



# ISCC System: Latest Developments and Challenges

Dr Norbert Schmitz, Managing Director, ISCC System  
ISCC Global Sustainability Conference, Brussels, Belgium  
22 February 2024

# 14th ISCC Global Sustainability Conference in Numbers



**1400+**  
online registrations  
from 83 countries



**3**  
dedicated streams  
ISCC EU, ISCC  
PLUS, ISCC for  
SAF/SMF



speakers **21**  
panelists **11**  
moderators **6**



**302**  
onsite  
registrations from  
37 countries



**85**  
countries  
represented in total



**2nd**  
hybrid format



„The year 2023 was challenging.“

The picture depicts a symbolic landscape with stormy skies and rugged terrain, representing the challenges faced. At the same time, there are elements that symbolize hope and perseverance, such as a person standing resiliently against the wind, or a vibrant flower growing through cracks in the ground. This is meant to balance the difficulties of the year with an underlying message of strength and the potential for overcoming adversity.“

ChatGTP



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Aviation & Maritime, Carbon Removals, and other key topics

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ISCC Association

# ISCC's three certification schemes to support the compliance with legal and voluntary sustainability requirements

## ISCC EU



- Sustainable fuels for transport, electricity, heating and cooling in the EU under the Renewable Energy Directive (RED)
- Demonstrate **compliance** with the EU's sustainability and GHG criteria for biofuels, bioliquids and biomass fuels (and **soon** RFNBOs, RCFs)

## ISCC PLUS



- Circular and biobased **chemicals, plastics, packaging, textiles, ...**
- **Sustainable food and feed**
- **Renewable feedstock** derived from using renewable energy sources

## ISCC CORSIA



- Sustainable aviation fuels (**SAF**) under **ICAO CORSIA**
- To demonstrate **compliance** with the sustainability and GHG criteria for CORSIA eligible fuels for international aviation

# Recognitions

in the Energy, Industrial Applications, Food and Feed Markets and others.

## Energy & Fuels Markets



by the European Commission to be compliant with the Renewable Energy Directive (recast) (RED II)



by the United Kingdom under The Renewable Transport Fuel Obligation (RTFO)



The Japanese Government recognises ISCC certification to verify compliance with the sustainability requirements for biofuels and Japan FIT



ISCC is in compliance with the Liquid Fuel Supply Regulation of Queensland



ISCC is registered as a certification system administrator by the Polish Agricultural Market Agency (ARR)



ISCC is recognized under CORSIA by the International Civil Aviation Organization (ICAO)

## Industrial Applications



The ecolabel Blue Angel ("Der Blaue Engel") of the federal government of Germany accepted ISCC for bioplastic granulate for writing implements and stamps



Recognised by Amazon Climate Pledge Friendly Program



Recognised by the German "Initiative for Sustainable Supply of Raw Materials for the Industrial Use of Biomass (INRO)



Recognised by the Dutch Green Deal "green certificates" for Sustainable biomass in chemical products and plastics



Textile Exchange is a global non-profit organisation promoting sustainable practices in the textile value chain

## The Food Market



The Sustainable Agriculture Initiative (SAI) Platform



Recognised to be compliant with Unilever's Sustainable Agricultural Code



Coca Cola's Sustainable Agriculture Guiding Principles acknowledge ISCC



Compliant with Diageo's sustainable agricultural sourcing requirements



In line with the Retailers Soy Group's (RSG) requirements



The Donau Soja Organisation aims to support sustainable, regional and non-GMO soy cultivation for European supply chains



Compliant with supply chain requirements of the German Non-GMO standard "Ohne Gentechnik"



Recognised under the Comprehensive Economic Partnership Agreement (CEPA)

## The Feed Market



in line with FEFAC Soy Sourcing Guidelines". Commissioned by IUCN NL



ISCC PLUS with add-on "Non-GMO" has been accepted as core standard



ISCC PLUS is recognised by QS Qualität und Sicherheit GmbH

## Others



ISCC EU and PLUS are recognised by the Food Security Standard (FSS)

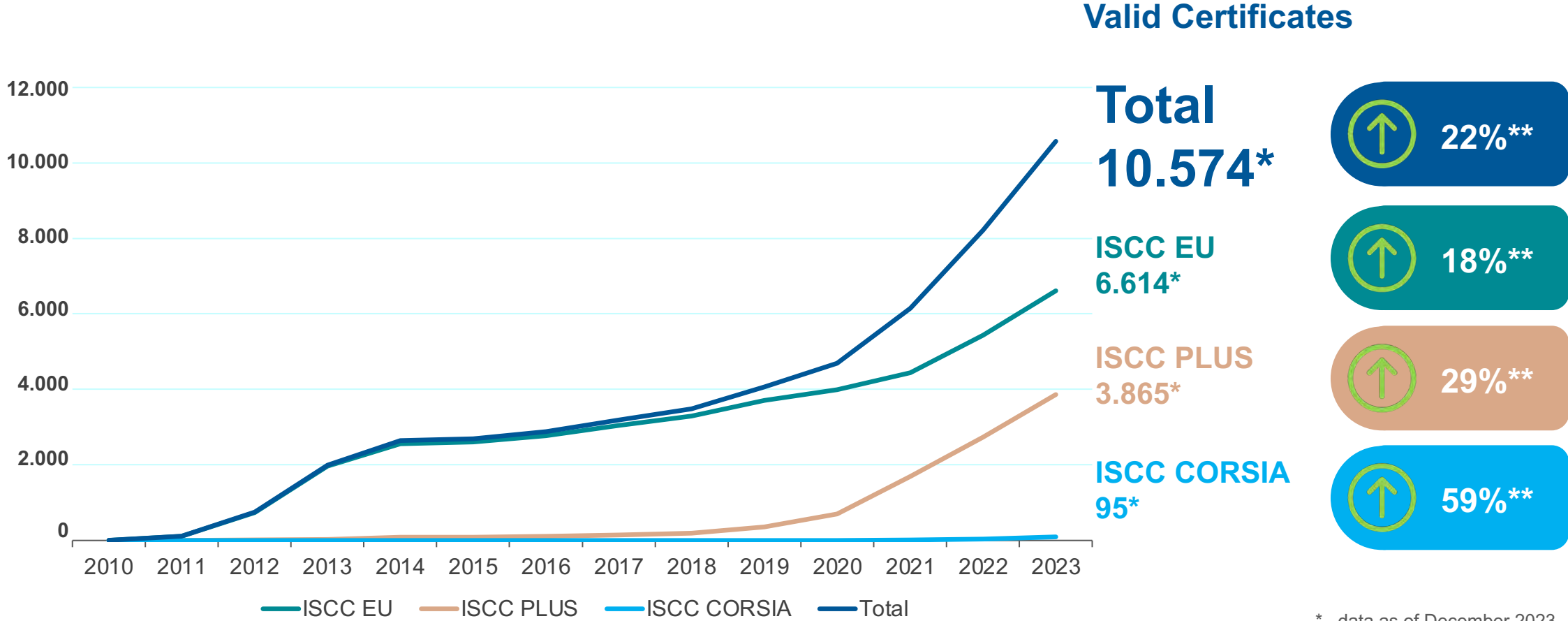


The Forum for Sustainable Palm Oil (FONAP) accepts the ISCC certification system for the implementation of its voluntary commitment



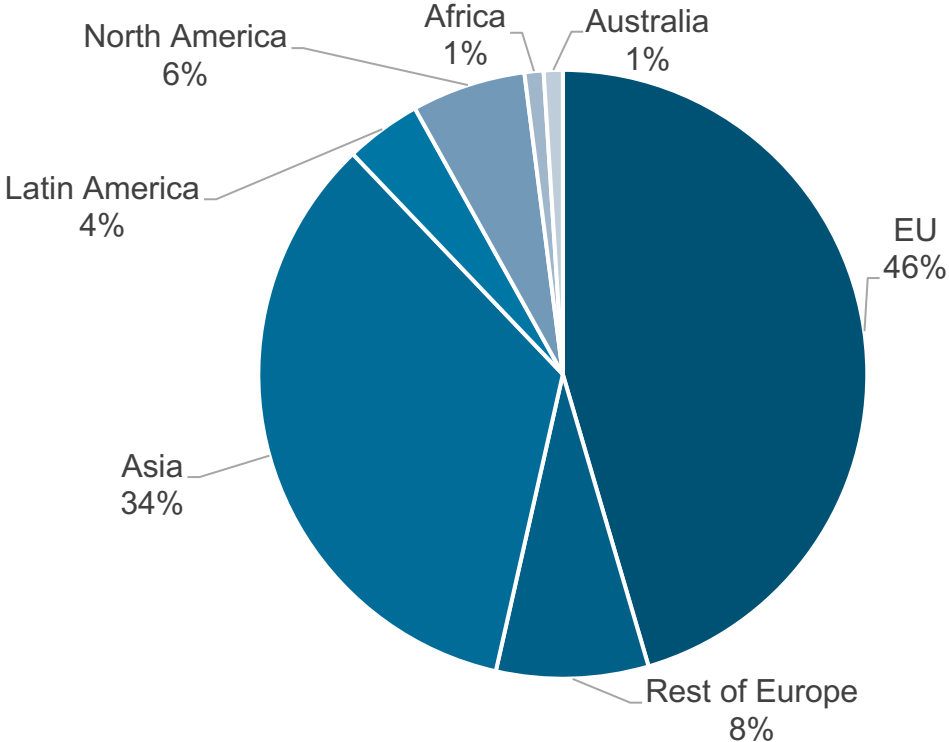
The Carbon Disclosure Project) recognises ISCC as a credible third-party certification scheme

# Development of ISCC EU, PLUS, and CORSIA certification

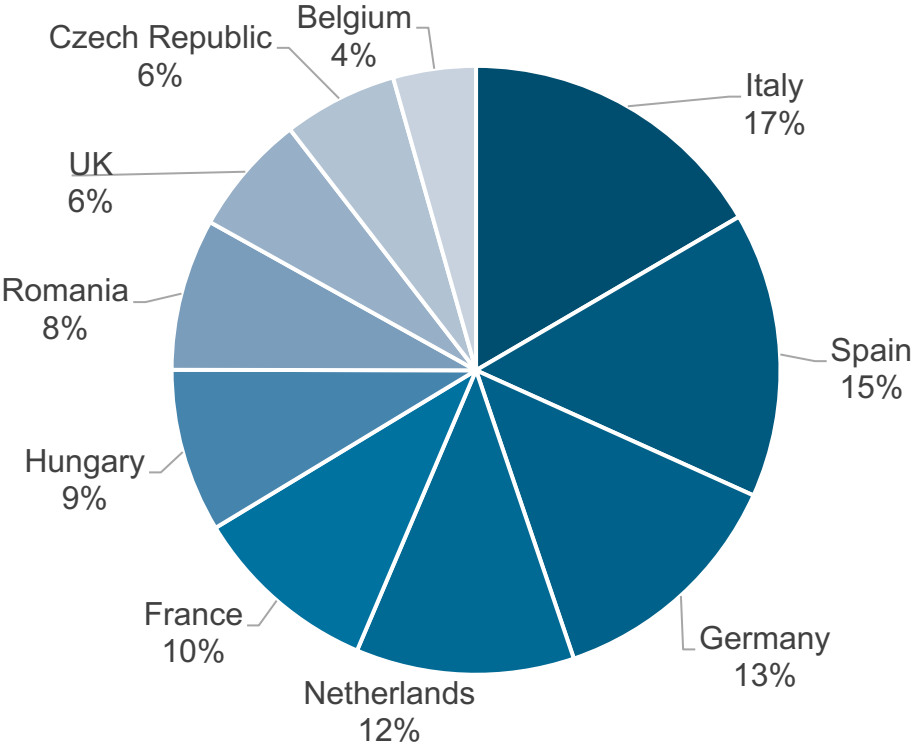


# Developments by region

## Valid certificates by region



## Top 10 EU-27 countries (+ UK)





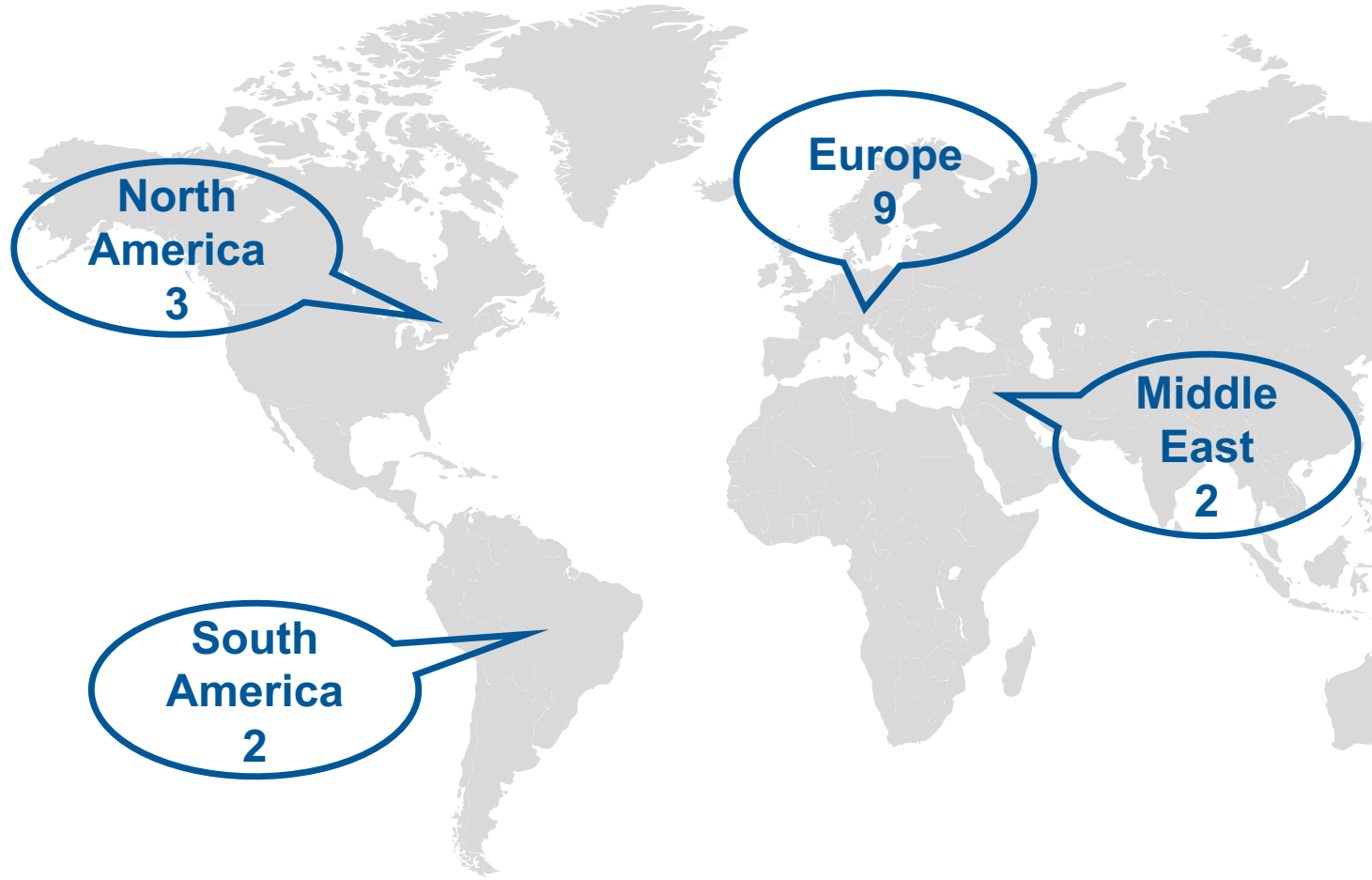
# Key developments for ISCC EU since February 2023 – Overview



- **Recognition of updated ISCC EU documents\*** by EC (adjustments based on Implementing Regulation (EU) 2022/996 cover scheme governance, audit process & auditor qualification, mass balancing, GHG emissions)
- **Certification approach for RFNBOs and RCFs** was updated according to final delegated regulations on RFNBOs – Recognition by EC pending
- **Guidance on co-processing** was updated according to final delegated act – will be published once confirmed by EC
- **ISCC approach for forest biomass** under RED II was confirmed by EC – Official recognition by EC will follow shortly
- Set up of **stakeholder working group “Waste and Residues”** to provide additional guidance for priority waste/residues feedstocks

\* Overview of adjustments and updated documents available at [www.iscc-system.org/certification/iscc-documents/](http://www.iscc-system.org/certification/iscc-documents/)

# ISCC EU has applied for RFNBO recognition and has been involved in multiple pilots conducted by Meo



- On June 20<sup>th</sup> 2023, two Commission Delegated Regulations were published in the OJ (EC 2023/1184 and EC 2023/1185)
- After successful pilot audits, ISCC documents were adjusted to reflect final DA's on RFNBOs
- ISCC involved in RVO pilot conducted by the Dutch government
- First meeting of the ISCC Technical Stakeholder Committee RFNBO took place on 16 January 2024
- Two ISCC RFNBO Trainings conducted
- Our sister company, Meo, has supported customers with different RFNBO pilot projects (inter alia H<sub>2</sub>, e-methanol, NH<sub>3</sub>, H<sub>2</sub> for refinery route)

# The ISCC HUB is at the core of ISCC's integrated IT solutions for System Users and Certification Bodies



**Data accuracy** in a fast-changing world



**Growth and increasing complexity** of requirements

**WHY?**

A digital platform allowing in real-time

**HOW?**



**Information exchange** between relevant parties



**Interconnection** to further databases



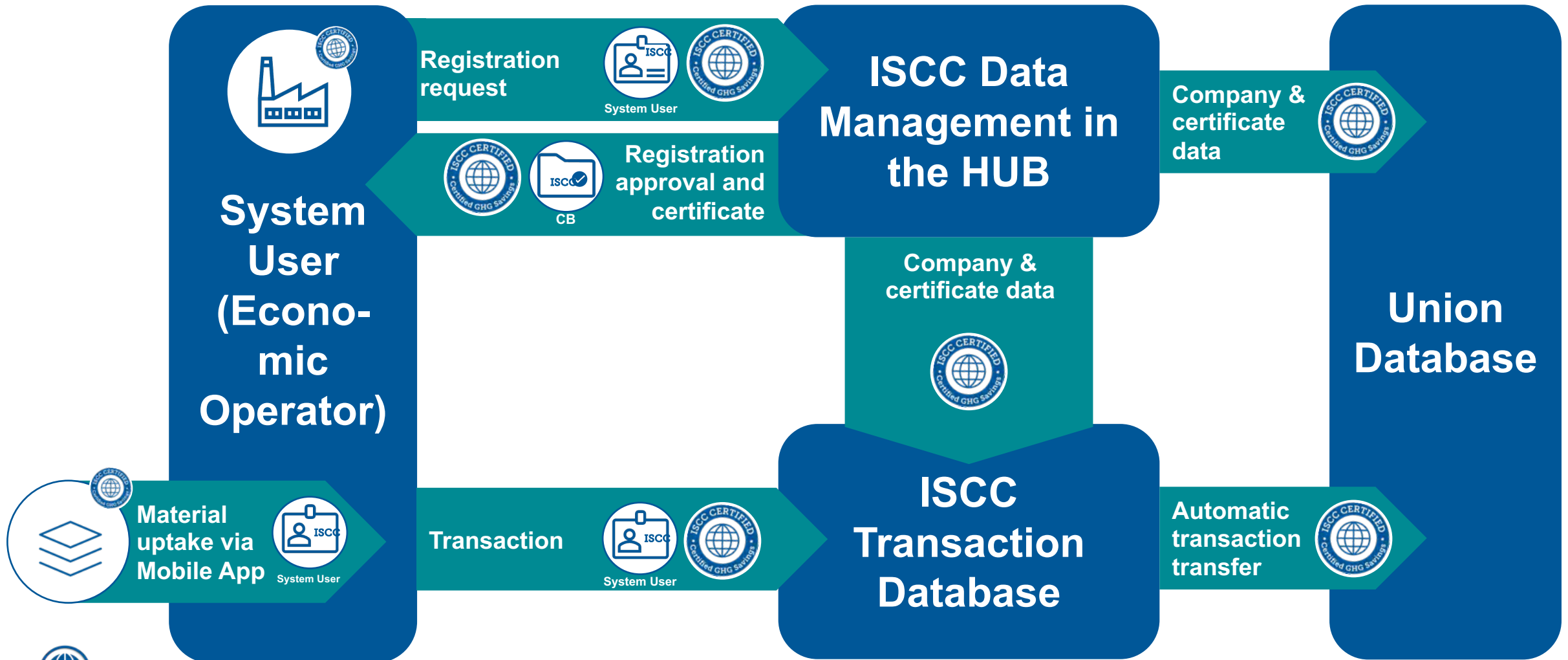
**WHAT?**

- Data management system for efficient System User data management regarding **registrations** and **certificates**
- Operated by ISCC and accessible for both **System Users** and **Certification Bodies**
- **Built-in validations** increase data accuracy and will be extended continuously
- Will be **interconnected** to ISCC Mobile App, ISCC Transactional Database and Union Database

## Union Database – Update

- The UDB application is open to all successfully registered Economic Operators for transactions registration in the liquid fuels supply chain as from **15 January 2024**
- The UDB must be set up and fully operational to enable the tracing of liquid and gaseous renewable fuels by **21 November 2024**
- To speed up the onboarding process, ISCC has intensively worked on an integration between the ISCC HUB and the UDB. According to the EC UDB Team, this system-to-system connection will be available from **26 February 2024**
- As part of the UDB implementation plan, the eDelivery onboarding process for Service and Access Point Providers on the UDB side is scheduled to begin no earlier than **26 February 2024**
- An automatic transfer of Economic Operators and certificate data can only happen once the function has been tested and is operationally stable for most certificates across all Voluntary Schemes, allowing to start with the initial stock registrations and transactions

# Integrated database solutions supporting monitoring of daily operations



# The robustness and integrity of the certification set-up is depending on a variety of factors

## Selected examples for influencing factors

### EU

- Supervision Voluntary Schemes (VS)
- Ensuring a level playing field between VS
- Coherent, balancing incentives

### Voluntary Schemes

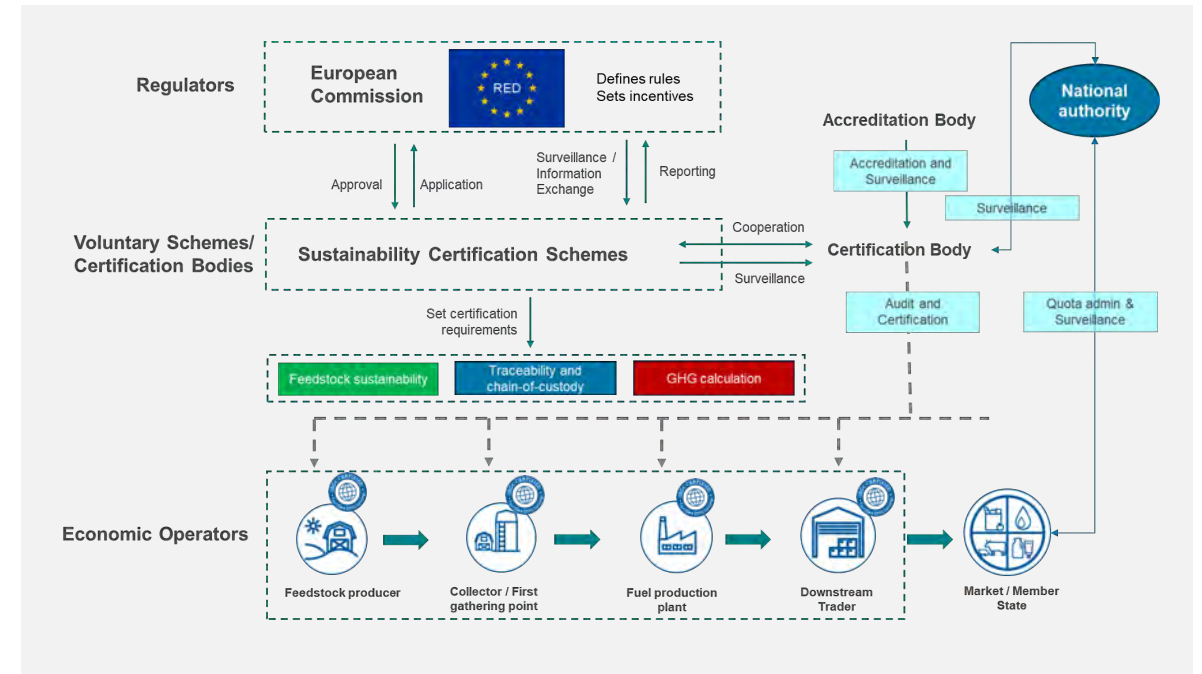
- Certification / audit requirements
- Communication/Training
- Monitoring of system users / CBs

### Certification Bodies (CB)

- Risk management system
- Auditor training
- Auditor rotation

### Member States

- Supervision CBs
- Incentives
- Procedures providing data to be counted for quota



# ISCC reacted immediately with a range of measures regarding potentially fraudulent behaviour

Selection



- The wrong declaration of material leads to the immediate withdrawal of a certificate
- Implementation and development of digital tools (ISCC HUB, ISCC Mobile App, Risk Assessment tool to support auditors)
- Update of ISCC system documents, audit documents, APS
- ISCC w/r working group (Stakeholder process to develop audit guidance/ guidelines)
- ISCC Integrity Programme with focus on China / SE Asia and w/r supply chains in 2023

**ISCC puts massive resources into this matter and is working with regulators and stakeholders and takes its responsibility very seriously as a voluntary scheme**

# Technical guidance documents are supporting auditors for the verification of waste and residue- based materials



ISCC Working Group Waste and residues – Last Meeting: 29 January 2024



Point of Origin



## Material eligibility & yield plausibility

### Palm Oil Mill with Vertical Sterilizer (approximate figures)

Oil content of sterilizer condensate	0.5 kg/ton FFB <sup>1</sup> – 17.4 kg/ton FFB <sup>2</sup>
Oil content of heavy phase	5.5 kg/ton FFB <sup>3</sup> – 11.4 kg/ton FFB <sup>2</sup>
<b>Total POME oil content</b>	<b>6 kg/ton FFB – 28.8 kg/ton FFB</b>

### Palm Oil Mill with Horizontal Sterilizer (approximate figures)

Oil content of sterilizer condensate	0.5 kg/ton FFB <sup>1</sup> – 2.1 kg/ton FFB <sup>2</sup>
Oil content of heavy phase	1.6 kg/ton FFB <sup>2</sup> – 5.5 kg/ton FFB <sup>3</sup>
<b>Total POME oil content</b>	<b>2.1 kg/ton FFB – 7.6 kg/ton FFB</b>

## Assessment of processing technology for w/r materials



Annex 1A: Necessity of certain process stages depending on the used raw material

Raw material type	Pre-purification/ refining of the raw material	Acid catalysed acylification or transesterification	Alkaline catalysed transesterification	De-methanolisation and drying of the crude fatty acid methyl ester	Reprocessing of the heavy phase	Production of bio-cerine with > 99 %
Vegetable oil or fat, refined or partially refined	N	N	R	R	O	
Crude vegetable oil or fat	R	O	R	R	O	
Used Cooking Oil (UCO) with low content of free fatty acids and low content of contaminations	O	O	R	R	O	
Used Cooking Oil (UCO) with high content of free fatty acids and high content of contaminations	R	R	O	R	O	OR
Fatty acids from physical refining of vegetable oil	R	R	O	R	O	I
Palm oil mill effluent (POME)	R	R	O	R	O	OR

Under development



# Key developments of ISCC PLUS in 2023

- After public consultation: New ISCC PLUS System Document v3.4.1 published
- Extensive stakeholder dialogue on packaging directives, plastic tax
- 7 trainings and 2 TC Meetings. 3 Working Groups
- Discussion with regulators regarding the developments on SUP Directive and Green Claims Directive
- Public consultation contributions and discussions with HMRC UK, SEC Australia, ECCC Canada. Discussions with the Ministry of Environment of Korea and Japan
- Ongoing inclusion of new materials, processes
- Carbon Footprint certification

# The ISCC Licensing Scheme is a tailor-made solution for brand owners

- For brand owners who receive **certified finished goods** from a certified supplier
- **93 licence agreements** are in place, 48 in the pipeline
- All finished goods are published on the **ISCC license database**
- Enables brand owners to **communicate and use ISCC logos and claims** in a credible way
- Establishes a **common language** should support trust

1500+ ISCC certified products on the market



# ISCC PLUS at the Climate Pledge Friendly program on Amazon

amazon

Climate Pledge Friendly

## Climate Pledge Friendly Certifications

We partnered with a wide range of external certifications, including governmental agencies, non-profits, and independent laboratories, and created our own certifications to help us distinguish more-sustainable products. We focused on certifications that are reputable, transparent, and have a focus on preserving the natural world. We will routinely evaluate and reassess the certification landscape to ensure we include the best partners to help you shop for more-sustainable products.

„We partnered with trusted third-party certifications and created our own certifications, to highlight products that meet sustainability standards and help preserve the natural world. We are committed to building a sustainable business for our customers and the planet.“

are produced in line with standards, including climate change certified products

energy Savings verifies 0% in the use-phase products.

Shop Fair Rubber certified products

Shop The Forest Stewardship Council certified products

Shop Global Organic Textile Standard certified products

Shop Global Recycled Standard certified products

Shop GreenCircle Certified: Certified Energy Savings products

GreenCircle Certified: Certified Environmental Facts Label verifies product carbon footprint reduction in the raw material or manufacturing stage. Selection coming soon

GreenCircle Certified: Life Cycle Assessment Optimized verifies reductions in product life cycle impacts through product or manufacturing improvements. Shop GreenCircle Certified: Life Cycle Assessment Optimized products

GreenCircle Certified: Recycled Content verifies a product is made of at least 50% recycled material. Shop GreenCircle Certified: Recycled Content products

Green Seal certified products have reduced climate and environmental impacts at one or more stages of their lifecycle. Shop Green Seal certified products

ISCC PLUS certified products are created using raw materials like recycled plastics and bio-based materials, which can reduce fossil fuel consumption. Shop ISCC PLUS certified products

## Results

Fisher-Price Baby Toy Rattle A-Latt Baby

★★★★★ ~ 4,572

1K+ bought in past month

Delivery Tue, Aug 8

Ships to Germany

Climate Pledge Friendly

Climate Pledge Friendly

Products with trusted sustainability certification(s). [Learn more](#)

Product Certification (1)

ISCC PLUS certified products are created using raw materials like recycled plastics and bio-based materials, which can reduce fossil fuel consumption.

[Access to Climate Pledge Friendly](#)



# ISCC Food Security Add-On

- Up to 735 million people go hungry - small farmers and agricultural labourers are particularly affected (FAO, 2023).
- FSS was developed by Welthungerhilfe, WWF and ZEF to help the private sector **respond to food insecurity and human rights due diligence obligations.**
- The FSS Add-On looks at the hunger situation holistically as it includes aspects like living income, access to health, access to education, etc.
- ISCC is one of the first certification systems recognized by the FSS. *GREMCA Agricultura y Energia Sostenible* from Colombia is the first company to obtain the ISCC-FSS certification.

managed by:



co-financed by:



**Join us and become early adopters!**

# In aviation, sustainable aviation fuels (SAF) are expected to grow significantly. ISCC aims to be a solution provider in SAF certification

## SAF – State of play and outlook

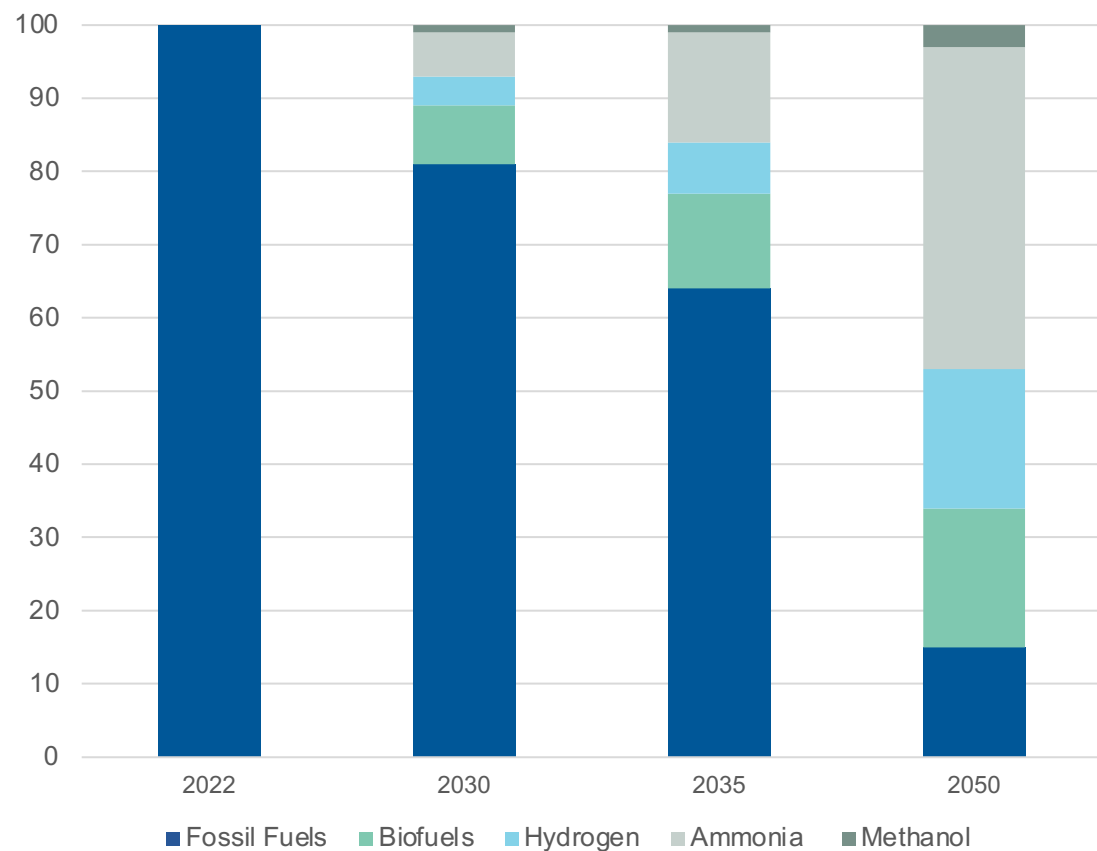
- **Main drivers for SAF production and use**
  - SAF mandates and incentive schemes (ReFuelEU, CORSIA, EU ETS, SAF production tax credits, etc.)
  - Demand from voluntary markets (e.g., under SBTi)
- **Situation today**
  - Demand for kerosene is expected to be approx. 230 million metric tons (mt) in 2024
  - SAF production volume is expected to be 1,5 million mt in 2024
- **Outlook for 2030**
  - Estimated SAF production volume of up to 17 million mt by 2030, depending on policy support levels
  - Industry is looking to diversify feedstock base to scale up other pathways such as Alcohol-to-Jet

## Highlights of ISCC's work in SAF since Feb 2023

- **150+ ISCC certified companies** in SAF supply chains (of which 90 under ISCC CORSIA)
- **ISCC CORSIA certification system's recognition extended** by ICAO for post-pilot phase from 2024
- **Increased number of ISCC CORSIA trained auditors** to 170 via two ISCC CORSIA Trainings
- **Five major airlines**, incl. three US Flag Carriers, now **part of ISCC Association**
- Successful third Meeting of the **ISCC Technical Stakeholder Committee on SAF** (340+ participants from all major stakeholder groups)
- Set up of the **ISCC Credit Transfer System** for SAF claims in voluntary markets
- **Support of PtL SAF development** in regulatory frameworks (EU RED, ICAO CORSIA)

# Sustainable marine fuels (SMF) will be crucial in reducing the shipping sector emissions. ISCC is active in SMF certification

## Forecasted development of fuel mix in final energy consumption in shipping



## State of play and outlook for SMF

- Shipping used 213 million mt of fuel in 2022, of which 99,9% were fossil fuels (IMO data)
- Demand for SMF is expected to be around 17 million mt by 2030, and around 220 million mt by 2050

## Main drivers for SMF production and use

- EU & IMO policies (e.g., FuelEU Maritime)
- Demand from voluntary markets

## Highlights of ISCC's work in SMF since Feb 2023

- **ISCC certified SMF in the market** (mostly FAME, HVO and biomethanol)
- **Three major shipping companies** now part of **ISCC Association**
- Successful second Meeting of the **ISCC Technical Stakeholder Committee on SMF** (330+ participants from all major stakeholder groups)

# ISCC Events fostering stakeholder dialogues in various markets

## Technical Stakeholder Committee

- Circular Economy and Bioeconomy
- Sustainable Aviation Fuels
- Sustainable Marine Fuels
- Renewable Fuels of Non-Biological Origin

≈ 2,145 engaged stakeholders  
online format

## Regional Stakeholder Committee

- Southeast Asia
- Latin America
- North America

≈ 1,050 engaged stakeholders  
hybrid format

## Diving into further Opportunities

### Working Groups:

- Mass Balance
- Logos, Claims, Licensing
- POME
- GHG

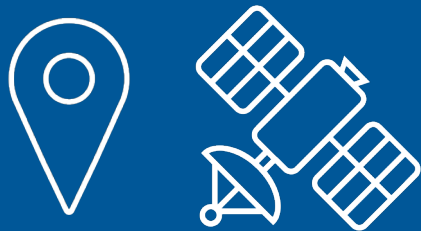
### ISCC PLUS Sustainability Conference Seoul, Korea

Continuously shaping the systems with stakeholder integration & commitment

# ISCC provides support to comply with EU Deforestation-Free Regulation (EUDR) requirements

ISCC supports companies by developing an **EUDR Add-On** with the following components:

## Information Collection & Deforestation Analysis



- Collection of product information and geolocation data
- Conduct deforestation analysis based on remote sensing data
- Assessment on legality

## Risk Assessment & Risk Mitigation



- Consideration of all relevant environmental and human rights criteria of the EUDR
- Identification of high risk hot spots
- Risk mitigation

## Digital Traceability Platform



- Transmission of relevant information along the supply chain via digital traceability platforms
- Option to export for due diligence statement



# EUDR Add-On certification and developments

- ISCC EUDR Add-On is available for the commodities: oil palm, soy, rubber and wood
- EUDR Add-On is compatible with ISCC EU and PLUS certification
- EUDR Add-On certification can be part of the next audit and is an easy and cost-effective method to contribute to EUDR compliance
- First pilot certifications have started and the Add-On will be available starting summer 2024
- Key steps to prepare for EUDR Add-On certification:
  - Have an overview of suppliers
  - Prepare facilities for physical segregation



Get in contact with ISCC to get started!



Oil Palm



Soy



Rubber



Wood



Coffee



Cacao



Cattle

# ISCC actively contributes to the dialogue on the Carbon Removal Certification Framework Regulation



## Activities of the Expert Group

*Supports the EC in the definition of the EU Carbon Removal Certification Framework:*

- Methodologies for Carbon Farming and Industrial Carbon Removals, consistently with the Q.U.A.L.I.T.Y criteria
- Permanent Storage
- Certification process and MRV procedure

## The Q.U.A.L.I.T.Y criteria



**Quantification**



**Additionality**



**Long Term Storage**



**Sustainability**

## Carbon Farming

*It was the focus of the second meeting of the EGCR (June 2023). It covers:*

- Agriculture on mineral soil
- Forestry
- Peatland

## Industrial Carbon Removals

*It was the focus on the third technical meeting of the EGCR (Oct. 2023). It covers:*

- Industrial capture of carbon (Direct Air Capture – DAC and Bioenergy with Carbon Capture – BECCS)
- Link with the CCS directive

# Cultivating Change: ISCC Drives Regenerative Agriculture for Climate Action and Food Security

ISCC is actively developing a global certification system for **Regenerative Agriculture Practices** with a targeted focus on



**Soil Health & Fertility**



**Water Health**



**Biodiversity**



**Carbon Sequestration**

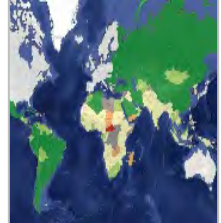
Indicator	Measurement	Frequency	Method	Responsible Party
Soil organic carbon	Soil sampling and analysis	Annually	Direct measurement	Farmer
Water quality	Water sampling and analysis	Quarterly	Direct measurement	Farmer
Biodiversity	Field observations	Annually	Visual assessment	Farmer
Carbon sequestration	Soil sampling and analysis	Annually	Direct measurement	Farmer



- **Development of indicators and measures** that guide and support environmental impact insights



- **ISCC, in collaboration with pilot partners**, assesses the implementation of regenerative practices in various environmental conditions



- **Testing and analysis of regenerative agricultural methods** in diverse cropping systems, including intermediate crops



**Indicators & Measurements**



**Sustainability Case Studies & Pilot Farms**



**Assessment & Oversight**





Active multi-stakeholder dialogue to cultivate innovative sustainability solutions



Commitment to sustainable, traceable, deforestation-free & climate-friendly supply chains



Continuously improving standards to meet global sustainability requirements



Further development of the circular economy and the bioeconomy

# 57 New ISCC Members have joined in the last twelve months, representing a 18% growth

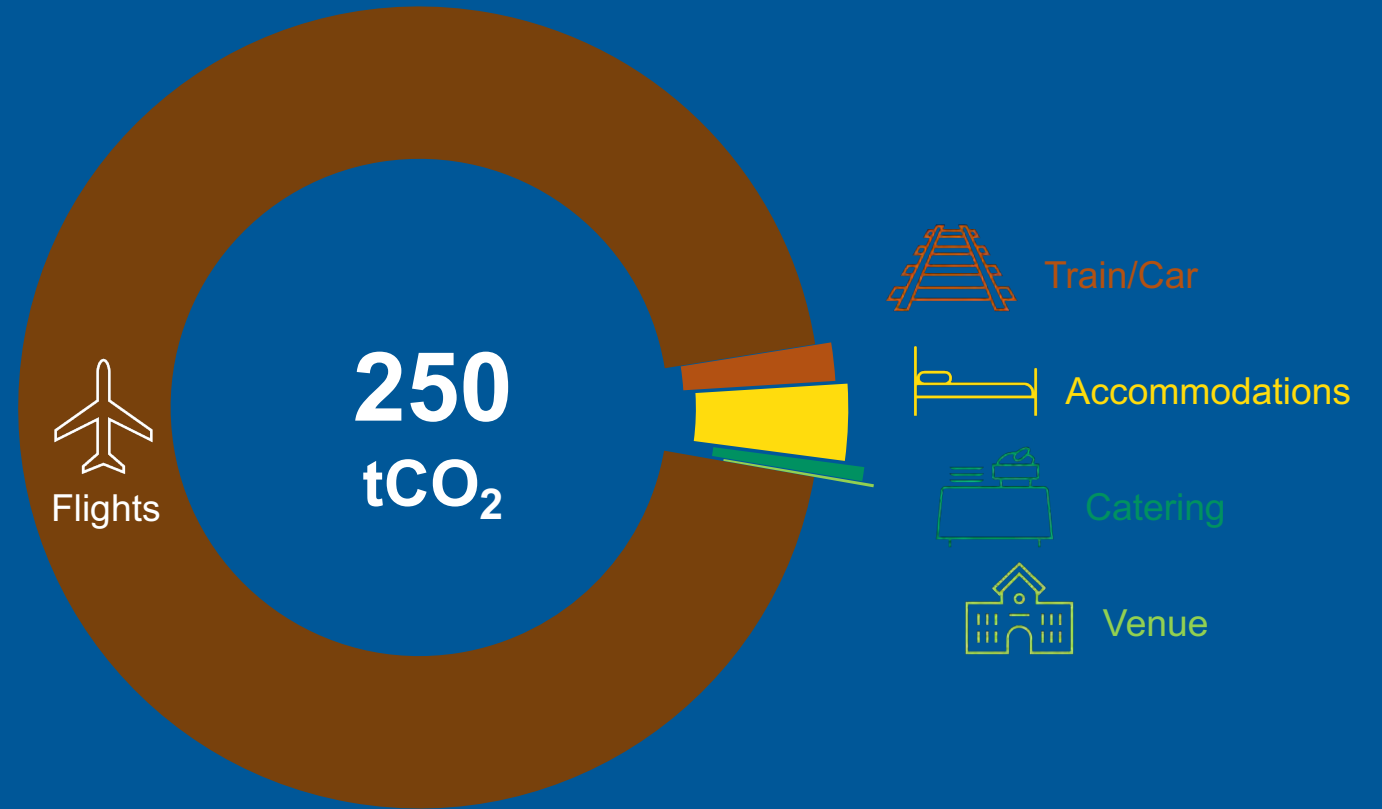


51 of the new Members have given consent for displaying their logos

**Preliminary assessment:**  
(calculations will be adjusted ex-ante)

# Carbon Footprint Assessment

ISCC General Assembly +  
Global Sustainability  
Conference 2024



**Emissions will be counterbalanced by high-integrity carbon credits; complemented by ISCC's own reforestation project**



# Thank you!

ISCC System GmbH

Hohenzollernring 72, 50672 Cologne, Germany

[www.iscc-system.org](http://www.iscc-system.org)

