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TOWARD THE 2050 VISION FOR  
SUSTAINABLE AVIATION FUELS



# Developments in sustainability of aviation fuels

*The role of the SCS in CORSIA: The RSB System*



**Elena Schmidt**

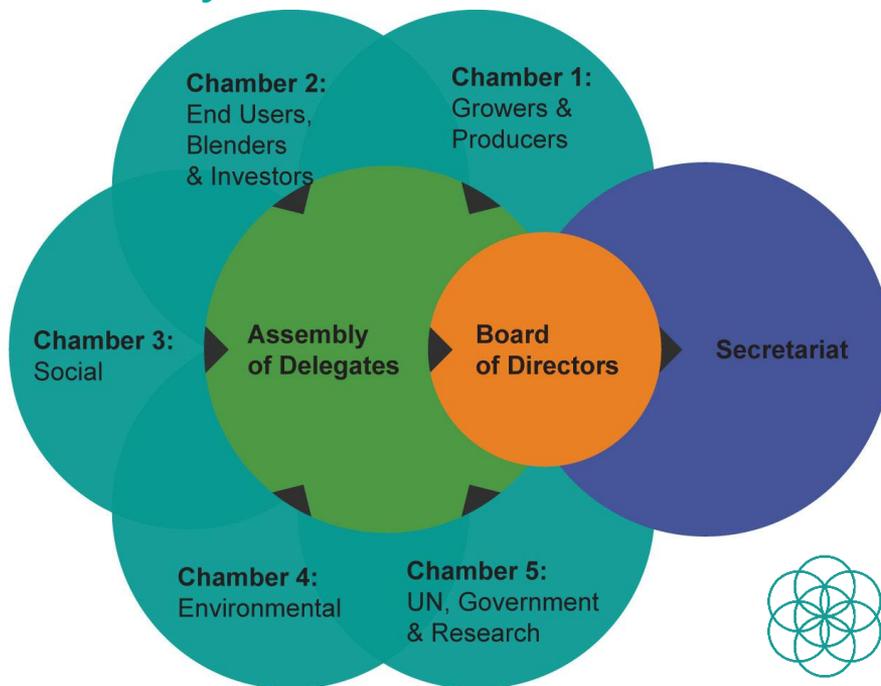
Standards Director, Roundtable on  
Sustainable Biomaterials



# WHAT IS RSB

## A Multi-Stakeholder Sustainability Standard

5	Chambers
86	RSB members
34	Countries represented





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# RSB Members Aviation Representation



AIRBUS



NESTE

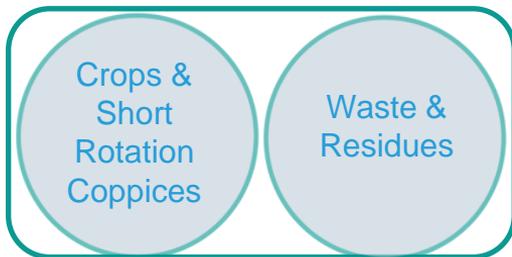


capturing carbon. fueling growth.

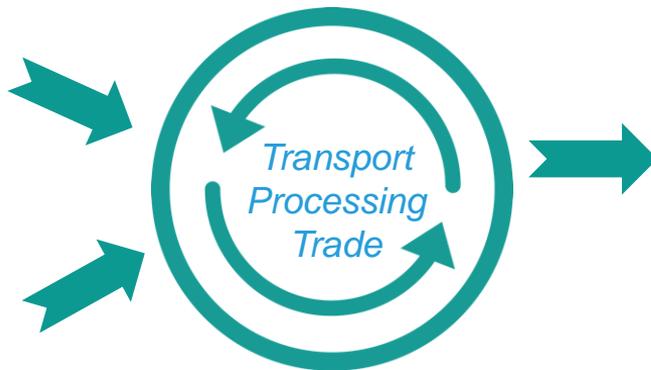
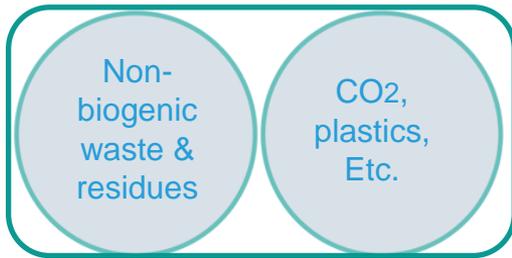


# FEEDSTOCK & PRODUCT DIVERSITY

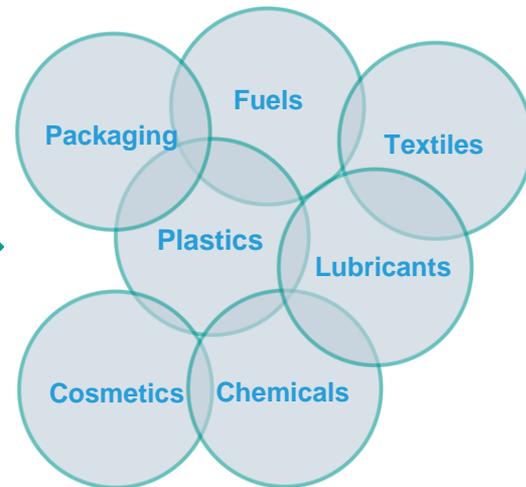
## Bio-based Feedstocks



## Advanced Feedstocks



## Products



**RSB certifies**

entire supply chains for multiple markets





## How RSB Certification overlaps with CORSIA Criteria

<p><b>CORSIA requirement:</b> Greenhouse Gases</p>	<p><b>CORSIA requirement:</b> Carbon Stock</p>
	
<p><b>RSB Solution:</b> GHG Principle requires 50% minimum reduction</p>	<p><b>RSB Solution:</b> Conservation Principle prevents conversion or degradation of conservation values</p>

- **Verified** by the RSB Assurance System: Third-party certification
- **Traceability:** RSB Chain of Custody Standard
- **Indirect land use changes:** RSB Low ILUC risk biomass module



# ENVIRONMENTAL & SOCIAL RESPONSIBILITY

## Sustainability Compliance

 <b>Principle 1</b> Legality	 <b>Principle 2</b> Planning, Monitoring & Continuous Improvement	 <b>Principle 3</b> Greenhouse Gas Emissions	 <b>Principle 4</b> Human & Labour Rights	 <b>Principle 5</b> Rural and Social Development	 <b>Principle 6</b> Local Food Security
 <b>Principle 7</b> Conservation	 <b>Principle 8</b> Soil	 <b>Principle 9</b> Water	 <b>Principle 10</b> Air Quality	 <b>Principle 11</b> Use of Technology, Inputs & Management of Waste	 <b>Principle 12</b> Land Rights





## RISK BASED APPROACH: Simplified Certification

<b>Risk Category</b>	<ul style="list-style-type: none"><li>- Audit schedule</li><li>- Audit intensity</li></ul>
<b>RSB Screening Tool</b>	<ul style="list-style-type: none"><li>- Identifies risks specific for the project</li><li>- Audit team composition</li></ul>
<b>Waste/Residues</b>	<ul style="list-style-type: none"><li>- Impact assessment per category</li><li>- Requirements to address specific risks</li></ul>
<b>RSB Regional Indicators</b>	<ul style="list-style-type: none"><li>- Existing regulatory context</li><li>- Tools/Standards already used in a region</li></ul>
<b>Collaboration</b>	<ul style="list-style-type: none"><li>- Benchmarks</li><li>- Combined Audits</li></ul>





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## RSB SMALLHOLDER APPROACH

Incorporating small-scale production in  
global aviation supply chains

- RSB Smallholder Standard
- Group management approach
- Step-wise compliance over 3 years





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# BEYOND CERTIFICATION: A Snapshot of RSB Projects

ADVISORY SERVICES

POLICY DEVELOPMENT

REGIONAL INDICATORS



China



USA



Brazil



Mexico



South Africa



Ethiopia



Queensland Government  
Department of Environment and  
Heritage Protection

Queensland, Aus



Sub-Saharan Africa



Alabama, US



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## RESOURCE ASSESSMENTS

Availability of sustainable alternative aviation fuel



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Real sustainability is built into the  
foundations of the project!

# RSB's Aviation Work in Action



 CERTIFICATIONS

 PARTNERSHIPS

 MEMBERS



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# THANK YOU!

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# HOW IT WORKS

## Certification Process



### Step 1: Application

- Online Application
- Accept Terms & Conditions
- Contact Certification Body
- 2 week public comments period

### Step 2: Preparation for the Audit

- Self-Risk Assessment
- Screening Exercise
- Greenhouse Gas Calculation
- Environmental & Social Management Plan
- Chain of Custody Procedure
- Stakeholder Consultation

### Step 3: Audit

- Desk-based preparation
- On-site Evaluation
- Identification of non-conformities
- Closing of major non-conformities
- Issuance of the certificate
- Public Audit Summary

RSB  
Certified

CORSA  
Compliant

### Ongoing

Annual surveillance audits during period of certificate validity



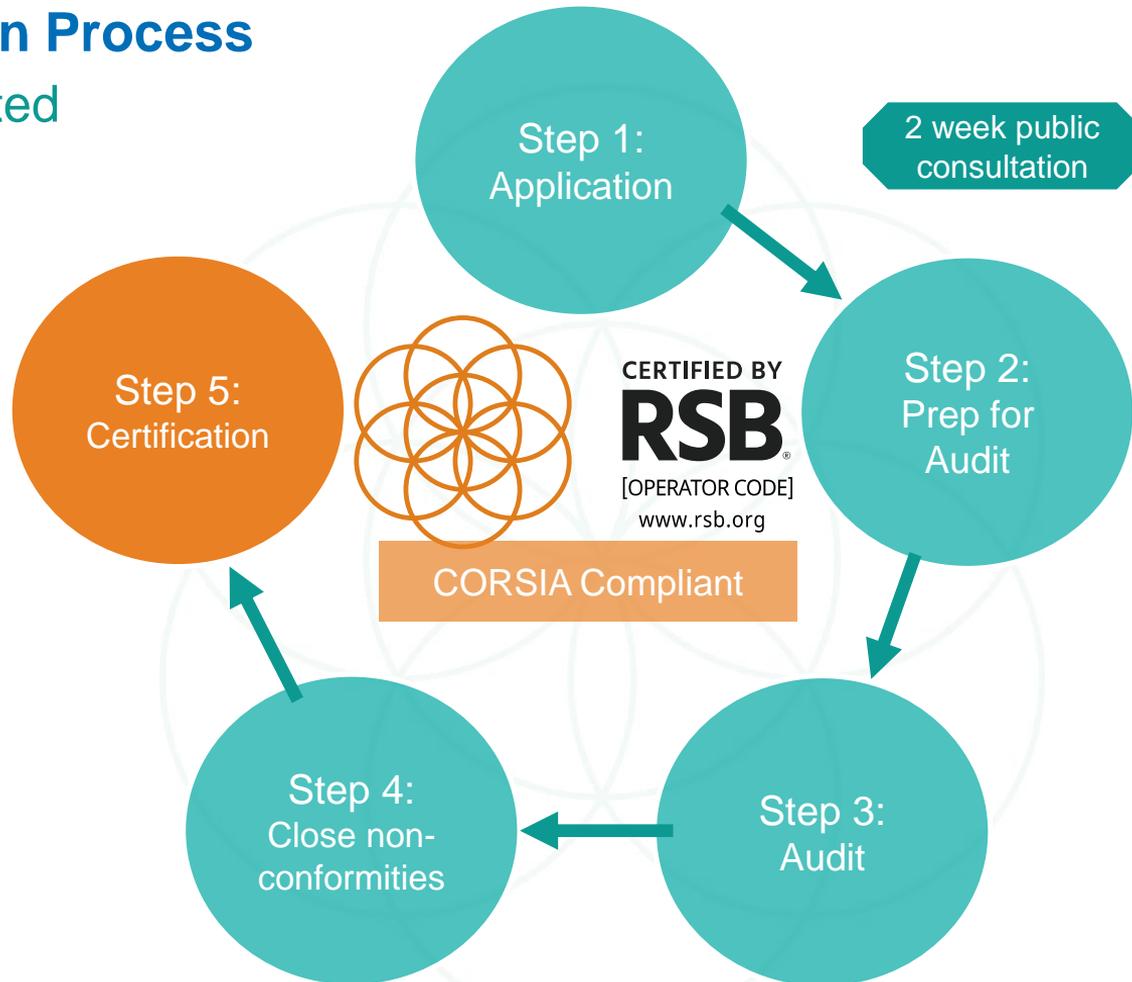
## ASSURANCE: Ensuring Credibility

- Ensuring Independent and 3<sup>rd</sup> Party Audits by Certification Body
- Full documentation procedures
- Evaluation of Certification Body's competence to provide RSB assessments
- Ongoing monitoring of the Certification Body
- Conducting Witness Audits
- Unplanned Assessments – triggered by specific concerns or RSB requests



# Certification Process

## Getting Started





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## RSB Chain of Custody Certification



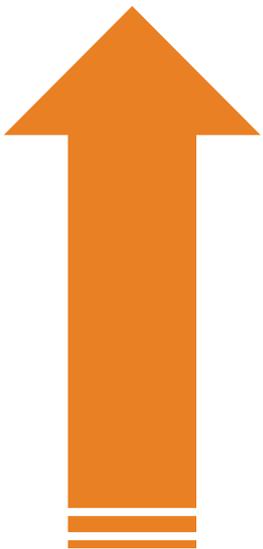
*A robust chain of custody certification is essential*

### **The RSB Chain of Custody certification**

- Ensures that certified operators only associate RSB compliance claims with biomass/biofuels/advanced fuels and advanced products which are compliant with the RSB Standards, and
- Requires continuous documentation to uniquely identify RSB compliant product in acquiring, handling and forwarding of product.
- Ensures that relevant information necessary to fulfill reporting requirements is tracked from origin to the user



## Verifying Greenhouse Gas Emission calculations



### Factors that increase emissions:

- Land-use change
- Fertilizer use
- Energy use
- Other inputs (pesticides, chemicals)
- Effluents, leakages



### Factors that decrease emissions:

- Soil carbon sequestration
- Perennial feedstocks
- Reducing inputs
- Using residues for heat/power generation

**RSB has a third-party certification system in place to verify GHG calculations throughout the entire Chain of Custody:**

Training of Auditors and Operators, GHG calculation tool, Audit Checklists

