

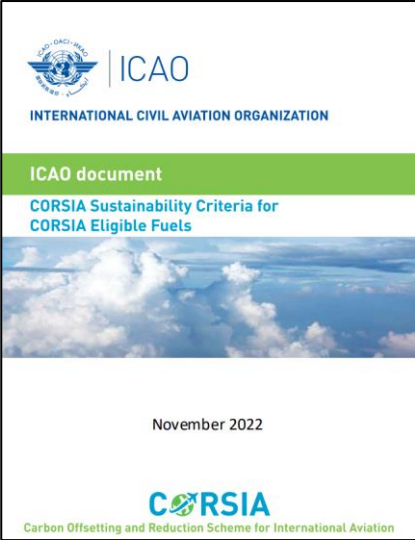
Basics of SAF Sustainability Certification

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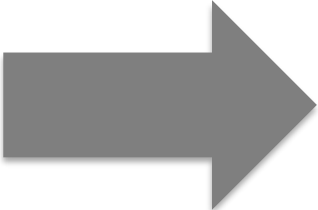
Working for sustainable aviation.
Your safety is our mission.

For CORSIA, ICAO makes use of sustainability certification schemes (SCS) to ensure the sustainability of SAF



Sustainability Themes
1. Greenhouse Gases (GHG)
2. Carbon stock
3. Water
4. Soil
5. Air
6. Conservation
7. Waste and Chemicals
8. Human and labour rights
9. Land use rights and land use
10. Water use rights
11. Local and social development
12. Food security

Implemented via
certification schemes



Name of the Sustainability Certification Scheme	Date of approval	Website	Scope of approval
International Sustainability and Carbon Certification (ISCC)	16 Jun. 2023	https://www.iscc-system.org/about/sustainable-aviation-fuels/corsia/	Certification of CORSIA Sustainable Aviation Fuels economic operators covered by Chapters 1 and 2 of the ICAO document "CORSIA Sustainability Criteria for CORSIA eligible fuels"
Roundtable on Sustainable Biomaterials (RSB)	16 Jun. 2023	https://rsb.org/rsb-corsia-certification/	Certification of CORSIA Sustainable Aviation Fuels economic operators covered by Chapters 1 and 2 of the ICAO document "CORSIA Sustainability Criteria for CORSIA eligible fuels"
ClassNK SCS	28 Oct. 2024	https://www.classnk.or.jp/hp/en/authentication/scs/index.html	Certification of CORSIA Sustainable Aviation Fuels economic operators covered by Chapter 2 of the ICAO document "CORSIA Sustainability Criteria for CORSIA eligible fuels"

Sustainability certification focuses on three key aspects (I)

Sustainability in feedstock and fuel production



Reduction of GHG emissions in the fuel supply chain



Traceability and chain of custody in the supply chain



Sustainability certification focuses on three key aspects (II)

Examples

Sustainability in feedstock and fuel production

Is the feedstock eligible under the regulatory framework?

If the feedstock is a primary crop: Is it cultivated on eligible lands? No cultivation on valuable (e.g., high carbon stock) lands

If the feedstock is a waste or residue: Is it actually a **genuine** waste or residue?

Does feedstock and fuel production respect other environmental and social sustainability criteria?

Reduction of GHG emissions in the fuel supply chain

Are all life cycle steps from feedstock production to final fuel use considered?

Does the economic operator calculate GHG emissions as required by the regulatory framework?

Does the economic operator use valid and accurate data sources for their GHG emissions calculation?

Is the economic operator's GHG emissions calculation a fair and accurate representation of their actual emissions?

Traceability and chain of custody in the supply chain

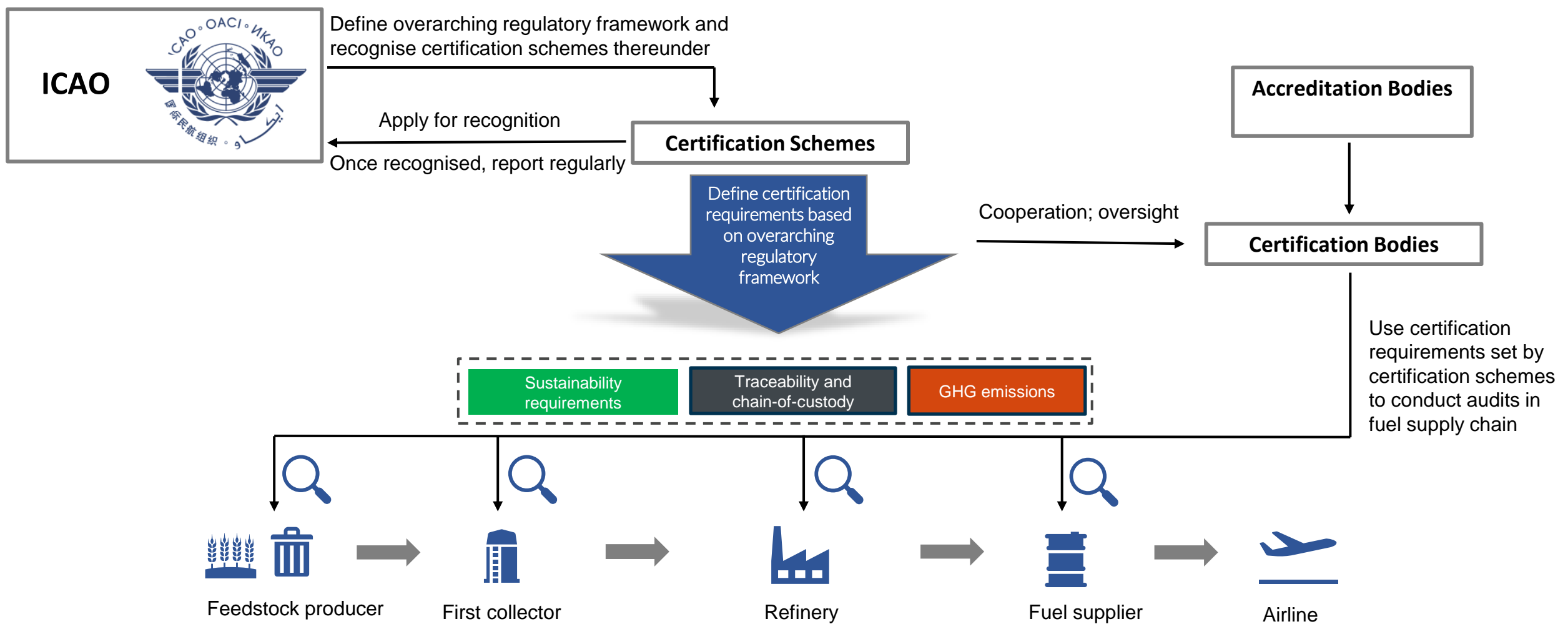
Has economic operator clearly defined responsibilities in maintaining traceability of sustainable product among relevant staff?

Does the economic operator have a tracking system in place that is fit for purpose?

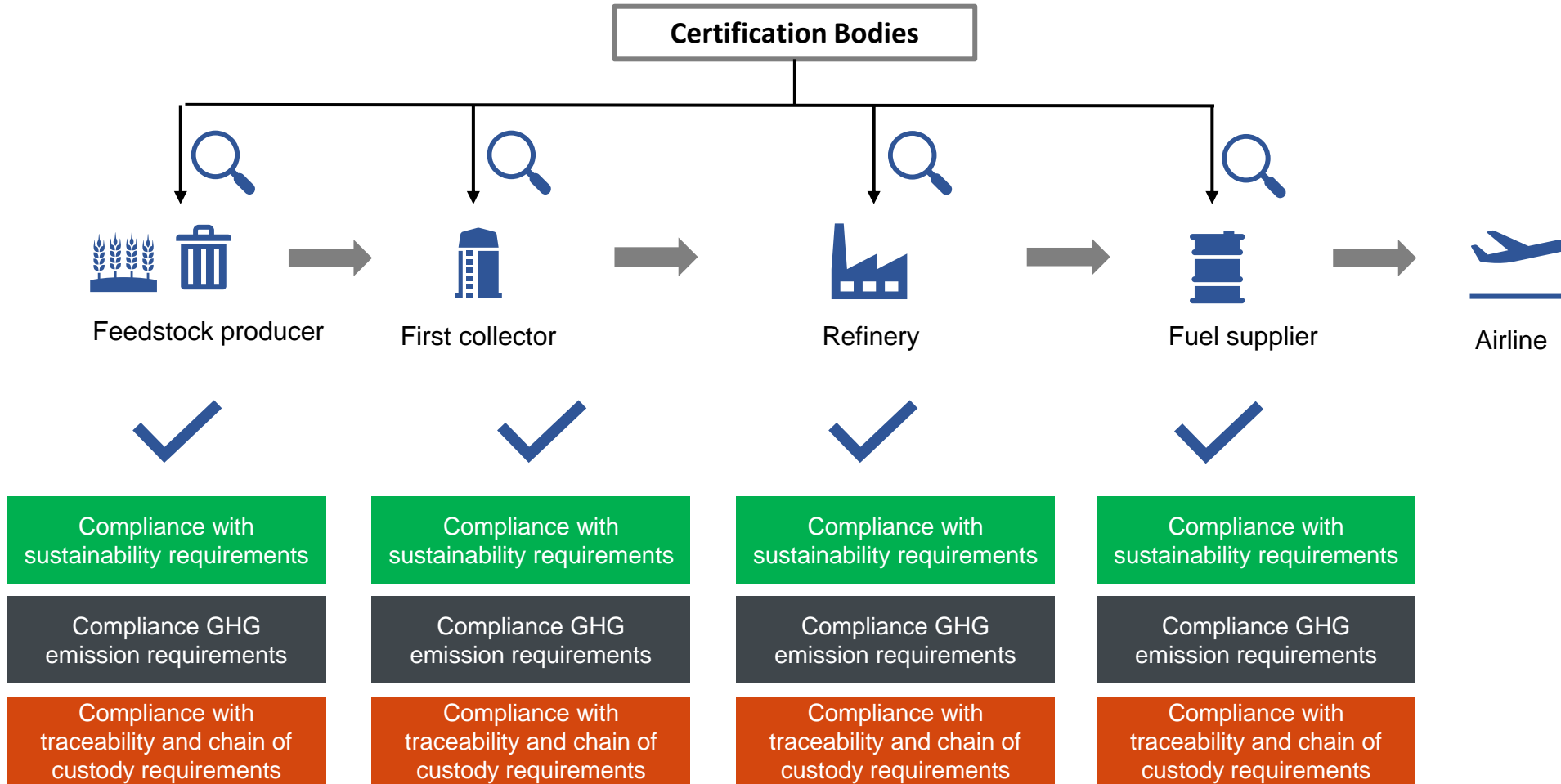
Does the economic operator maintain an accurate mass balancing system?

Does the economic operator accurately forward sustainability information to their buyers in the supply chain?

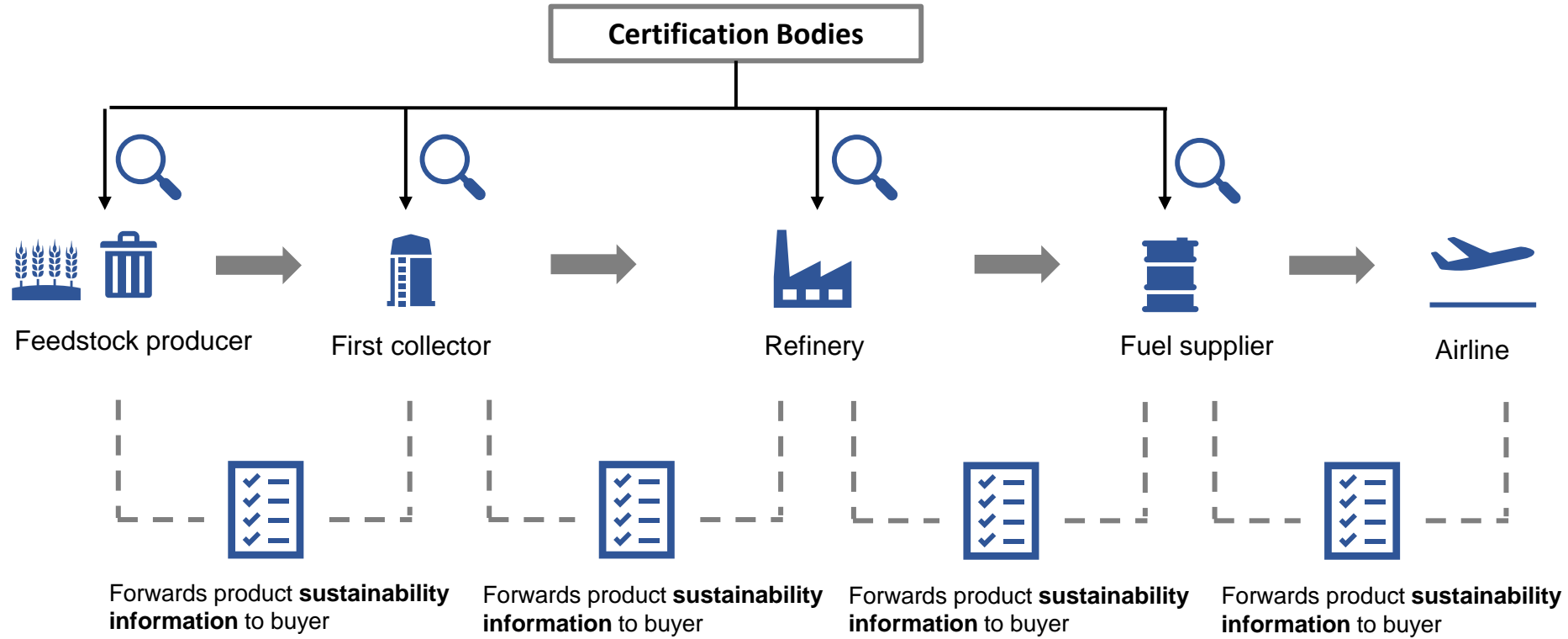
In the certification ecosystem, the different organisations involved have clear roles and responsibilities



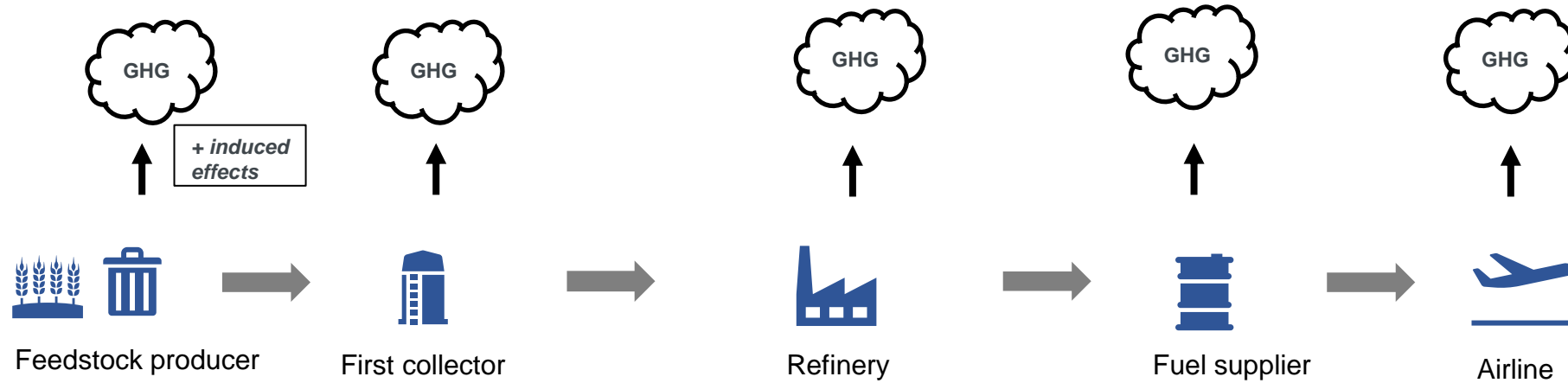
How does it work? Every operator in the supply chain is regularly certified to ensure continued compliance



Sustainability information is forwarded from operator to operator in the supply chain



GHG emissions are emitted along the whole life cycle of SAF and must be accounted for



In certification, emissions from each life cycle step are calculated and added up along the supply chain to determine the SAF's carbon intensity



The GHG emissions value calculated at each step must be audited and verified by a certification body before it can be forwarded in the supply chain!



Indirect effects

- Emissions from **indirect land use change**

Feedstock production and collection

- Emissions from **feedstock cultivation**
- Emissions from **direct land use change (DLUC)**
- Emission savings from **soil carbon accumulation**
- Emissions from **upstream transport**

Processing; upstream and downstream transport and distribution

- Emissions from **processing**
- Emission savings from **carbon capture and storage**
- Emissions from **transport and distribution** (upstream and downstream)
- Emissions from **combustion**

Sustainability certification on the African continent – Current status

- In total, **more than 100 entities/companies are certified under sustainability certification schemes on the African continent** for different products and different markets, **most of which for biofuels feedstock production**
- **Most prominently presented in terms of certified companies** are Kenya (25+ certified companies), South Africa (20+), Mali (20+), Egypt (15+), Mozambique (10+), Ghana (10+)
- This number has been growing quickly over the past few years, **pointing to significant potential**

Thank you!



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