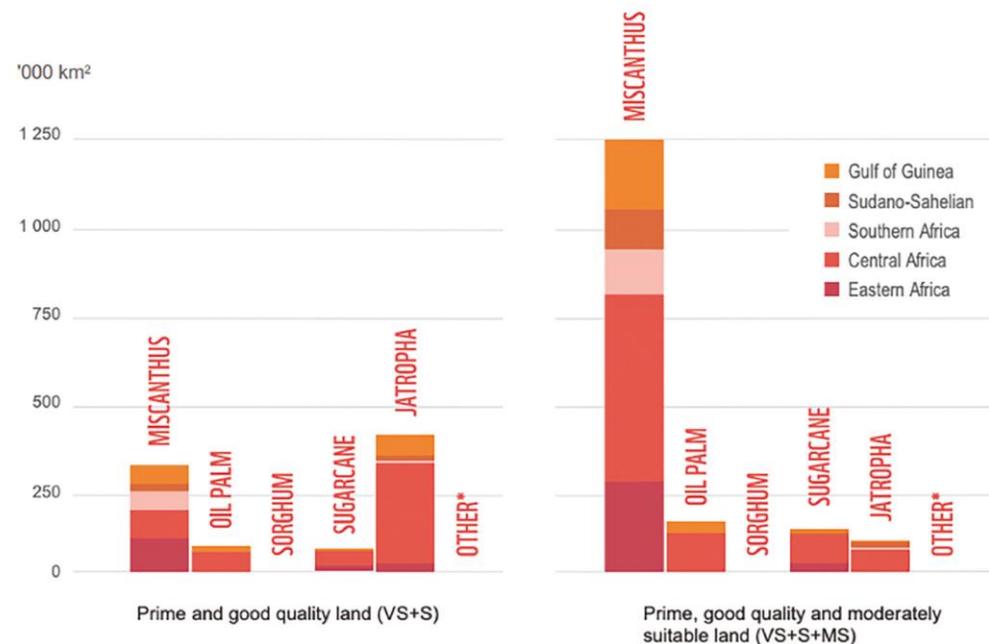


Fuelling the Sustainable Bioeconomy: Africa project outputs

Report on SAF potential – Sub-Saharan Africa

- International Institute for Applied Systems Analysis (IIASA) assesses pathways towards large-scale sustainable biofuel development in Sub-Saharan Africa.
- The report “Taking off: Understanding Sustainable Aviation Biofuel Feedstock Potential in Sub-Saharan Africa”, is based on a spatially detailed resource assessment for different biofuel feedstocks.

Figure 8: Geographical distribution of best-performing RSB-compliant feedstocks on REMAIN land under current conditions

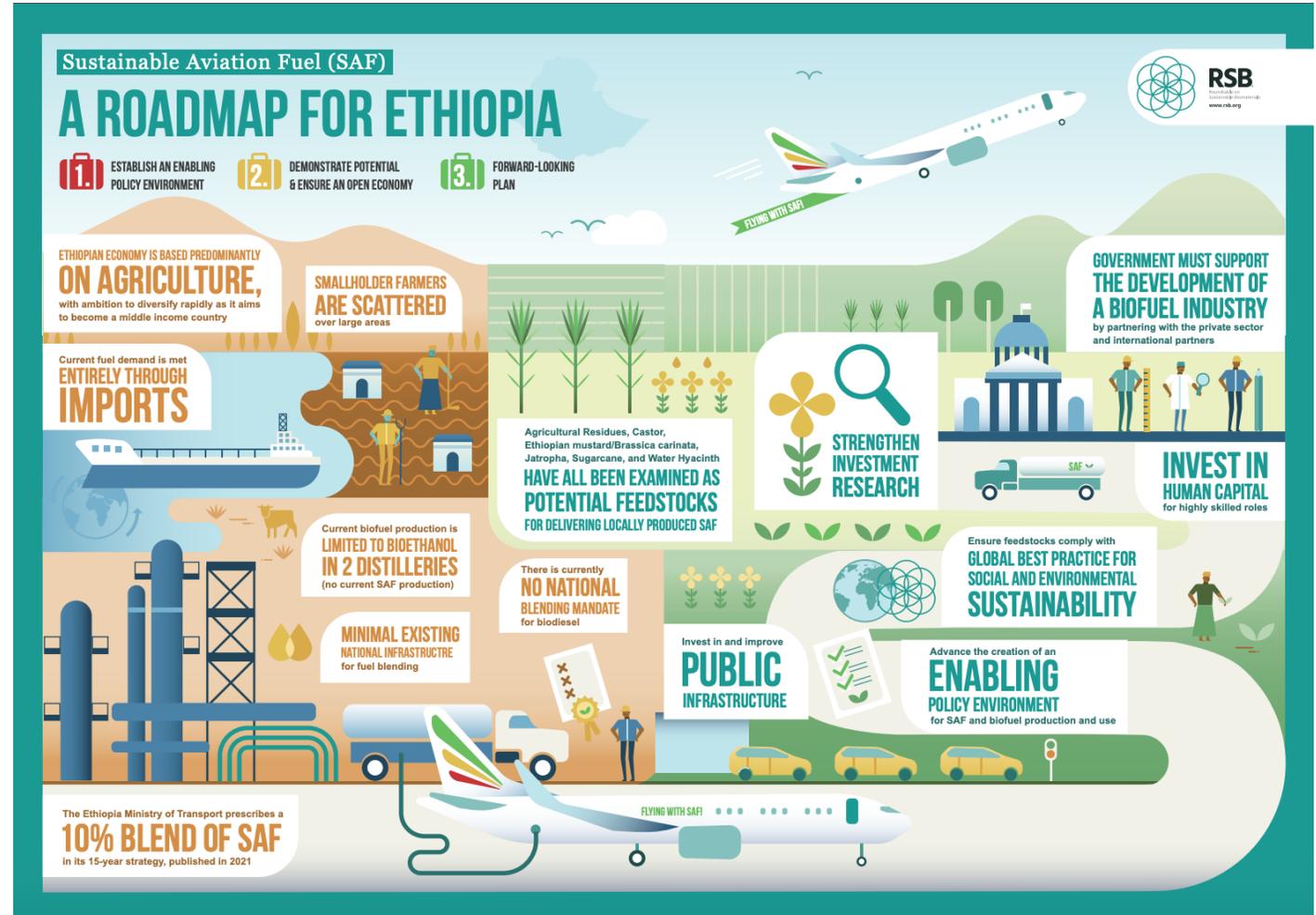


* These extents include small amounts of Solaris tobacco that meet the GHG savings criterion in southern Africa.
Source: Own calculations

Fuelling the Sustainable Bioeconomy: Africa project outputs

National SAF roadmap – Ethiopia

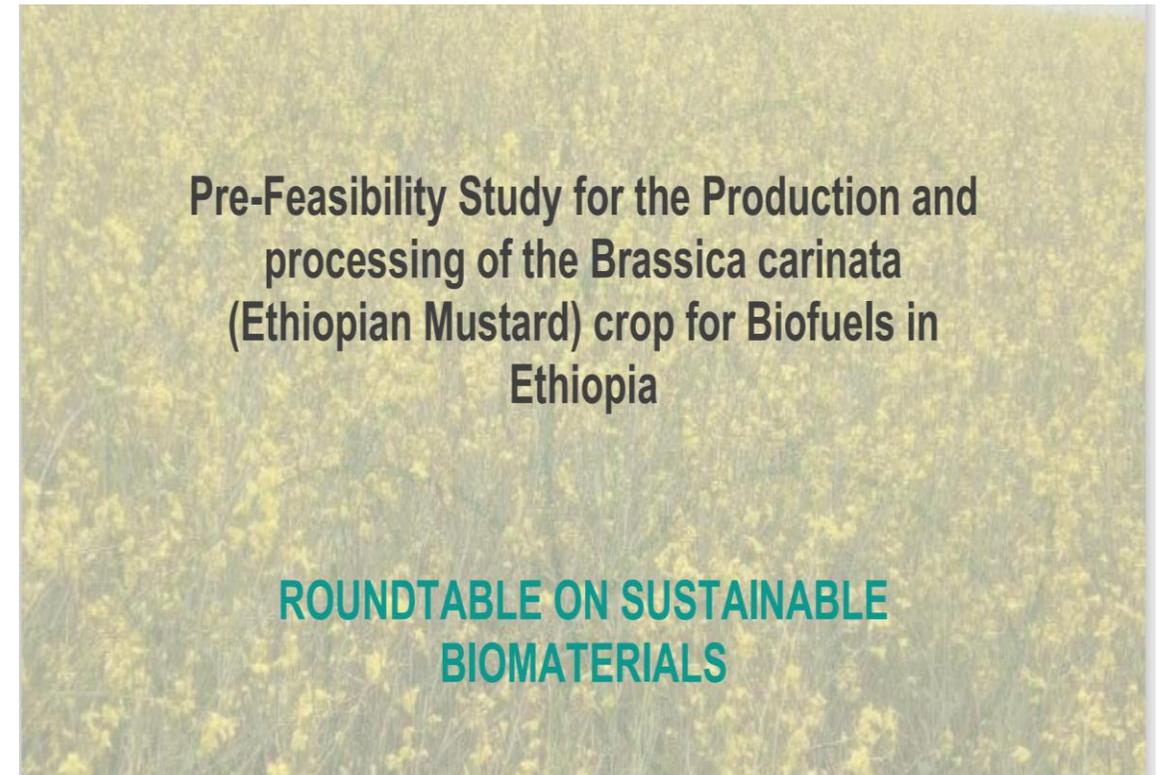
- To explore and advance Ethiopia's capacity to produce biofuels for use as Sustainable Aviation Fuel (SAF), RSB initiated the development of a 10-year SAF Roadmap for the country – with a report detailing a roadmap for SAF development in the country.



Fuelling the Sustainable Bioeconomy: Africa project outputs

Pre-feasibility study on Brassica Carinata as sustainable feedstock for SAF – Ethiopia

- The SAF roadmap has identified Brassica carinata as one of the potential feedstocks for SAF production in Ethiopia.
- Findings of the pre-feasibility study show the calculated cost of cultivation of seed production in Ethiopia is competitive with similar costs in other regions of the world

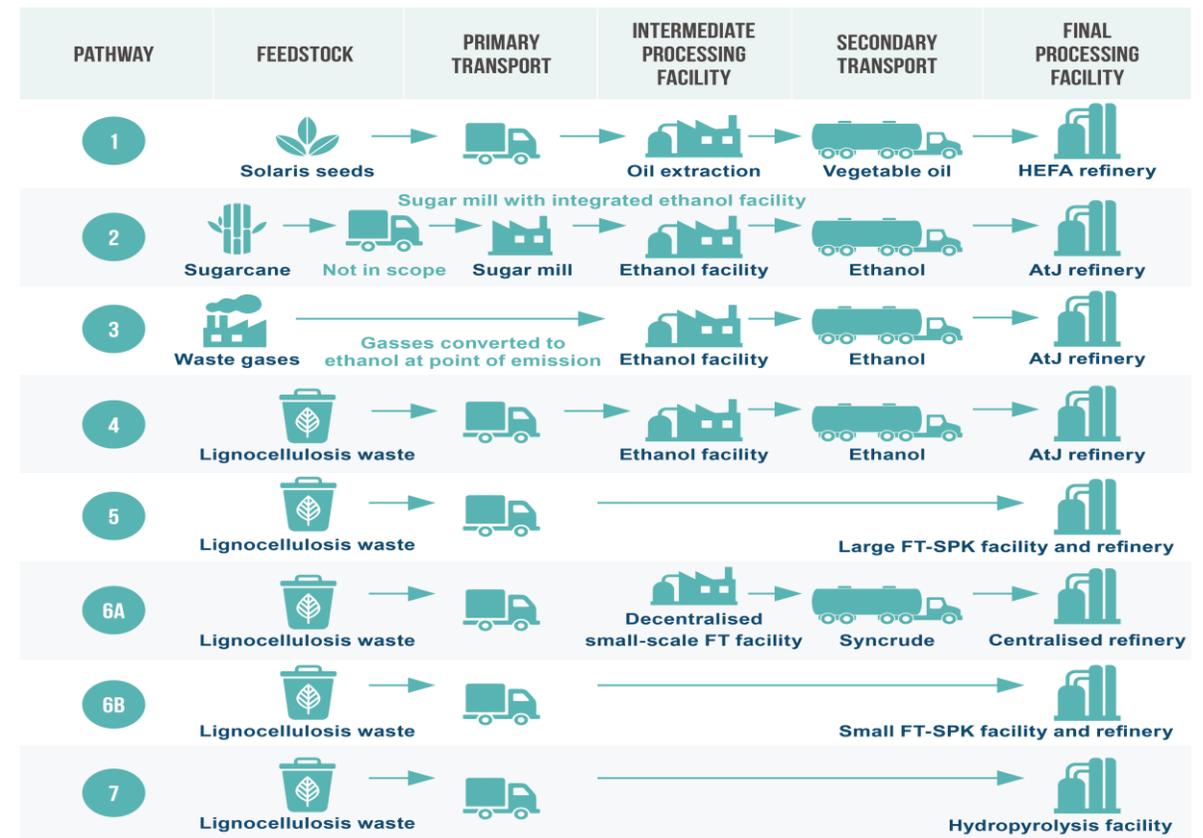


Fuelling the Sustainable Bioeconomy: Africa project outputs

Report on SAF production – South Africa

- WWF South Africa supports RSB in developing a techno-economic model of potential SAF pathways in South Africa.
- The report: *“Fuel for the future: A blueprint for the production of sustainable aviation fuel in South Africa”* finds that development of a new domestic SAF industry could be a pillar of South Africa’s low-carbon economy and play an important role in a just energy transition.

Feedstock source supply chain diagrams for SAF pathways in South Africa



Fuelling the Sustainable Bioeconomy: Africa project outputs

Stakeholder meeting and SAF roadmap – South Africa

Feedstock source supply chain diagrams for SAF pathways in South Africa

- RSB hosted a SAF stakeholder meeting to support South African stakeholders in developing the capacity and skills to bolster the local SAF economy, with strong sustainability principles at its core – in partnership with long-term partner WWF South Africa.
- RSB published the SAF roadmap and event outlining key conversations held at the event, outcomes, and the next steps that can be undertaken to make SAF a sustainable reality in the region.



Fuelling the Sustainable Bioeconomy: Africa project outputs

Invasive Alien Plants as sustainable feedstock for SAF – South Africa

- More than 10% of South Africa's land mass is covered by IAPs to some degree and they use up to 6% of the country's fresh water, which can potentially increase up to 16% without eradication measures, with an increase rate of 5-10% every year in land coverage.
- RSB has developed guidance to unlock the significant potential of invasive alien biomass to feed the biofuel and bioenergy markets



Fuelling the Sustainable Bioeconomy: Africa project outputs

SAF trainings – Ethiopia and South Africa

Ethiopia

- Developed and delivered SAF and carbon offset courses for the Ethiopian Airlines Aviation University
- RSB plans to offer SAF courses on online platform for a wider reach - RSB academy

South Africa

- Pilot of Sustainability certification approach on Invasive Alien Plants, and
- Pilot programme on Power to X course

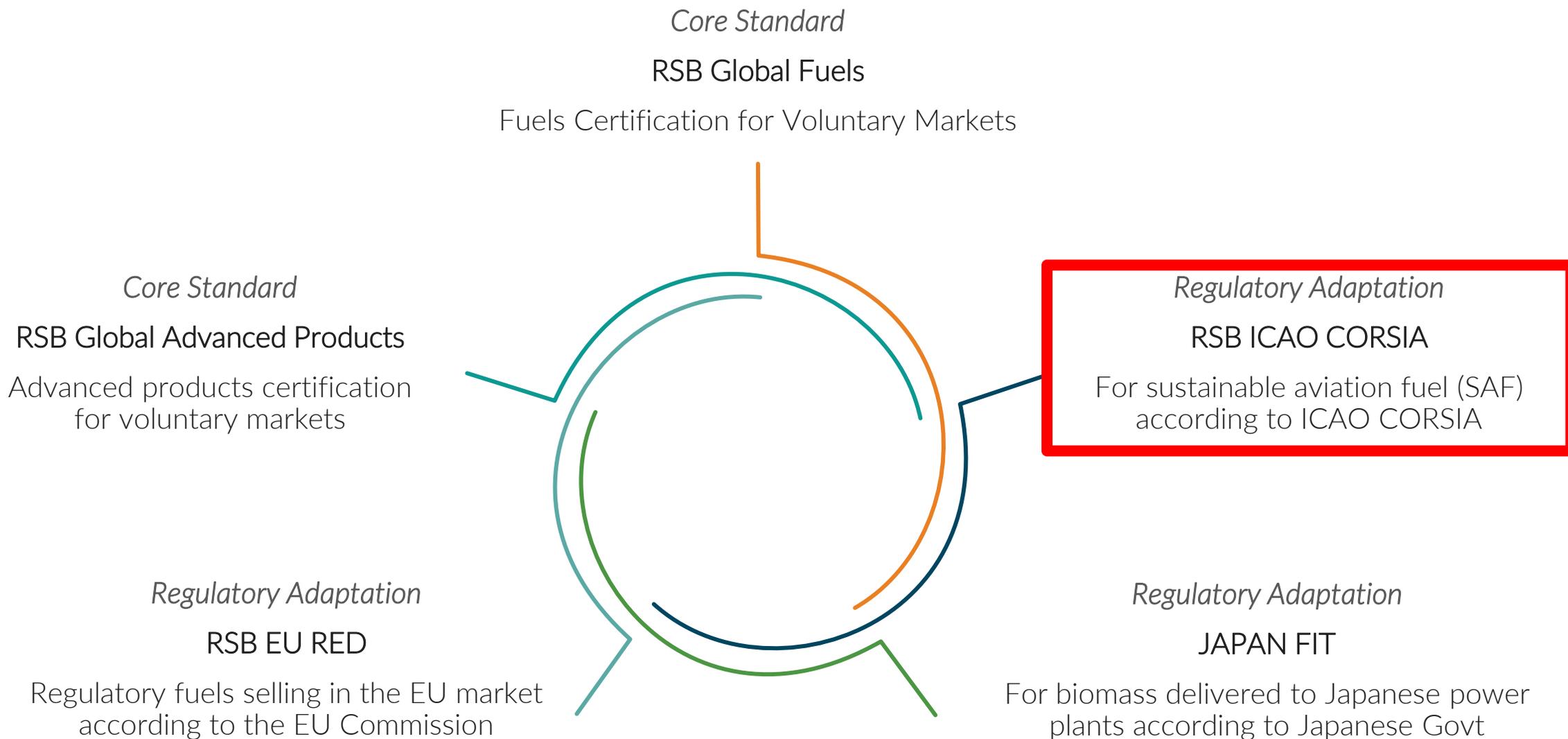


Section 3

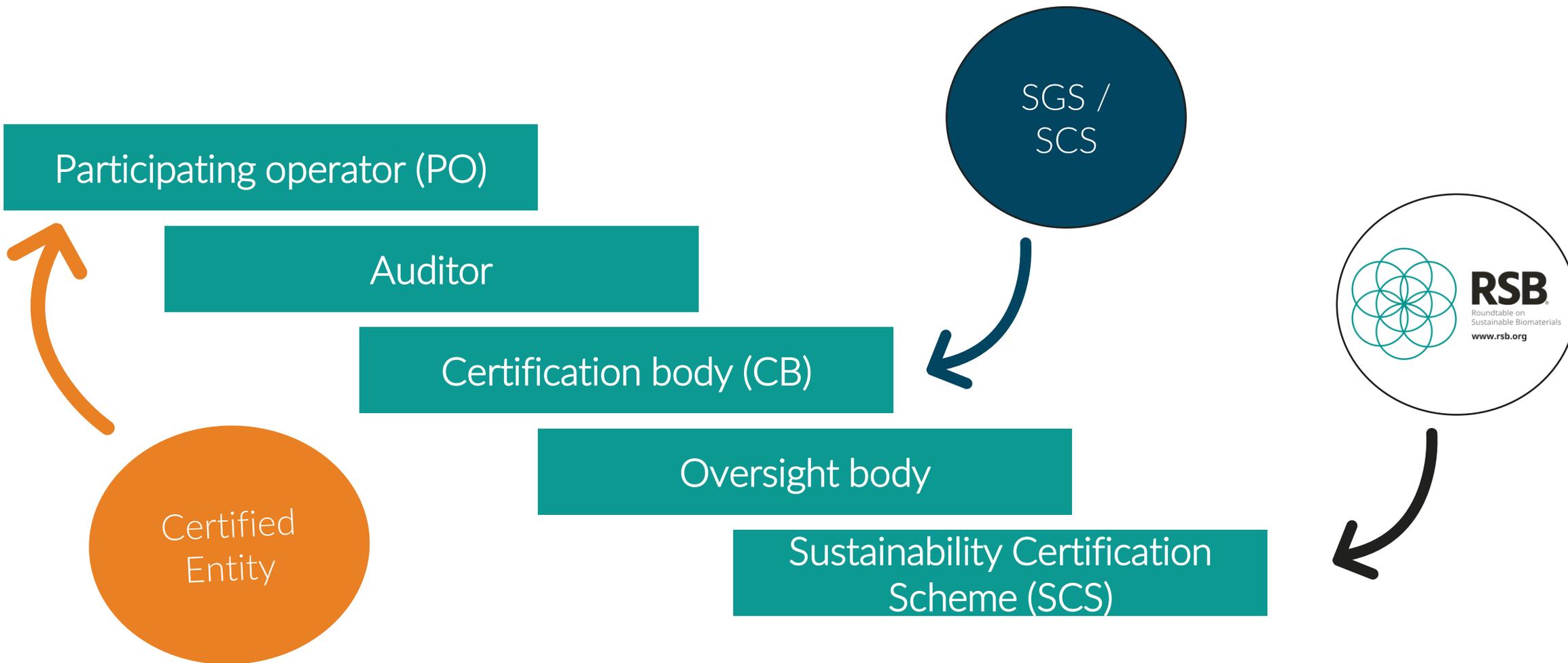
RSB Certification Approach



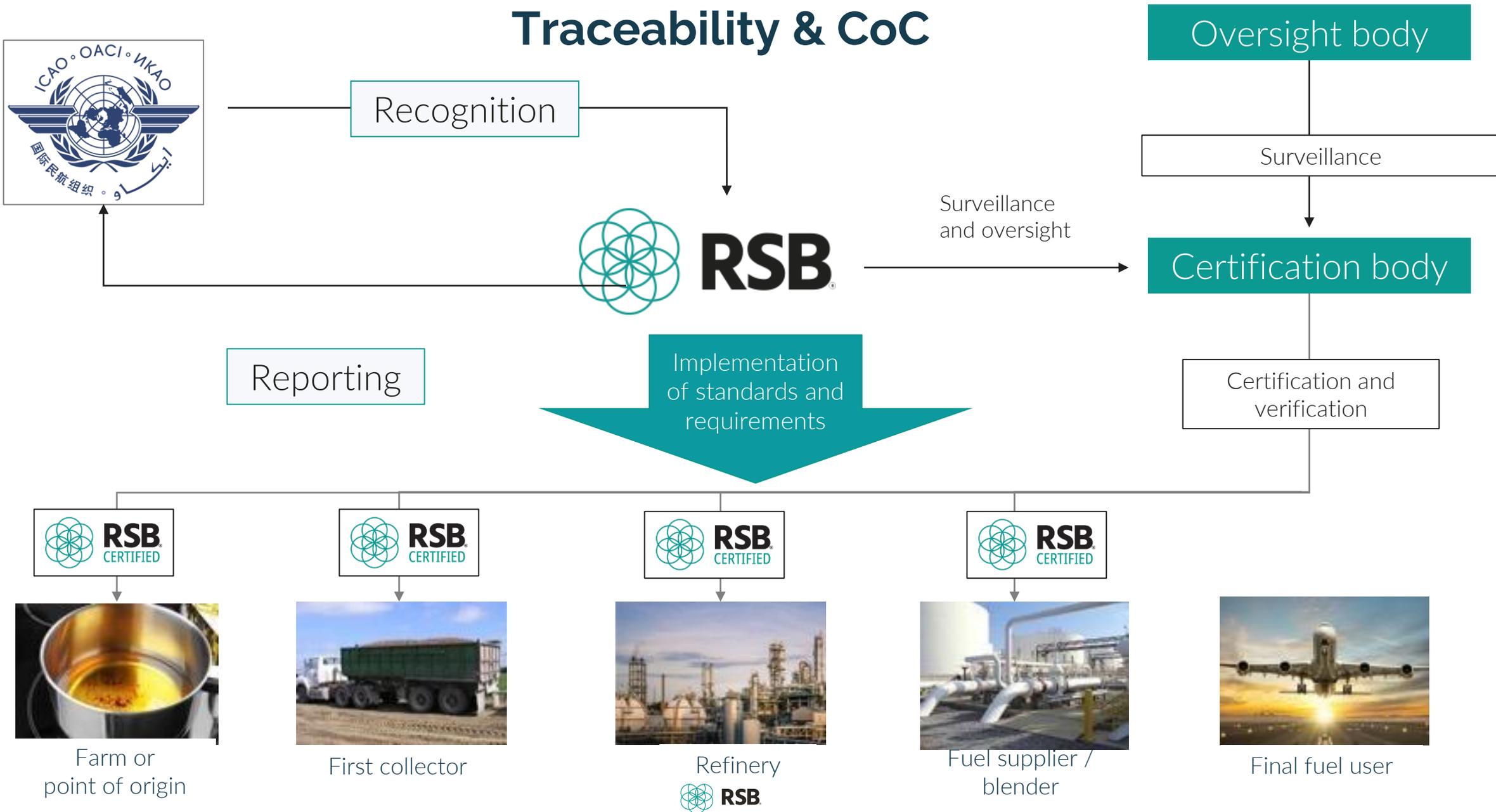
Regional and Regulatory Schemes



The RSB Certification ecosystem



Traceability & CoC



Steps to gain RSB Certification

Step 1: Scope

- Define your certification scope
- Select the certification scheme/s you want to apply for (RSB Global and/or EU RED and/or **CORSIA**)

Step 2: Application

- Online application
- Select an auditor (certification body) and agree on an audit date
- 2 weeks public comment period

Step 3: Prepare your audit

- Compile the screening tool and risk assessment
- Conduct a self-evaluation against applicable requirements
- Develop your Environmental and Social Management Plan (ESMP) to address applicable RSB requirements
- Develop Chain of Custody procedure
- Perform GHG calculation

Step 4: Audit

- Desk-based preparation
- On-site evaluation
- Identification of non-conformities, if any
- Time provided to address non-conformities
- RSB certificate issues
- Public audit summary published on RSB website



Ongoing

Annual surveillance audits (physical or desktop based on your risk class)

Section 4

Sustainability requirements



SAF Sustainability Criteria

GHG	<ul style="list-style-type: none">• SAF should generate lower carbon emissions on a life cycle basis than its fossil alternative.
Carbon Stock	<ul style="list-style-type: none">• SAF should not be made from biomass obtained from land with high carbon stock.
Water	<ul style="list-style-type: none">• Production of CORSIA SAF should maintain or enhance water quality and availability
Soil	<ul style="list-style-type: none">• Production of CORSIA SAFs should maintain or enhance soil health.
Air	<ul style="list-style-type: none">• Production of CORSIA SAF should minimize negative effects on air quality
Conservation	<ul style="list-style-type: none">• Production of CORSIA SAF should maintain biodiversity, conservation value and ecosystem services.

■ CORSIA and Sustainability requirements

■ Additional ICAO CORSIA Requirements

Source: [CORSIA Sustainability Criteria for CORSIA Eligible Fuels](#)

CORSIA Sustainability Criteria

Waste and Chemicals

- Production of CORSIA SAF should promote responsible management of waste and use of chemicals.

Human Rights

- Production of CORSIA SAF should respect human and labour rights.

Land use rights

- Production of CORSIA SAF should respect land rights and land use rights including indigenous and/or customary rights.

Water use rights

- Production of CORSIA SAF should respect prior formal or customary water use rights.

Local Development

- Production of CORSIA SAF should contribute to social and economic develop.

Food Security

- Production of CORSIA SAF should promote food security in food insecure regions.

Section 5

Traceability and Chain of Custody



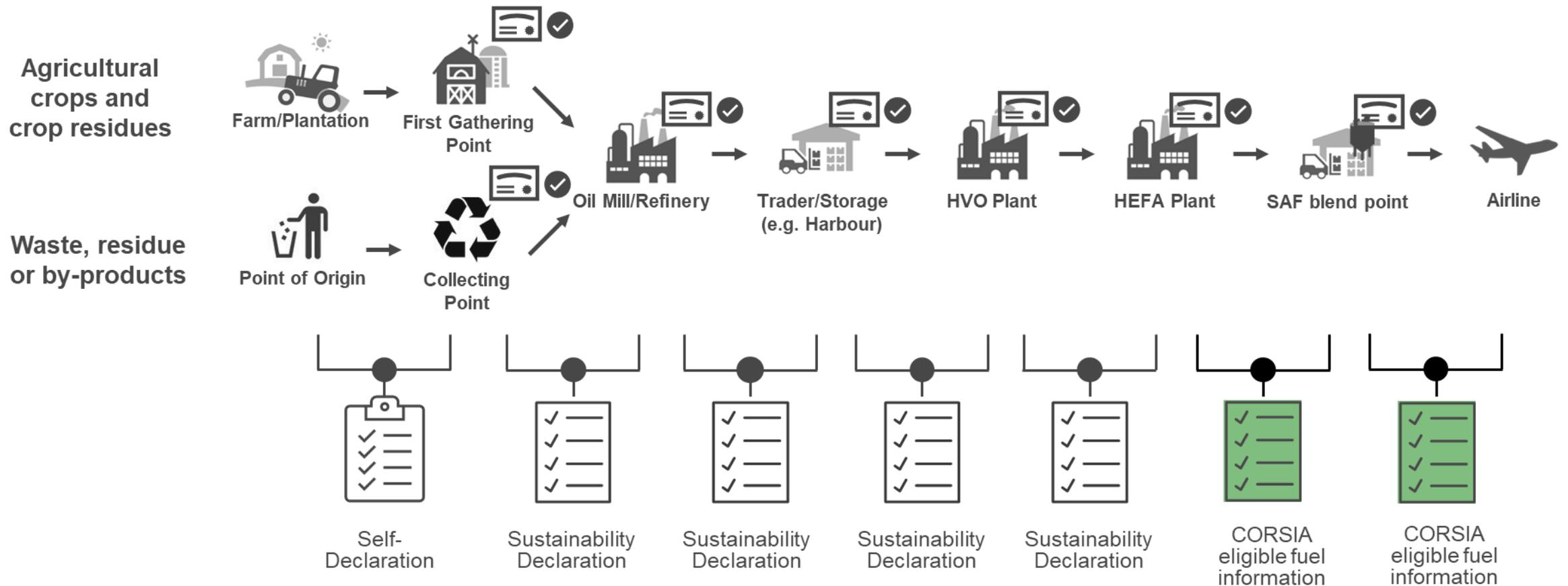
Chain of Custody system

The function of the Chain of Custody model is to :

- Identify origin of a final product or product component
- Ensure a custodial sequence along the supply chain
- Ensure that volumes of certified material sold (outputs) match or do not exceed volumes of certified material produced or bought (inputs)
- Link sustainability practices at a certain stage in the value chain with a product claim at the end of the chain
- Protect and monitor the integrity of claims » Improve transparency in the supply chain
- Ensure systems are in place for integrity of entities or participating operators
- Compile life cycle analysis (LCA) data along the chain (e.g. GHG data)

Flow of sustainability information

Sustainability information (e.g., on GHG emissions) is forwarded through the supply chain step-by-step.



Models and definition

Identity preservation



Delivers consignments physically containing **100% certified products** from a **uniquely identifiable source**

PoS

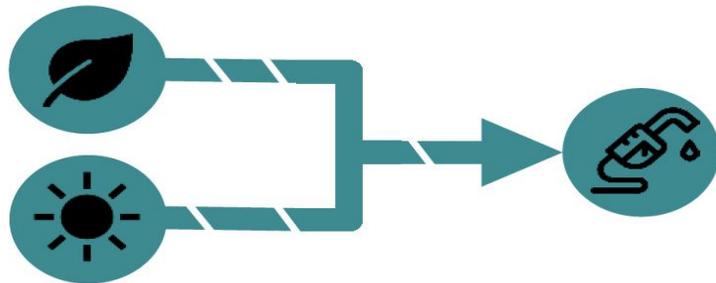
Mass balancing



Physical product and **sustainability information** are **coupled** when they are traded between parties. Products with different sustainability characteristics **can be physically mixed**, but are kept **administratively segregated**.

PoS

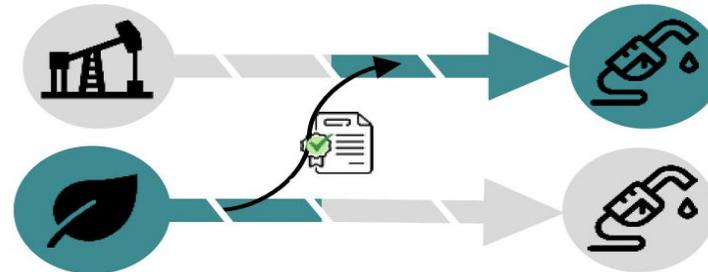
Segregation



Delivers consignments physically **containing 100% certified products**; but the **exact origins** of the material in the consignment **can not be traced**.

PoS

Book & Claim*



Trade of **physical products** is **completely decoupled** from the trade of **sustainability certificates**.

GO or
GO/PoS

Proof of Sustainability (PoS)

- With each shipment along the supply chain an RSB Operator should include a **proof of sustainability (PoS) document**.
- The proof of sustainability (PoS) shall include the product information described in **Annex I** of the RSB chains of custody standard.
- The operator may use regular sales documentation (invoices, bill of lading etc.) instead of the PoS provided it includes the product information described in Annex I.
- RSB provides a template for the PoS that may be used by the operator.

Proof of Sustainability (PoS)	
Batch ID Number:	(to be included by the certified operator, should be traced in their internal system)
Number of the Delivery Note	(invoice#, or Bill of lading etc)
Date of Shipment:	(date the material is dispatched)
Date of Issuance:	date that the PoS is issued
	
Supplier (certified operator who issues the PoS)	
Name:	Address:
Supplier - site from which the product is forwarded	
Name:	Address:
Customer	
Name:	Address:
(of recipient, receiving the certified product)	

Questions

