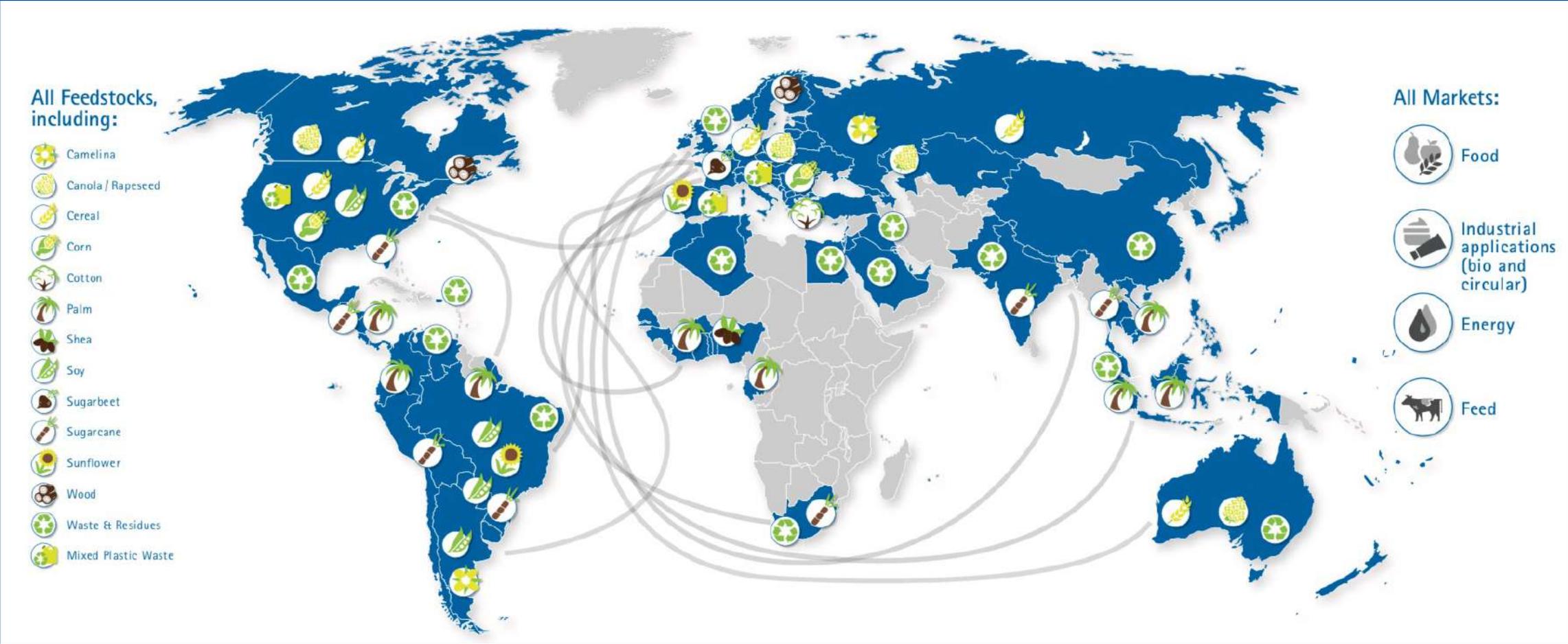




# ISCC Certification approach for RFNBOs

Juliane Pohl, Senior System Manager, ISCC System GmbH  
RVO Seminar on RFNBO certification, World Hydrogen Summit,  
10 May 2023, Rotterdam

# ISCC is a globally applicable certification scheme for a wide range of feedstocks and markets



# ISCC at a glance

12+



Years experience  
of certifying  
global value chains

45,000+



Total  
Certificates  
issued

130



Total  
Countries

8,600+



Current  
System  
Users

1400+



Total ISCC  
Auditors  
trained

160+



ISCC training  
courses  
conducted

240+



Current ISCC  
association  
members

50+



Current  
Cooperating  
certification  
bodies

# The ISCC System is governed by the multi-stakeholder ISCC Association with 240+ members

New members are welcome



As of 17th April 2023

# ISCC operates three schemes for fulfilling legal and voluntary sustainability requirements

## ISCC EU

- **Renewable Fuels**
- **RED II recognition by EC**  
Bio (biofuels, bioliquids, biomass fuels)
  - **Annex IX**
  - **Non-Bio** (Renewable Fuels of Non-Biological Origin, Recycled Carbon Fuels)
- **Production of electricity, heating, cooling** from bio-based fuels

## ISCC PLUS

- Industrial Application
- Renewable Fuels (non EU-RED) incl. hydrogen, PtX
- Food
- Feed

## ISCC CORSIA

- Sustainable Aviation Fuels (SAF)
- Recognition by ICAO
- PtX
- LCAF (Lower Carbon Aviation Fuels)

# RFNBOs/PtX can already be certified under ISCC PLUS

## ISCC EU

- ISCC **applied for recognition by the EU COM** for RFNBO certification
- RFNBOs can be certified once recognition by EC is in place
- ISCC is participating in **pilot audits**

## ISCC PLUS

- It is **already possible** to certify PtX under ISCC PLUS
  - Examples are:  
Hydrogen, Ammonia, Chlorine, PVC

## ISCC CORSIA

- At the moment, it is **not possible** to certify PtX under CORSIA
- Work in the PtX space is ongoing in ICAO (CAEP, FTG)
- ISCC is actively part of the working groups

# ISCC registration and certification process



# ISCC cooperates with 50+ Certification Bodies that conduct audits on a regional and global scale

See ISCC website for contact details



# 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  
Document available at <https://www.iscc-system.org/certification/certification-process/certification-fees/>

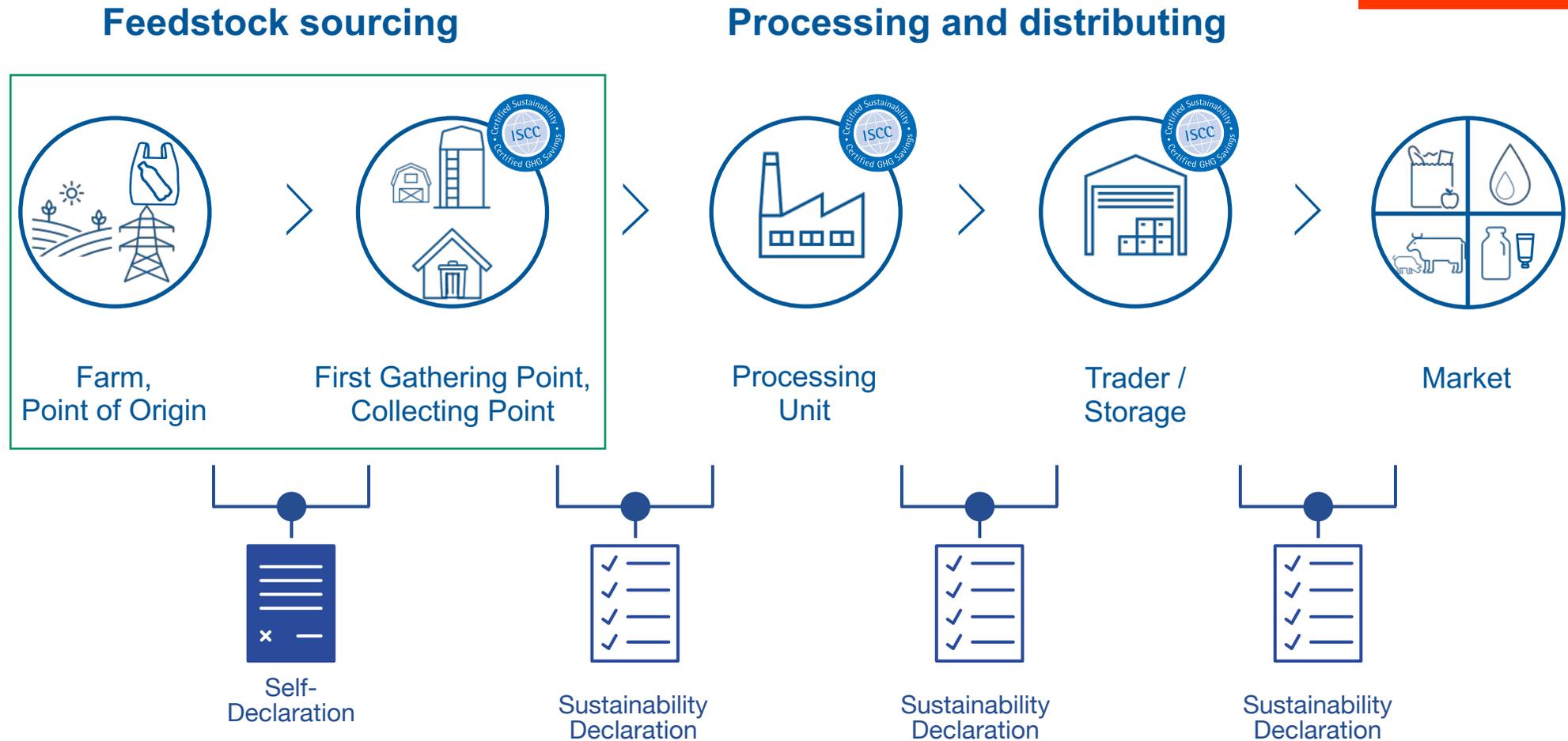
\*The **certification fee** is due once per issued certificate, irrespective of the number of scopes covered by certification. It is based on the total annual turnover in Euro (€) of the registered legal entity. The total turnover includes turnover of sustainable **and** non-sustainable material.

\*\*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.

# Forwarding sustainable material in the supply chain

Simplified supply chain



# Main points for certification

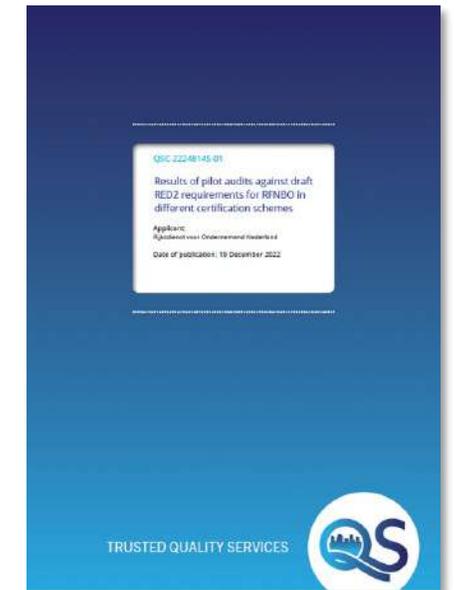
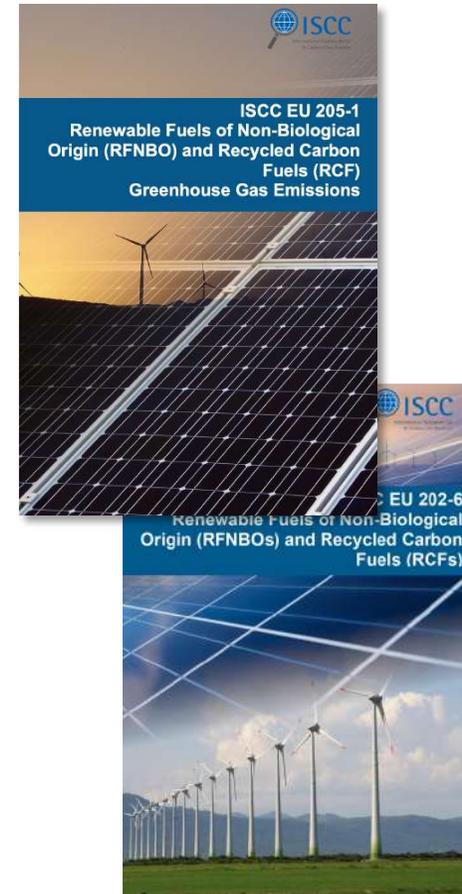
- Certification of individual supply chain elements
  - Group certification possible for farms and points of origin
- Annual certification audits by third-party certification bodies
- Certification covers: Management system, traceability documentation, mass balance, GHG emissions
  - For feedstock sourcing: Sustainability requirements for agricultural biomass, waste/residues or renewable electricity
- Forwarding of information on sustainable material through Sustainability Declarations
  - General information on transaction parties, production related information (e.g. raw material and country of origin, scope of raw material certification, GHG information)

# ISCC certification approach for RFNBOs has been set up

- ISCC developed a certification approach for Renewable Fuels of Non-Biological Origin (RFNBOs)
- Approach was successfully tested in pilot audits that were initiated by the Dutch authorities EZK and RVO\*\*
- Approach is based on delegated legislations as adopted in Feb. 2023\*
- ISCC submitted the RFNBO System Documents to the EC for recognition in March 2023
- RFNBO certification audits under ISCC EU will be possible, once recognition is in place

\* Draft delegated regulation on establishing a Union methodology setting out detailed rules for the production of RFNBOs and Draft delegated regulation on establishing a minimum threshold for GHG savings of recycled carbon fuels and by specifying a methodology for assessing GHG savings from RFNBOs and from recycled carbon fuels.

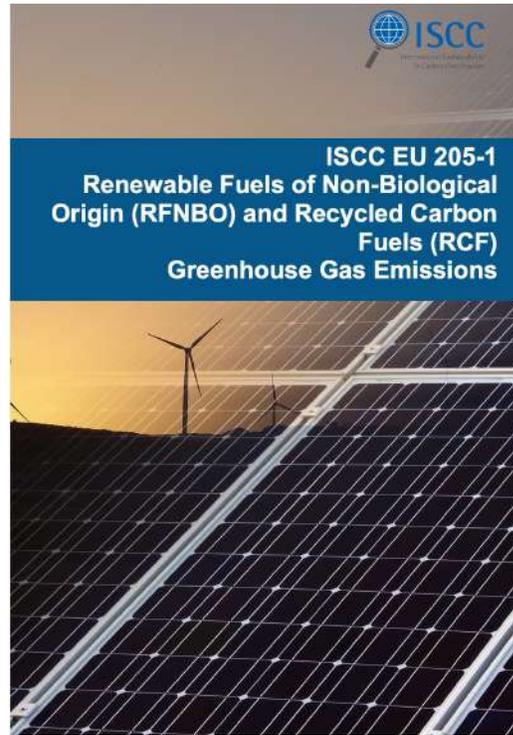
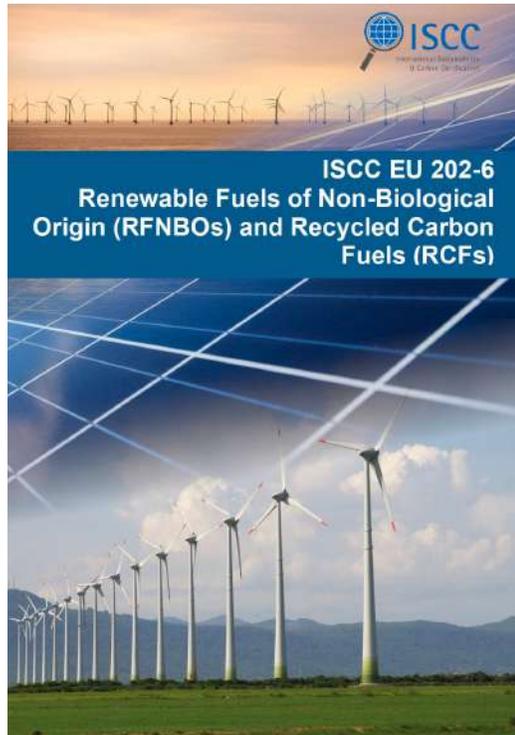
\*\* Dutch Ministry of Economic Affairs and Climate Policy (EZK) and Netherlands Enterprise Agency (RVO)



Final results of pilot audits by independent certification body

# ISCC RFNBO approach will be part of ISCC EU that is already recognised by the EC under RED II

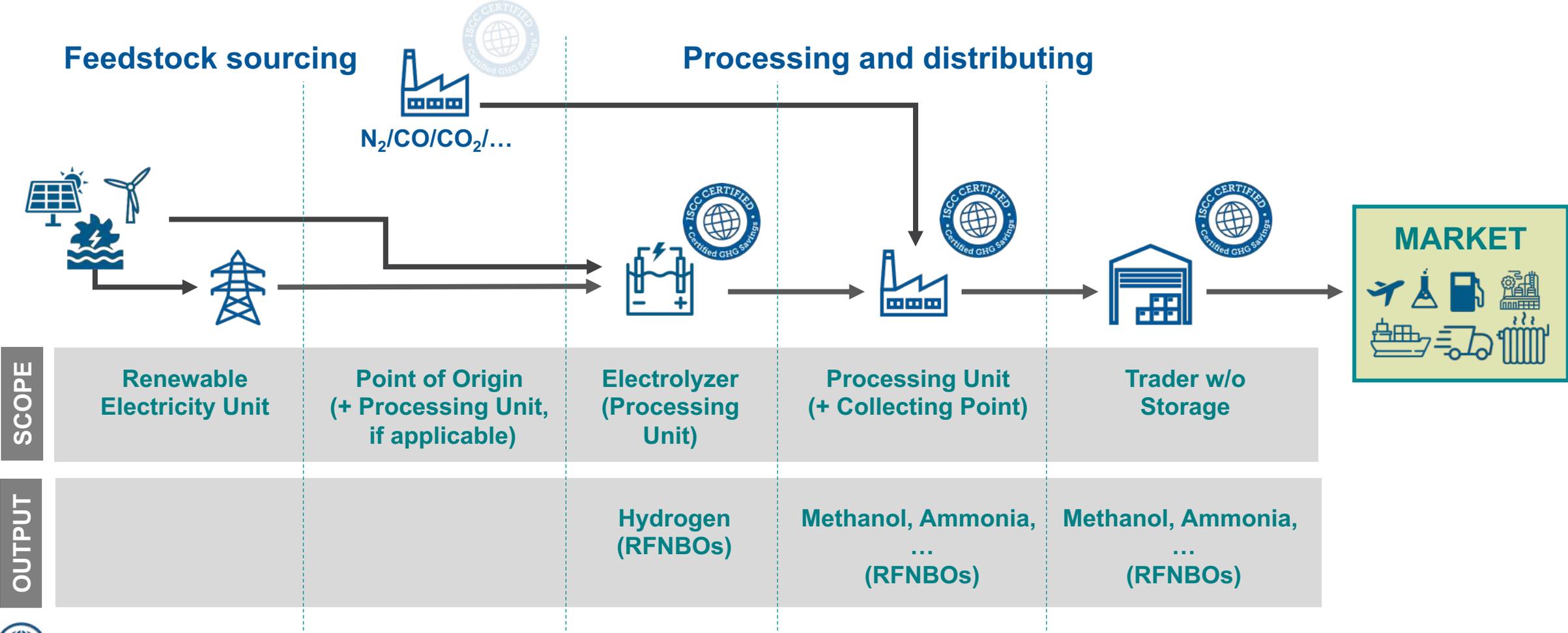
ISCC has developed two tailored system documents for RFNBOs certification purposes



The ISCC EU system documents set are recognised and apply



# To cover RFNBO supply chains renewable electricity units are added to the existing scopes



# Principles to count electricity for RFNBO production as renewable

## Renewability

The electricity must be produced exclusively from renewable sources excluding bioenergy:

- Rules if electricity is sourced from direct connection between electricity and RFNBO installation
- Rules to count electricity taken from the grid as fully renewable

To prevent increased electricity production from fossil sources the production of RFNBOs should...

## Additionality

...Incentivise **additional deployment of renewable electricity capacity** for RFNBO production

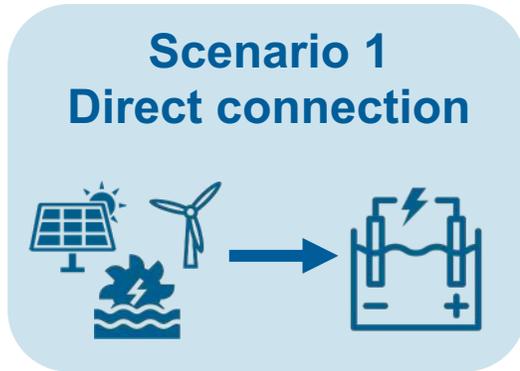
## Temporal correlation

...**Take place at times when renewable electricity is available** (i.e. when the RFNBO production supports the integration of renewable power generation into the electricity system and reduces the need for dispatching renewable electricity)

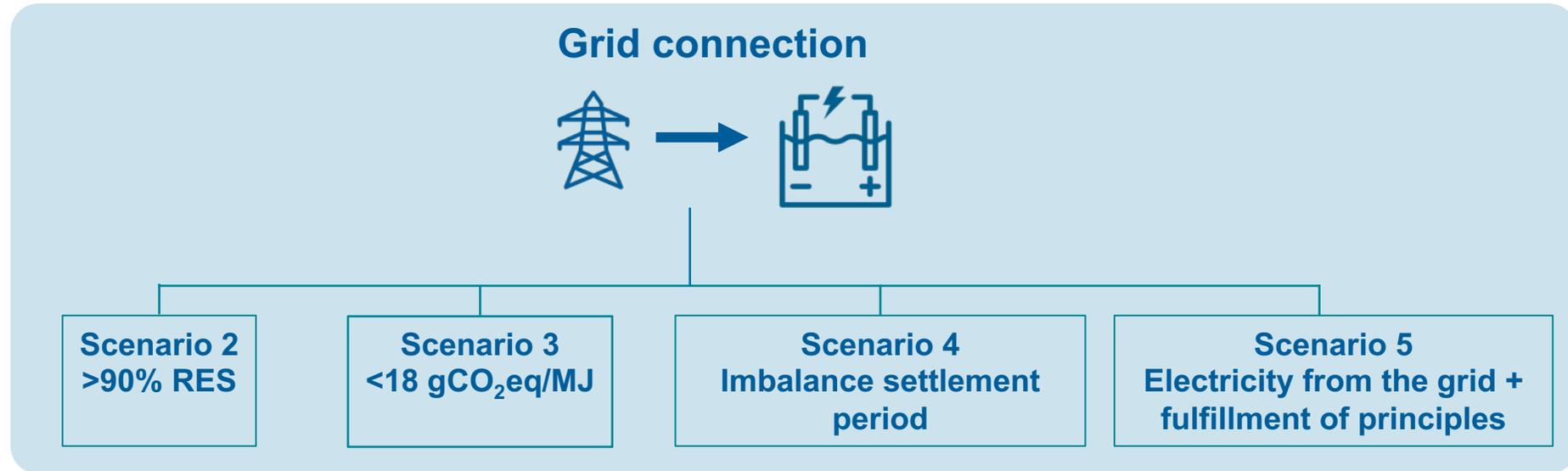
## Geographical correlation

...**Take place in places where renewable electricity is available** (i.e. the electrolyser and the installation production renewable electricity should be located in the same or interconnected bidding zone)

# Five possible scenarios for renewable electricity

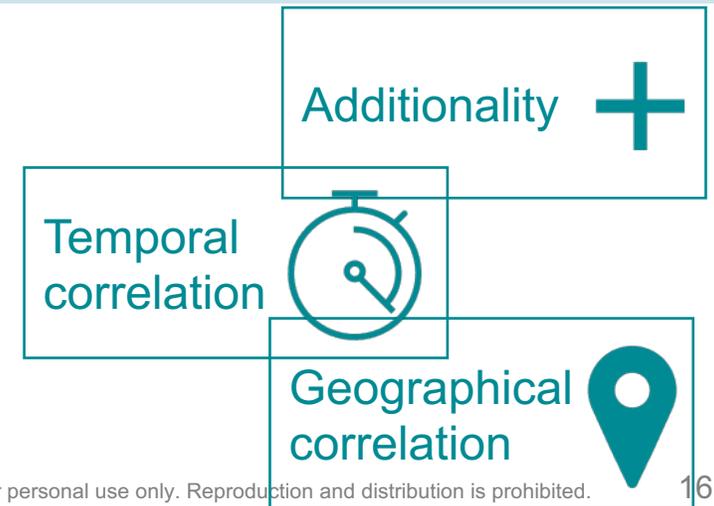


Additionality **+**



Temporal correlation 

Geographical correlation 



# The GHG methodology for included in the DA differs from RED II. Minimum GHG savings are 70%

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

Where:

**E = total emissions from the use of the fuel in g CO<sub>2</sub>/MJ**

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

Elastic: Supply can be expanded to meet additional demand (e.g. electricity)

Rigid: Supply cannot be expanded to meet additional demand (e.g. MSW, inputs for RCFs)

Source: Annex on Delegated Act on Renewable Fuels of Non-Biological Origin – GHG methodology (2023)

# Requirements for traceability chain of custody

## 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



# Final messages

- **ISCC EU certification approach for RFNBOs is with EC for recognition**
  - **ISCC EU RFNBO certification possible once EC recognition is in place**
- **ISCC PLUS certification of RFNBOs is already possible today**
- **First ISCC RNFBO Training takes place on 11 May 2023 (further in 2023 dates tbc)**
- **Dedicated ISCC Technical Committee on RFNBOs – Date for 2023 meeting tbc –**
  - **Sign up for ISCC Newsletter to stay informed**



# Thank you!

ISCC System GmbH

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