



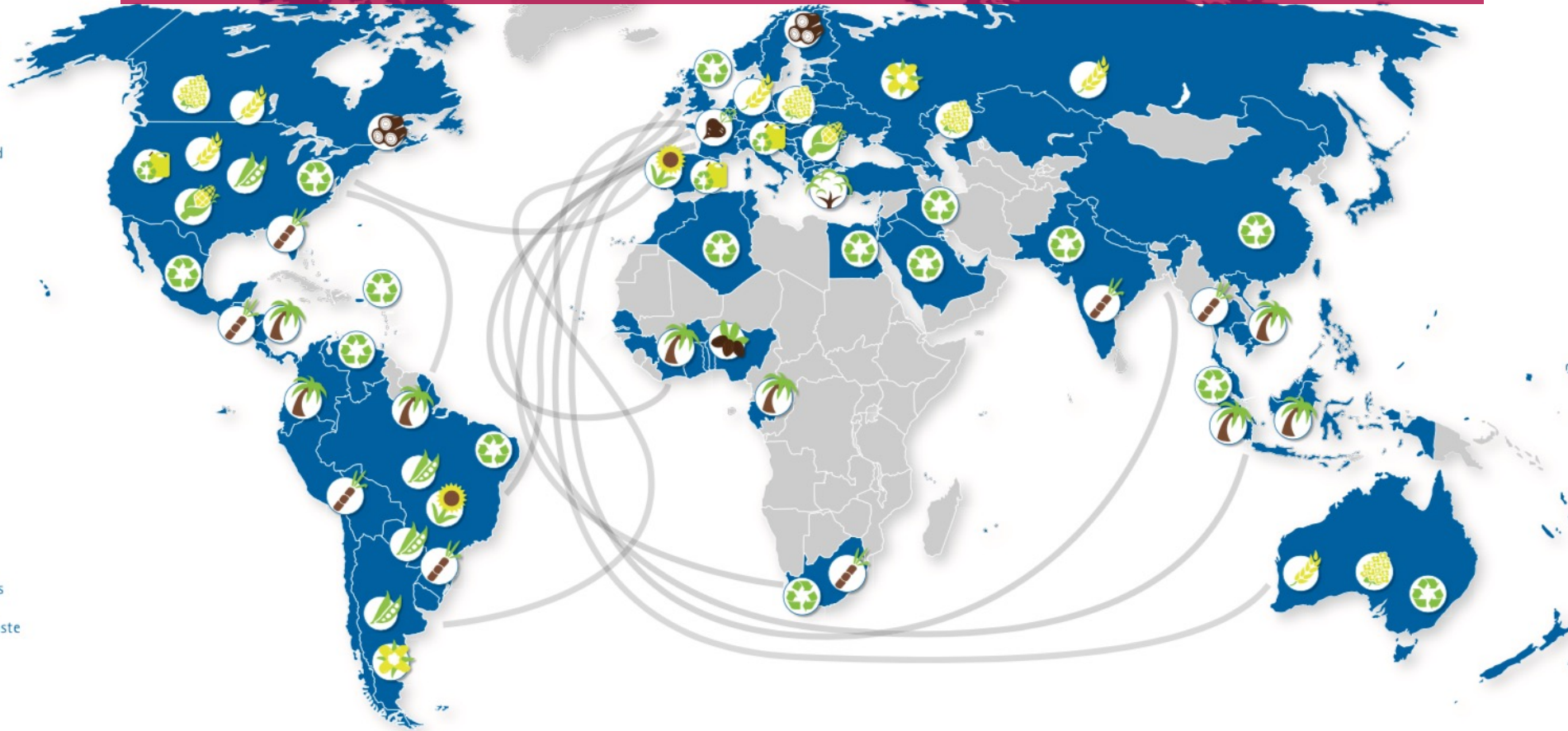
ISCC Overview and RFNBO Certification Process

ISCC offers certification for sustainable, traceable and deforestation-free supply chains

- ISCC certification covers all kinds of biomass, biogenic waste and residues, non-biological renewable materials and recycled carbon-based materials
- ISCC certification is applicable for the bioeconomy and the circular economy

All Feedstocks, including:

- Camelina
- Canola / Rapeseed
- Cereal
- Corn
- Cotton
- Palm
- Shea
- Soy
- Sugarbeet
- Sugarcane
- Sunflower
- Wood
- Waste Et Residues
- Mixed Plastic Waste



All Markets:

- Food
- Industrial applications (bio and circular)
- Energy
- Feed

Some facts and figures about ISCC

- **ISCC is an independent multi-stakeholder initiative**
 - The ISCC System is governed by the legally registered ISCC Association (ISCC e.V.)
 - Stakeholders are involved in the continuous development of ISCC
- **The ISCC Association includes members from the three stakeholder groups:**
 - Raw material producers and processors
 - Trade, logistics and users
 - NGOs, social affairs, science and research, public sector
- **ISCC operates three certification systems, application depending on the market**
 - ISCC EU for sustainable fuels used for transport, electricity, heating&cooling in the European Union
 - ISCC PLUS for food and feed, industrial applications, energy and biofuels outside the European Union
 - ISCC CORSIA for sustainable aviation fuels under ICAO CORSIA
- **40,000+ ISCC certificates in 100+ countries have been issued since its start of operation in 2010**
 - Currently 7,300 valid certificates
- **Extensive ISCC training programme for auditors and system users**
 - 750+ auditors have been trained
 - Training covers various topics (e.g. Basic Training, Waste&Residues, GHG, ISCC PLUS, ISCC CORSIA)
- **The ISCC Integrity Programme is a strong tool to monitor the activities of CBs, auditors and economic operators and to improve the ISCC scheme**

The ISCC Association has currently 214 members – Members are constantly growing and all stakeholder groups are represented



ISCC registration and certification process



ISCC is cooperating with 50 certification bodies (CBs) from 23 countries. CBs can conduct audits globally



- Contact information for all cooperating certification bodies can be found on the ISCC webpage.

ISCC offers a competitive fee structure for System Users

1. Certification fee:

- Per certificate issued (usually per year)
- Based on annual turnover in Euros

2. Quantity fee:

- Per ton of material declared/sold as sustainable (since previous audit)
- Reduced fee for members

Fees for ISCC certified System Users		
Type of fee	Classification	Fee
Certification fee*	< 3 Mill. € / year	200 €
	< 60 Mill. € / year	500 €
	< 150 Mill. € / year	700 €
	< 500 Mill. € / year	1.000 €
	> 500 Mill. € / year	2.000 €
Quantity-dependent fee**	First gathering points, individually certified farms, collecting points, individually certified points of origin, central offices, traders, individually certified FPR	0,01 € / mt
	Processing units	0,10 € / mt
	Logistic centers, individually certified warehouses	n/a
	Legal entities with ISCC Association membership (including fully owned subsidiaries)	20% reduction of total quantity fee
	Minimum quantity-dependent fee***	250 €

Fee structure valid since 1 September 2022

*The **certification fee** is due once per issued certificate, irrespective of the number of scopes covered by certification. It is based on the total annual turnover in Euro (€) of the registered legal entity. The total turnover includes turnover of sustainable **and** non-sustainable material.

The **quantity-dependent fee is to be paid for the amount of outgoing material declared by the System User as sustainable according to ISCC. It is due per certified scope, with the respective fee applicable to the quantities sold under that scope.

***ISCC will invoice a **minimum fee** of 250 € in case the System User declares zero sustainable output material, or if the declared sustainable output amounts to less than 250 €. The minimum fee applies irrespective of a membership in the ISCC Association.

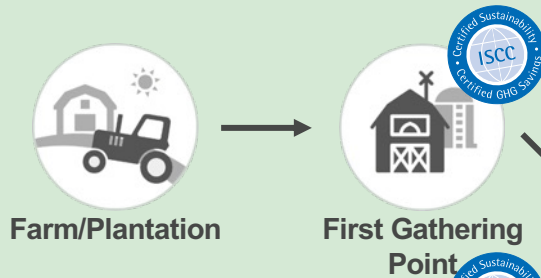
Certification of supply chain elements required. Information on sustainable material is forwarded and traced in supply chains via Sustainability Declarations

Feedstock sourcing

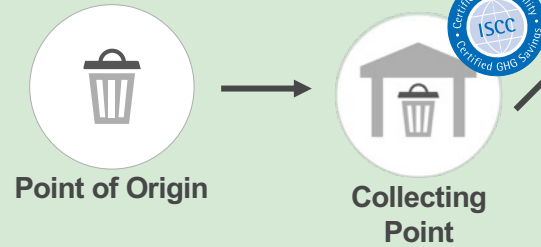
Processing and distribution

Simplified supply chains

Agricultural and forest biomass and residues



Waste, residues, renewable non-bio feedstocks



The System Documents build the basis for the ISCC certification. Audit procedures must be used by auditors during the audit

ISCC EU **System Documents** contain certification requirements and processes for certification bodies and for System Users



ISCC EU **Audit Procedures** are “**checklists**” of the certification requirements into checklists that must be completed during the audit

ISCC EU Audit Procedure for Chain of Custody

No.	Chapter	Remarks	Risk level	Audit Intensity
0.	Basic data			Not relevant
1.	Management system	Risk assessment according to ISCC 102 and 204		Not relevant
2.	Traceability	Within Chapters No. 2, 3 and 4 the risk of a flawed documentation has to be evaluated. The risk level determines the audit intensity	High	The documents of three successive months should be checked completely
3.	Mass Balance		Medium	The documents of one month should be checked completely and random samples should be taken from three successive months
4.	Physical Segregation		Regular	Documents taken from random samples of three successive months should be checked
5.	Greenhouse Gas Emissions			Not relevant
6.	Non-conformity list and action plan	Defined list of all points marked "no" in the column "Conformity"		Not relevant

General guidelines:

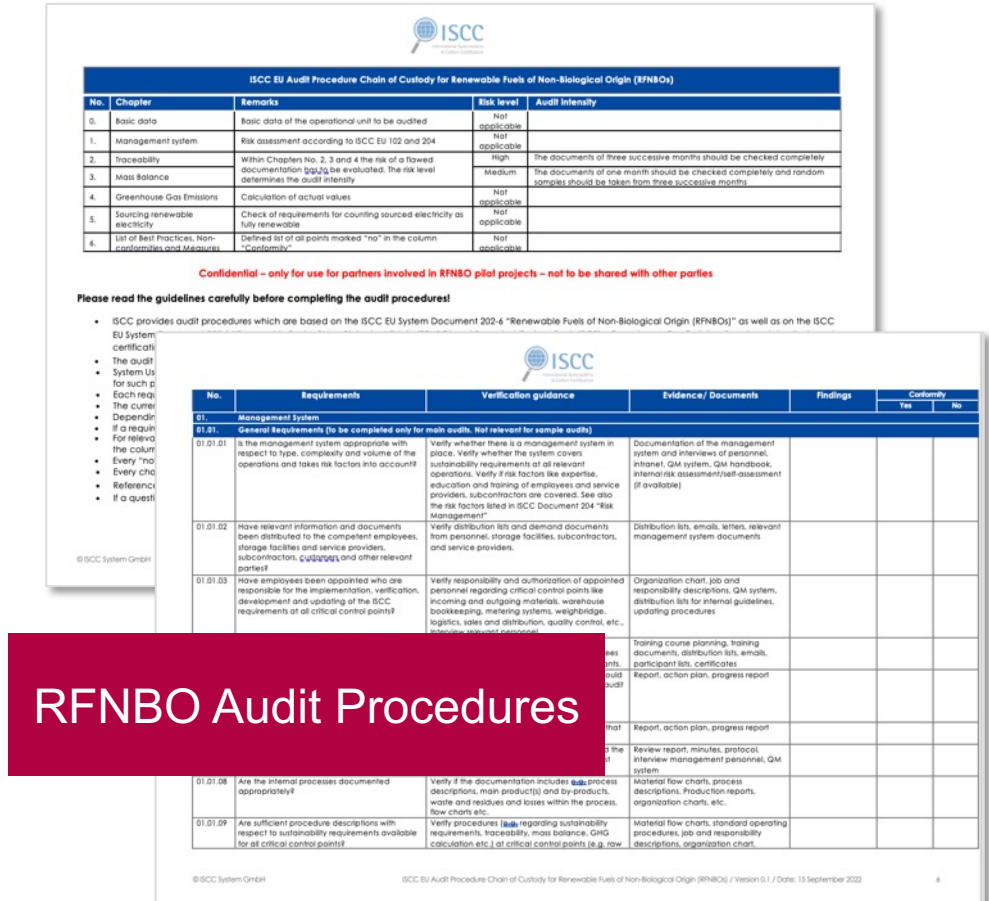
00.	Basic Data		
00.00.	Certification Body		
00.00.01.	Name of Certification Body		
00.01.	Operational Unit		
00.01.01.	Company Name		
00.01.02.	Street		
00.01.03.	Street Number		
00.01.04.	Postal Code		
00.01.05.	Place		
00.01.06.	Country		
00.01.07.	Geo Coordinates: Latitude in decimal degrees	(Example: 50.94218)	
00.01.08.	Geo Coordinates: Longitude in decimal degrees	(Example: 6.958337)	
00.01.09.	ISCC System	<input type="checkbox"/> ISCC EU <input type="checkbox"/> ISCC PLUS	
00.01.10.	ISCC Contact Person: Surname*		
00.01.11.	ISCC Contact Person: Last Name*		
00.01.12.	ISCC Contact Person: First Name*		
00.01.13.	ISCC Contact Person: Phone*		
00.01.14.	ISCC Contact Person: E-Mail*		
00.01.15.	Contact details (e.g. email, phone) of relevant department within the company*		
00.01.16.	Type of Operation/ Scope to be audited	<input type="checkbox"/> First Gathering Point <input type="checkbox"/> Logistic Centre <input type="checkbox"/> Trader <input type="checkbox"/> Collecting Point <input type="checkbox"/> Warehouse <input type="checkbox"/> MBE Plant	<input type="checkbox"/> ETR Plant <input type="checkbox"/> Central Office (Group of Points of Origin) <input type="checkbox"/> Central Office (Group of Points of Origin) <input type="checkbox"/> Processing Unit <input type="checkbox"/> Trader with storage <input type="checkbox"/> Dependent Collecting point
00.01.17.	Is the Operational unit certified individually or audited as a part of a sample?	<input type="checkbox"/> Individually certified <input type="checkbox"/> audited as a part of a sample (only applicable for storage facilities and dependent collecting points)	
00.01.18.	ISCC Registration Number		
00.01.19.	Recertification*	<input type="checkbox"/> yes <input type="checkbox"/> no	
00.01.20.	Year of Initial ISCC certification*		
00.01.21.	Total annual turnover of the operational unit to be certified in euro (about and up-to-date evidence must be available to the auditor for the confirmation)*		

ISCC has set up a RFNBO certification approach that are currently subject to pilot audits organised by RVO and the certification body QS

- The ISCC EU RFNBO documents contain the specific requirements relevant for RFNBOs
- Based on the outcome of the pilot audits and the final legislation relevant updates will be made in the documents

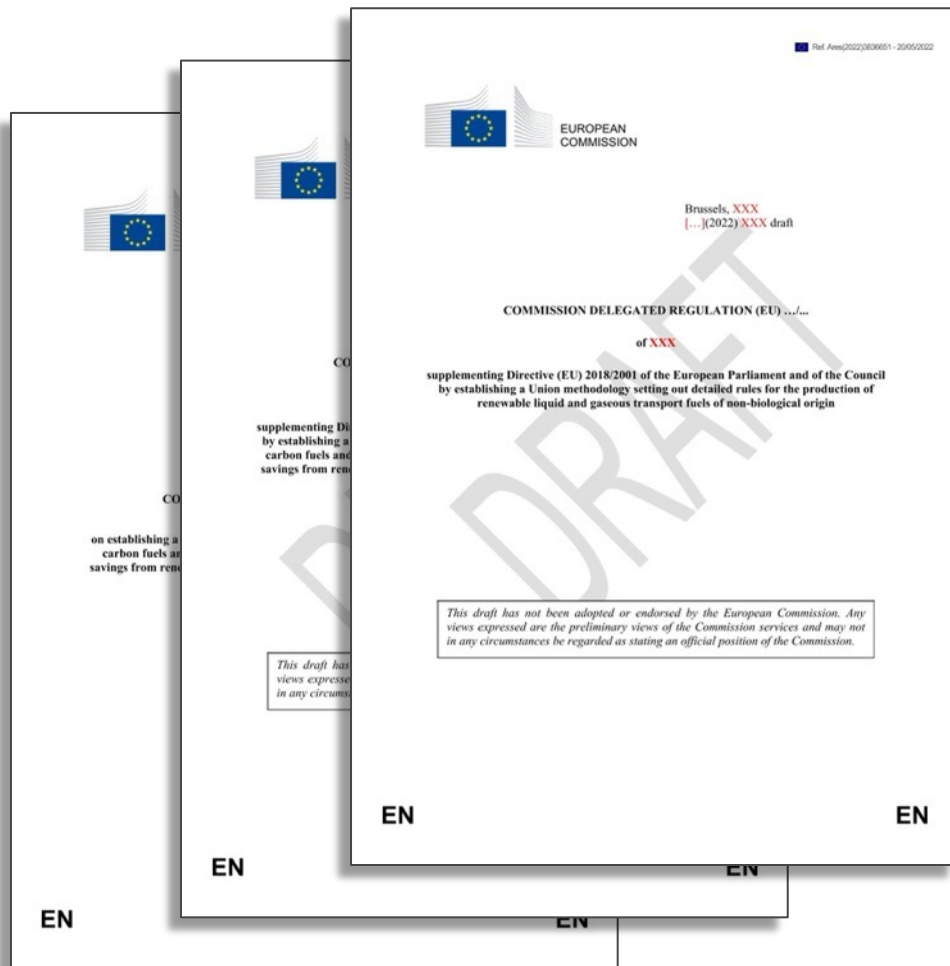


RFNBO System Documents



RFNBO Audit Procedures

The requirements for ISCC EU certification of RFNBO supply chains are based on the RED II and Draft Delegated Acts

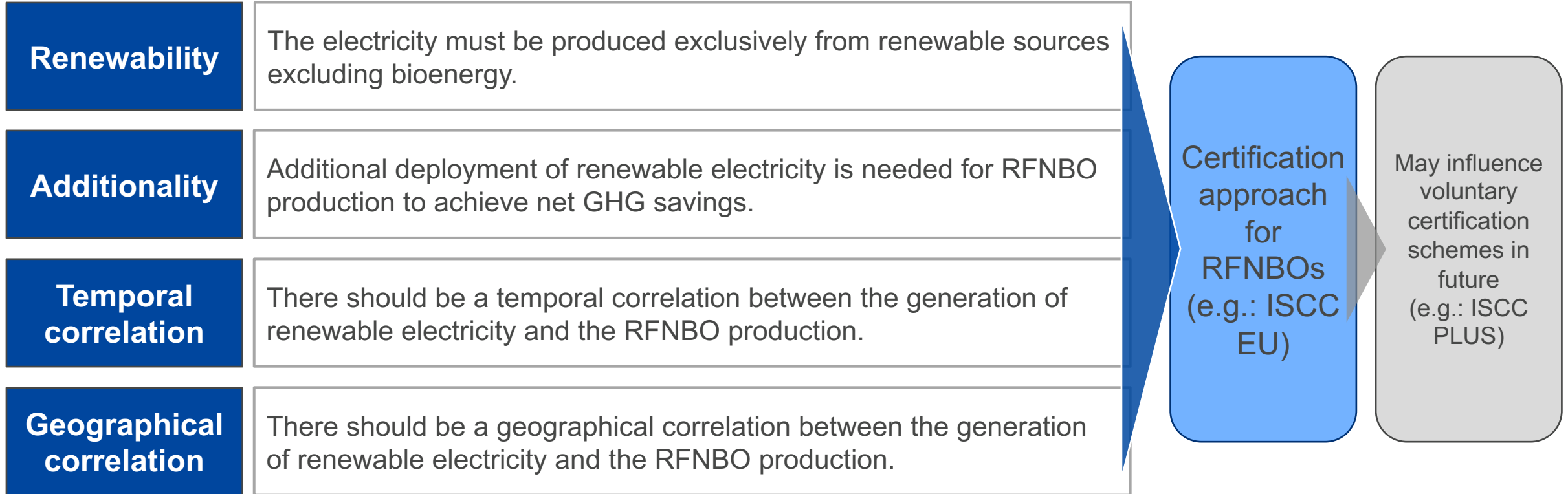


- As defined by the REDII (Directive 2018:2001):
 - Renewable fuels of non-biological origin (RFNBOs): renewable liquid or gaseous fuels which are used in the transport sector other than biofuels or biogas, the energy content of which is derived from renewable sources other than biomass.
- On May 20th 2022:
 - Two draft delegated acts and an annex published by EC
 - Provide guidance on RFNBOs and RCF (recycled carbon fuels)
 - Focus on electricity sourcing and GHG calculation methodology
- Currently, these documents are only available as drafts. Certification requirements might change once the legislation is finalized.

Draft delegated regulation on establishing a Union methodology setting out detailed rules for the production of renewable liquid and gaseous transport fuels of non-biological origin

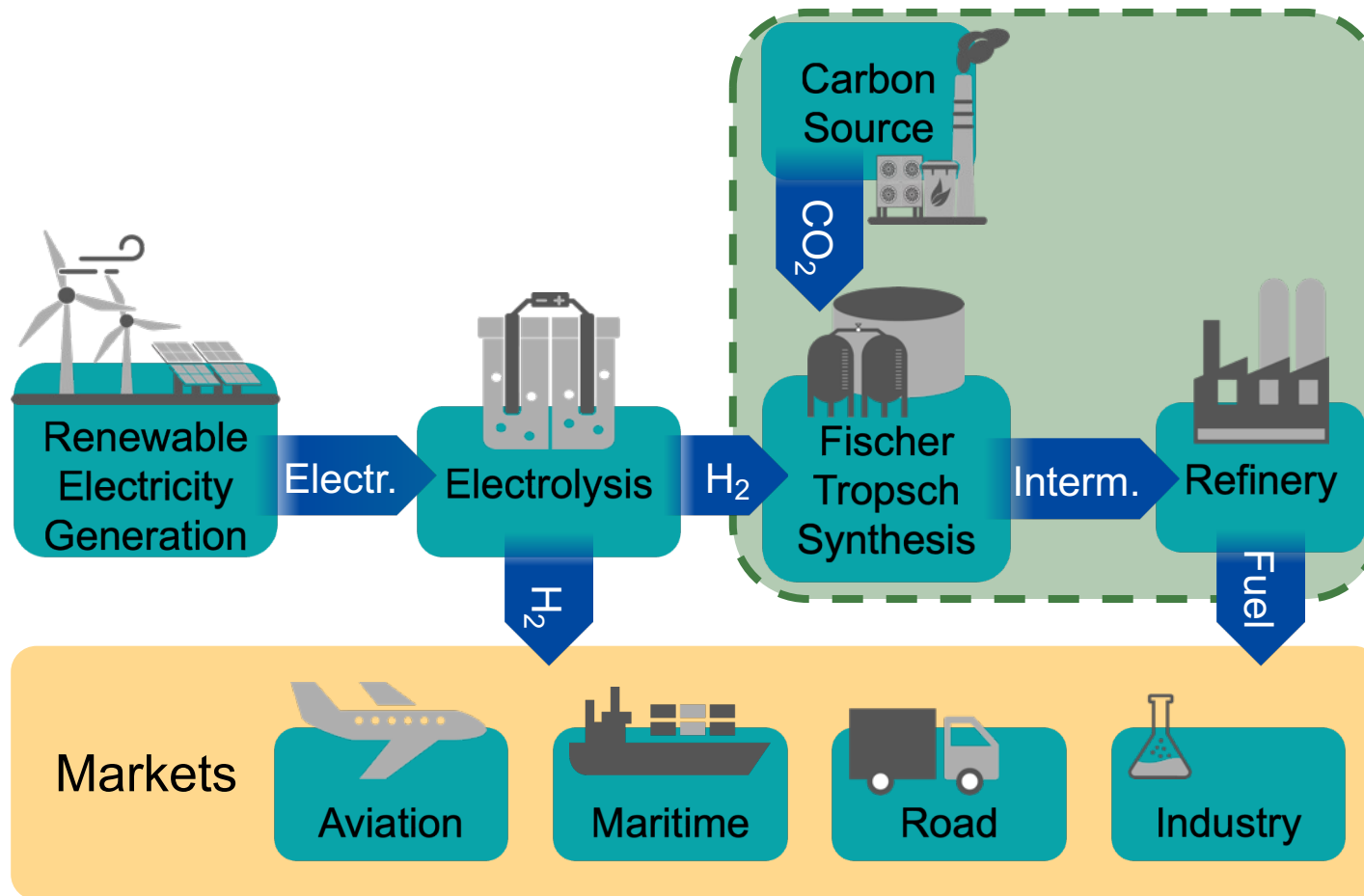
Draft delegated regulation on establishing a minimum threshold for greenhouse gas emissions savings of recycled carbon fuels and by specifying a methodology for assessing greenhouse gas emissions savings from renewable liquid and gaseous transport fuels of non-biological origin and from recycled carbon fuels

The criteria for renewable electricity for RFNBOs follow four principles



Source: Draft delegated regulation on establishing a Union methodology setting out detailed rules for the production of renewable liquid and gaseous transport fuels of non-biological origin

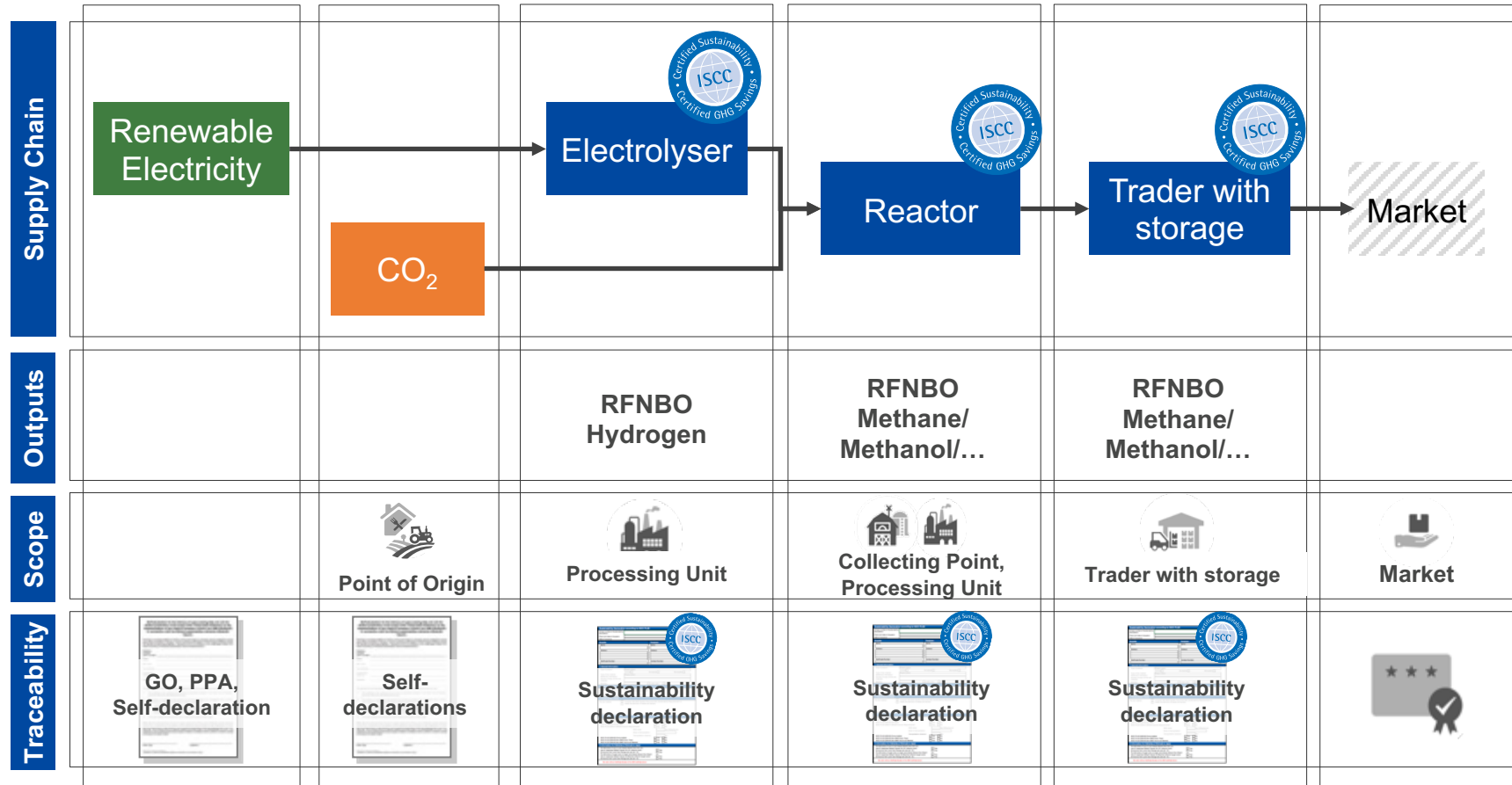
The ISCC RFNBO certification approach covers hydrogen and any derivatives. It will be applicable in RED II regulated and other markets



Example

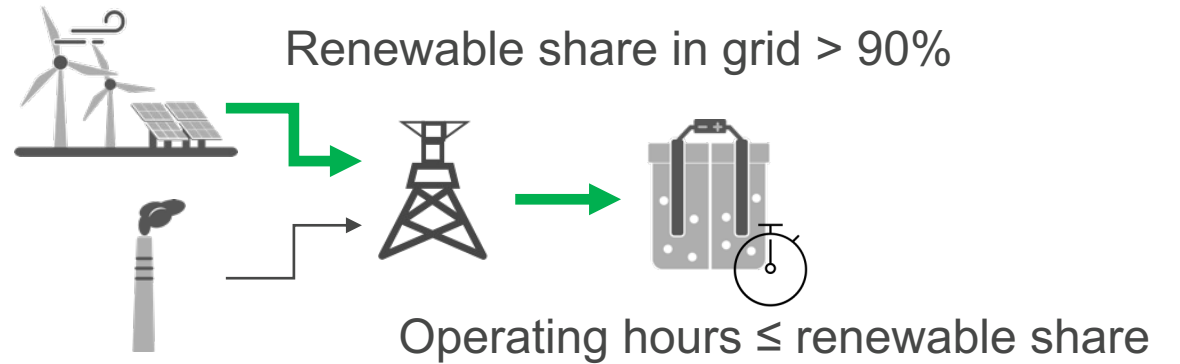
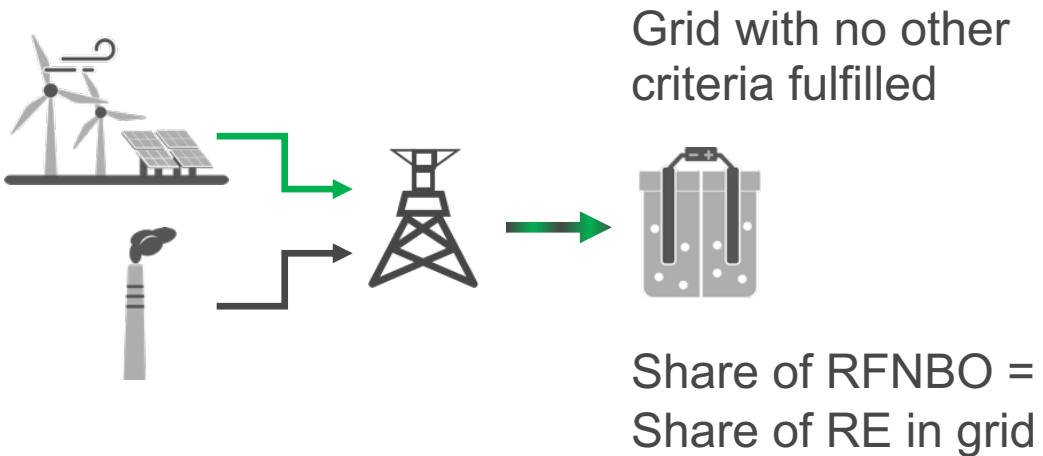
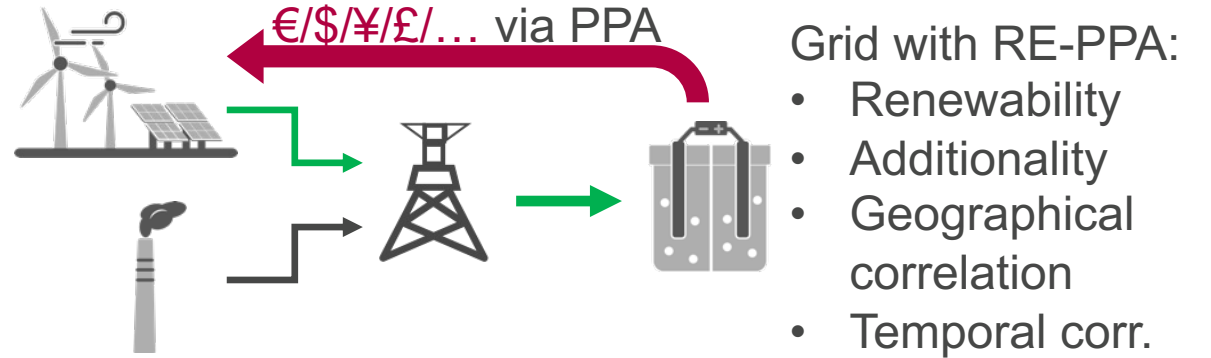
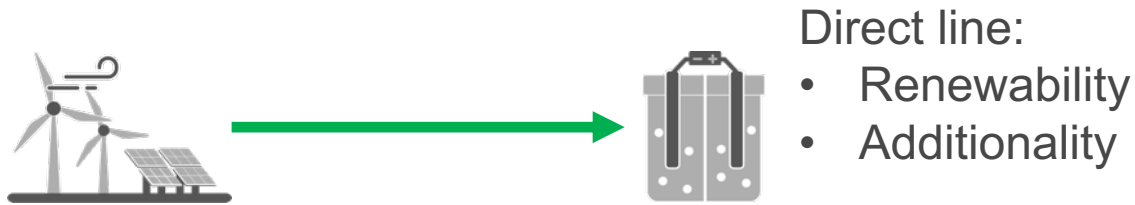
An exemplary supply chain for RFNBO production. Hydrogen may be used directly as fuel or serve as an intermediate for other RFNBOs.

ISCC approach to cover a RFNBO supply chain by certification



Electricity supply options for RFNBO production

RE = renewable electricity
PPA = power purchase agreement



GHG accounting methodology for renewable fuels of non-biological origin (RFNBOs)

Emissions from production and use of RFNBOs

GHG emissions shall be calculated as per:

$$E = e_i + e_p + e_{td} + e_u - e_{ccs}$$

Where:

E = total emissions from the use of the fuel

$e_i = e_{i \text{ elastic}} + e_{i \text{ rigid}} - e_{\text{ex-use}}$: supply of inputs

$e_{i \text{ elastic}}$ = **emissions from elastic inputs**

$e_{i \text{ rigid}}$ = **emissions from rigid inputs**

$e_{\text{ex-use}}$ = **emissions from inputs' existing use or fate**

e_p = emissions from processing

e_{td} = emissions from transport and distribution

e_u = emissions from combusting the fuel

e_{ccs} = emission savings from carbon capture and geological storage

Differences in comparison to REDII

- A new formula element summarizes and accounts for any inputs used $\rightarrow (e_i)$. There is no differentiation made between feedstock, processing input, residue, waste, co-product.
- The important question is: is the input rigid or elastic?
- **Elastic:** when the supply can be adjusted to meet higher demand (e.g., hydrogen input, electricity input to the plant)
- **Rigid:** when the supply of these inputs cannot be expanded to meet increased demand (e.g., the carbon used for RCF production)
- There is no feedstock factor to be applied
- Furthermore, emission savings from carbon capture and replacement (e_{ccr}) are no longer present
- Renewable electricity with 0 emissions possible under certain conditions (incl. PPA and GoO)

Sustainability declarations contain general and product specific information. Mass balance approach is applicable for RFNBOs

Traceability

- Every certified element in a RFNBO supply chain issues a sustainability declaration for amounts of outgoing sustainable material
- Sustainability declarations contain
 - General information on the supplier and recipient (e.g. name and address, place of dispatch and receipt)
 - Product specific information (e.g. country of origin of renewable energy, relevant GHG information)

Chain of Custody

- The mass balance approach is applicable for RFNBO supply chains
- "Proportional approach (or stoichiometric approach)" to be applied for allocation of sustainability and GHG characteristics
 - Sustainable share to be attributed to all process products in the same ratio in which products are generated per unit of consumed electricity

ISCC Event on PtX

You want to learn more?

Register for the ISCC Event – Renewable Fuels of Non-Biological Origin

Date: 1 December 2022 (online)

Attendance is free of charge

Registration: <https://www.iscc-system.org/trainings-events/upcoming-events/>

Topics on the agenda include:

- Update on ISCC developments on PtX
- European Commission's hydrogen strategy
 - GHG methodologies



Thank you!

Follow us on    

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