Session 7: Sustainability of SAF
RSB - Sustainability Certification and Claiming the Environmental Benefits of SAF

CAAFI 2023 Virtual Conference | 15 June 2023
The world we are trying to create

A collaborative network that works to accelerate the transformation to a sustainable and circular bioeconomy

where climate change has been mitigated, biodiverse ecosystems have been restored and livelihoods have been enhanced
Our global membership is highly diverse
A wide range of organisations across supply chains, regions and industries
Holistic approach supporting our ambition to create positive impact
Government recognition and 3rd party endorsements

RSB is rated as a best-in-class standard

Source: Blue Angel, Germany
Certification scope

- Biogenic feedstock
  Crops, bio-based wastes & residues

- Non-Biogenic feedstock
  Recycled carbon, Green H2 / NH3

- Sustainable fuels
- Bio-based and circular materials
- Bioenergy

Sustainability advice, partnerships and certification along the entire supply chain
RSB Certification schemes

- **RSB Global**
  - Sustainability requirements: Voluntary
  - Type of claim: Energy/Fuels and materials

- **RSB EU RED**
  - Sustainability requirements: RSB Principles and Criteria
  - Type of claim: Renewable fuels and energy

- **RSB CORSIA**
  - Sustainability requirements: Regulatory / linked to ICAO CORSIA targets
  - Type of claim: Sustainable Aviation Fuels
RSB CERTIFICATION

Who needs to be certified

The entire supply chain must be certified for the final product to carry the RSB claim (i.e., RSB-certified sustainable fuel)

RSB accepts material certified against other CORSIA-recognised Sustainability Certification Systems as “ICAO CORSIA compliant”
RSB’s Greenhouse Gas Life Cycle Assessment
GHG Emissions and System Boundaries

- **Core LCA** value can be determined either on the basis of default values or calculated actual LCA values.

- **ILUC** value must be determined on the basis of default values.

- **DLUC** value must be determined on the basis of context specifics, in line with the RSB methodology for land use changes.
GHG Calculation Methodology & Data

**Background data:**
Default emission factors from science-based literature, recognised data sets (e.g. Ecoinvent)

**Foreground data:**
Operator-specific values

- Emission factor for fertiliser (g CO₂eq/kg) → Amount of fertiliser (t/ha) → Crop cultivation
The combined impact of RSB'S tools

GHG LCA Assessment and Technoeconomic Analysis

Life-Cycle Assessment
- Data collection
- Science-based Literature
- RSB GHG tool

Interactive process

Technoeconomic Analysis Tool
- Data input and results analyses
- RSB Expertise
- RSB TEA tool

Scenario Selection
RSB's Landscape-Level Programmes
RSB'S LANDSCAPE-LEVEL PROGRAMMES

What are the outcomes?

Engagement of key regional stakeholders in relevant sourcing regions

Capacity building and long-term use of project results

Development of new material and fuel supply chains creates positive sustainability impacts across landscapes

SAF investment decisions based on long-term sustainable feedstock availability

Long-term sustainability certification for SAF supply chains made possible with more emphasis on feedstock selection
Questions and discussion