

### Support the Bio-Economy and Circular Economy with ISCC Certification Systems

Dr Jan Henke, Director, ISCC System ISCC Japan Conference, Tokyo, Japan 21 January 2025

ISCC EU
RFNBO/ RCF
Refuel EU
Aviation and
Fuel EU
Maritime

ISCC PLUS

ISCC CFC

ISCC CORSIA

ISCC PLUS Japan Biofuels mandate (US exports)



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#### ISCC - A Global Leader in Certification

Addressing sustainability requirements across diverse feedstocks and markets



13000+



Total Valid Certificates 130+



5200+



Current Cooperating certification bodies 1800+

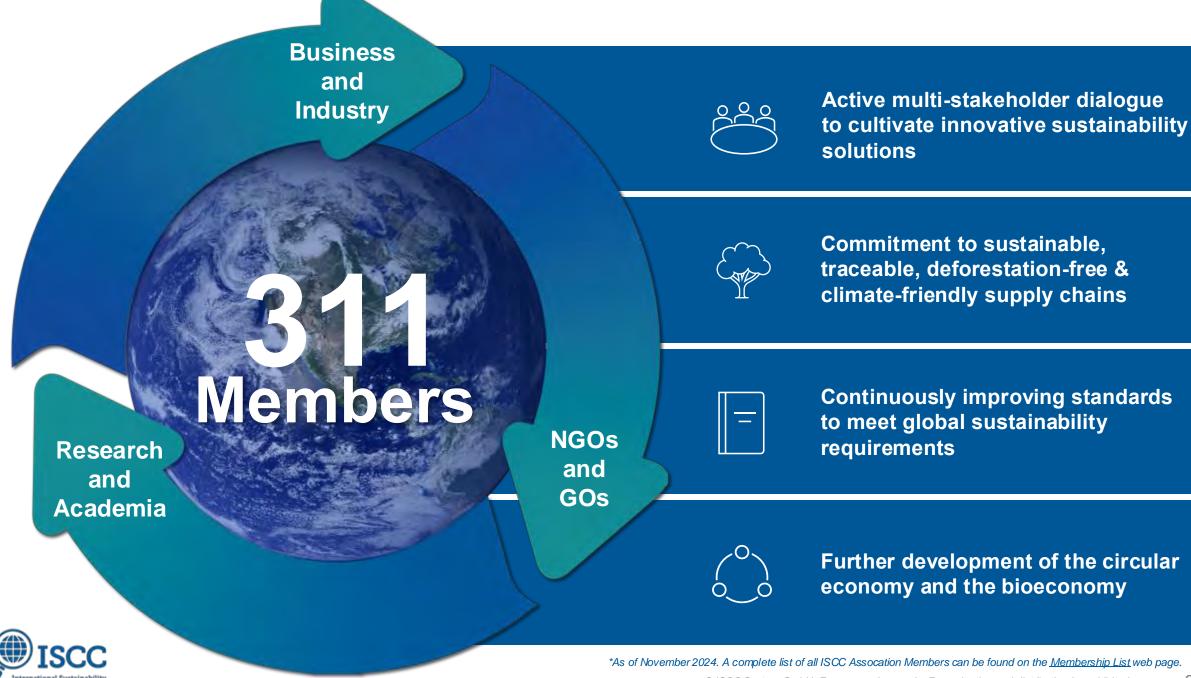
Qualified ISCC Auditors

220+

ISCC training courses conducted

300+

Current ISCC association members



#### The ISCC System is governed by the ISCC Association, a multistakeholder non-profit organization with currently 311 members



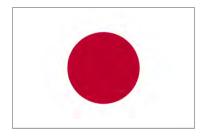
UVG UIC UPM UPONOR US.GRAINS VARO VDB Verbio VVG VERTEX VITERRAL WILLIAM WIPAK XONOX



As of January 2025

#### The ISCC Association: 311 Engaged Members\*

Multi-Stakeholder Governance of the ISCC System





### **AsahiKASEI**













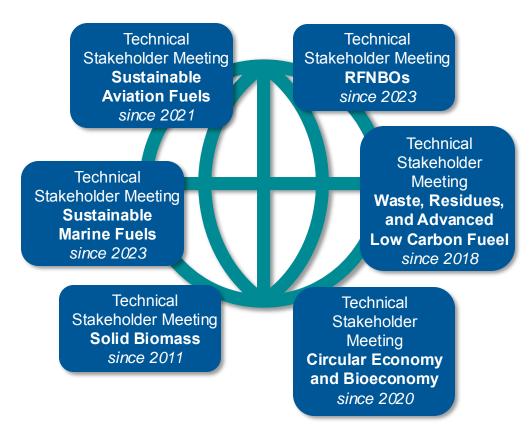


#### The ISCC Association is responsible for the global multistakeholder dialogue

#### **Regional Stakeholder Committees**



#### **Technical Stakeholder Committees**





More information about the ISCC Stakeholder Committees can be found at this <u>link!</u>

### Get involved!

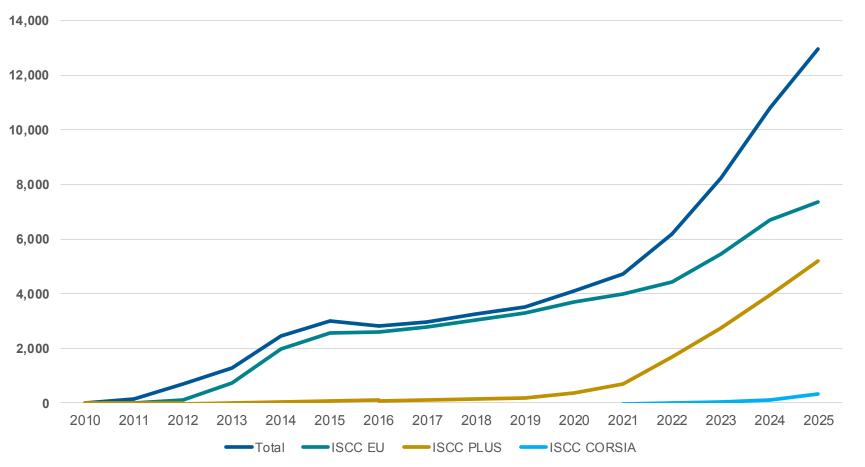
### Become a member of ISCC Association





### Development of ISCC EU, PLUS, and CORSIA certification





Total 12.956\*



ISCC EU 7.360\*



ISCC PLUS 5.198\*



ISCC CORSIA 342\*



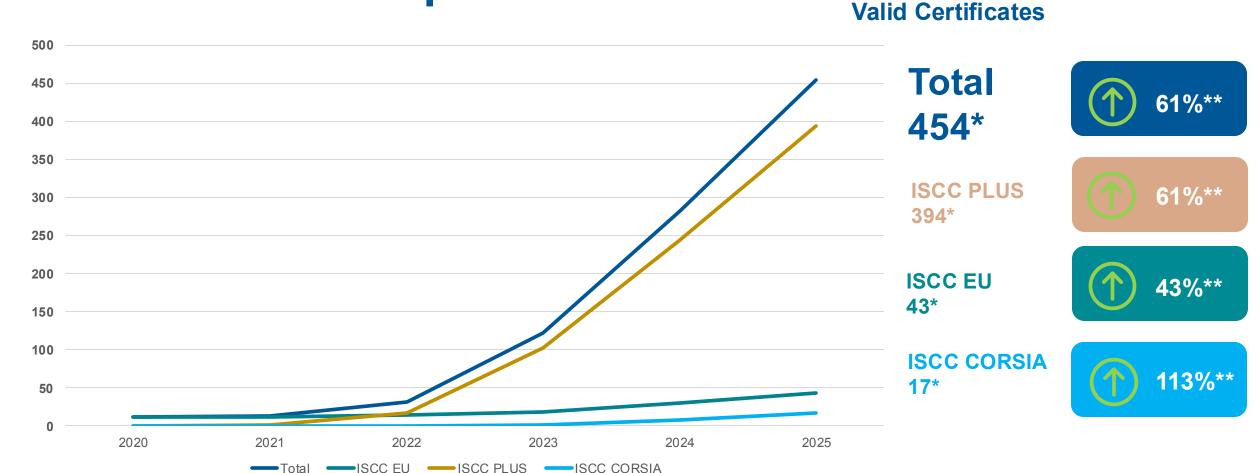
\*Data as of January 1st 2025

\*\*In comparison to January 2024

\*\*\*The number of total certificates also includes certificates of other schemes, e.g. Japan fit



### Development of ISCC EU, PLUS, and CORSIA certification in Japan



\*Data as of January 1st 2025 \*\*In comparison to January 2024



#### ISCC EU for energy markets and transportation

#### **Certification based on legal requirements for:**







Production and cultivation

Traceability & Chain of custody

GHG emissions calculations and savings

- Applicable for sustainable fuels used for transport, electricity, heating and cooling in the European Union
- To demonstrate **compliance** with the EU's sustainability criteria for biofuels, bioliquids and biomass fuels set out in the **Renewable Energy Directive II (RED II)**

**Covered** markets



Road transport



**Aviation** 



Maritime



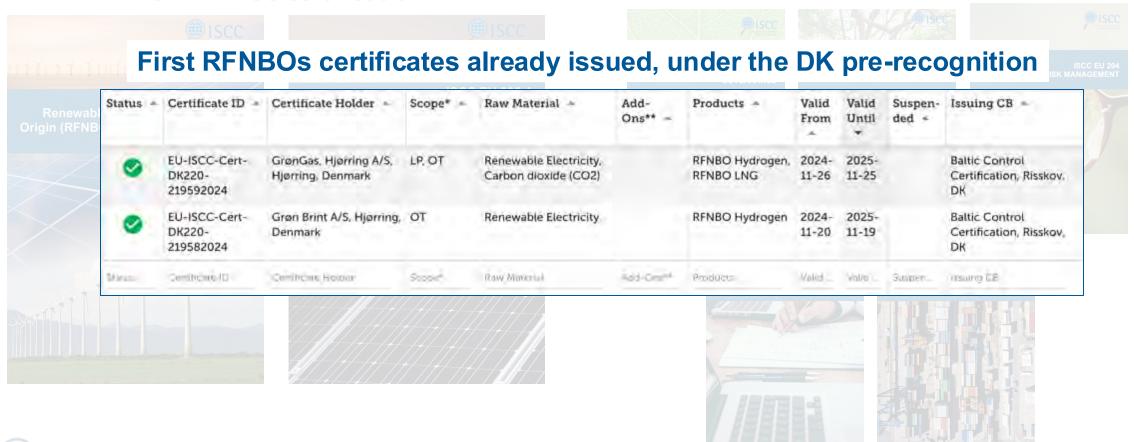
Power-to-x



### The ISCC RFNBOs and RCF approach is recognized by the EU COM since December 20<sup>th</sup> 2024

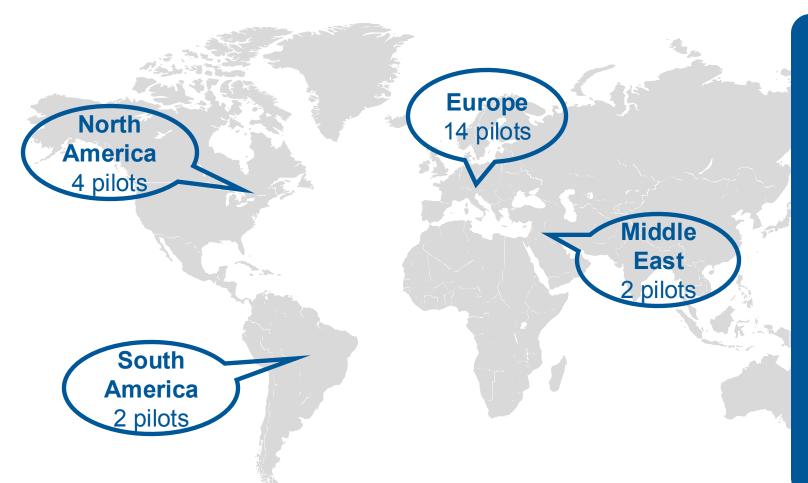
ISCC has two dedicated system documents for RFNBOs certification

The ISCC EU system documents are also valid for RFNBOs





### ISCC has already been involved in many RFNBOs pilot projects, partly in direct cooperation with Meo Carbon Solutions



- ISCC is directly involved in pilots, such as the RVO pilot conducted by the Dutch ministry
- ISCC's sister company Meo Carbon Solutions has supported many customers with different RFNBO pilot projects, including:
  - GHG calculations
  - Certification set-up and electricity requirements verification
  - Certification support for voluntary markets (already possible)

Contact <u>info@meo-carbon.com</u> for more information



### Rising demand for Sustainable Aviation Fuels (SAF) and their ISCC certification



- SAF markets will grow tremendously
- Driven by regulatory frameworks (e.g. ReFuelEU Aviation, ICAO CORSIA) that require sustainability certification
- Voluntary market complements the demand
- Big ISCC growth in SAF certificates
- More SAF players in the ISCC Association
- Support of PtL SAF development in regulation
- The ISCC Credit Transfer System and Registry went live in April 2024



### **Updates on ISCC certification for Sustainable Marine Fuels (SMF)**

- Increasing interest. Driven by regulatory developments
- The EU mandates certification for SMF under FuelEU Maritime and EU ETS (starting 2025).
- ISCC certifies SMF in the market (mostly FAME, HVO and biomethanol)
- ISCC part of EU COM-led working group on marine fuel certification
- ISCC joins IMO working group on LCA Guidelines and certification
- Many of the largest shipping companies are ISCC members
- Currently available biomarine fuel is almost entirely ISCC certified





#### **ISCC Japan FIT**



ISCC Japan FIT: Principles and Criteria – Sustainable Palm Oil

- Certification of renewable feedstocks destined for power generation in Japan
- Japan FIT (feed-in-tariff) system:
   power plants receive incentives
   for producing power from
   eligible biomass
- Recognition from Japan's
   Ministry for Economy, Trade and
   Industry (METI) since April 2022







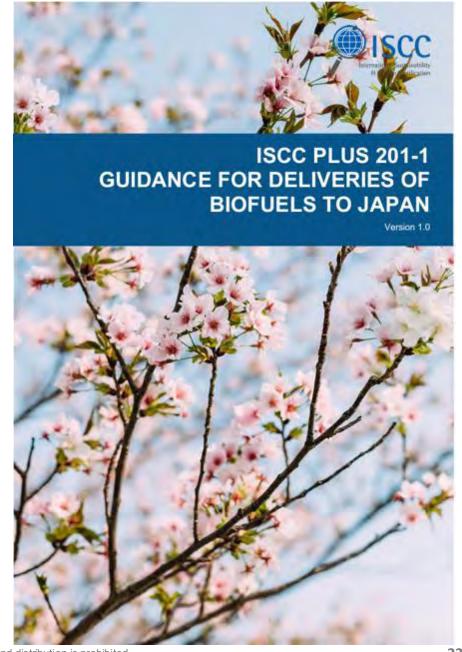




## ISCC PLUS is recognised by the METI for Japan Biofuels mandate

to verify compliance with the sustainability requirements for biofuels particularly ethanol derived from U.S. corn and Brazilian sugarcane, to Japan under its biofuel mandate







# ISCC PLUS in a nutshell



**Broad raw materials & final market coverage** 



**Several Chain of Custody Options** 



**Chemical and mechanical recycling routes** for Circular Economy covered



**End-to-end-certification** 



**Licensing for the Brand Owners** 



#### ISCC PLUS certified feedstocks covers all final markets

Raw material categories







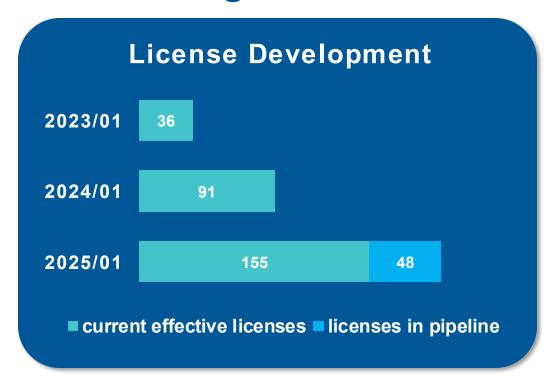


Plastic commodities & packaging

Automotive industry

Renewable energy

#### The ISCC Licensing Scheme is an approach for brand owners to use ISCC logos and/or claims











**ISCC certified products** on the market





















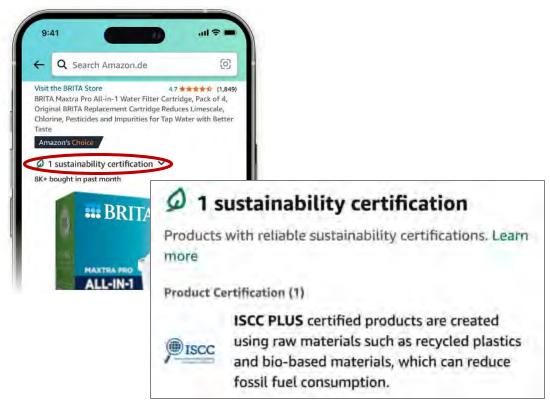






### ISCC PLUS collaborates with Amazon on Climate Pledge Friendly program

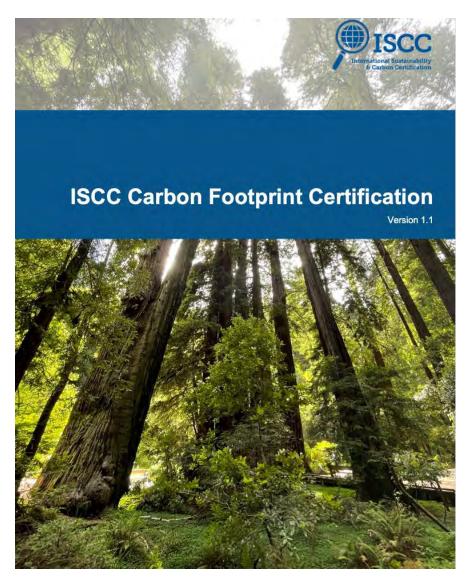




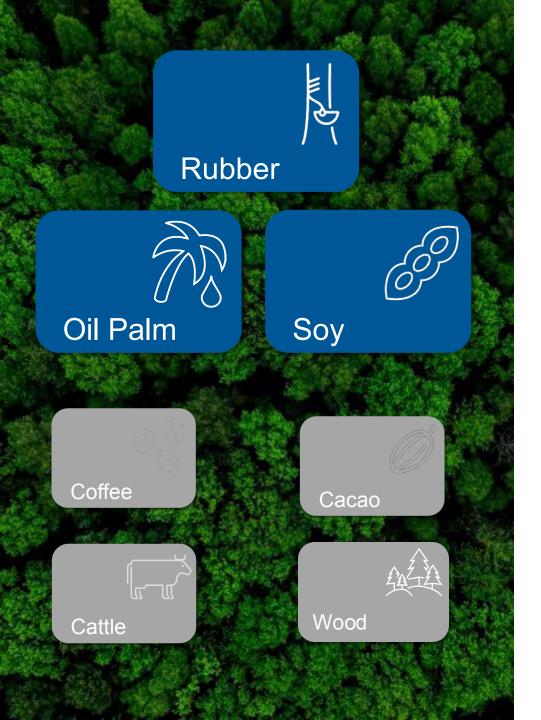
ISCC PLUS certified products now can be found in: Australia, Belgium, Brazil, Canada, France, Germany, Italy, Mexico, Poland, Spain, Sweden, UK, US



### The ISCC Carbon Footprint Certification (CFC) will allow to assess the environmental benefit of products independent of the feedstock



- Certification of product carbon footprints (PCFs)
- Low carbon claims for products with improved carbon footprint
- Module can be used on its own or combined with ISCC PLUS feedstock
- Applicable for co-processing setups with annual verification of mass balance and volumes



#### **Example: ISCC EUDR Add-on**

- EUDR Add-on is a comprehensive solution to help companies meet EUDR compliance and offers:
  - > Deforestation analysis
  - ➤ Risk assessment
  - Legality check
  - Traceability
- EUDR Add-on is available for the commodities oil palm, soy, rubber and their products
- 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 for EUDR compliance



Get in contact with ISCC to get started!

#### THE FOOD SECURITY STANDARD (FSS)



- Developed to help the private sector to respond to food insecurity.
- WWF, WHH and Centre for Development Studies of Bonn University developed the standard.
- Aims to foster zero hunger at the production level of global agricultural value chains.
- Based on the human right to adequate food.
- FSS certification allows companies to make claims towards customers and other stakeholders.
- Support implementation: guidelines of Respecting Human Rights in Responsible Supply Chains in Japan.





#### Unlocking Untapped Market Potentials with ISCC - Potential Overview

#### Supply Chain Input / Feedstock



Agriculture



Forestry



Waste / Residues



Renewable

- energy
- derived



Non Renewable



|                              | Market / Compliance                              |                    |                          | Compliance System |
|------------------------------|--|--------------------|--------------------------|-------------------|
| Sustainability Certification | RED II; III                                      | RTFO               | JAPAN FIT                |                   |
|                              | Refuel EU Aviation                               | IRA Tax Credits    | Recycl., biobased Regul. | ISCC EU           |
|                              | CORSIA   | Voluntary Claims   | EUDR                     |                   |
|                              | CORSIA LCAF                                      | Registry Usage     | FSS                      | ISCC CORSIA       |
|                              | ETS EU   | Voluntary Food     | Low iLUC                 |                   |
|                              | ETS UK   | Voluntary Feed     | E-Fuels                  | ISCC PLUS         |
|                              | FuelEU Maritime                                  | Voluntary Chemical | RFNBOs/ RCFs             |                   |
| SHG Mitigation               | Potential scope of the EU Green Claims Directive |                    |                          | ISCC CFC          |
|                              | Carbo  |                    |                          |                   |
|                              | \  | ClimatePal         |                          |                   |
|                              | EU Carbon Re                                     |                    |                          |                   |



### ISCC Integrity Program key for a credible system

- Complete audits or specific focus (CoC, GHG etc.)
- ISCC Integrity Auditors
- Choice of Candidates
  - Randomly / risk basis after risk evaluation
  - complaints
  - Report of non-conformity or fraud
- On a global scale
- On-site/remote
- Results documented in Audit Report
- Consequences: Conditions for recertification, sanctions (e.g. suspension, withdrawal of certificate)

#### **ISCC PLUS Training**

#### On-site registration possible





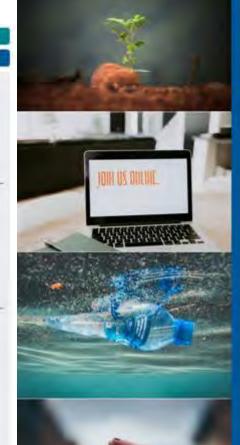




#### 加工流通の過程/ライセンス、ロゴを通格性宣言

| 時間            | 進程   | 担当者           | 時間                             | 練罗    |
|---------------|--|---------------|--------------------------------|-------|
| 08:30 - 09:00 | <b>登録 5.形刻金</b>                                  | ISCC          | 08:30 - 09:00                  | 21    |
| 09:00 - 09:10 | トレーニングへの教道と導入                                    | ISCC          | 09:00 - 09:10                  | 1-1   |
| 09:10 - 09:40 | 機塊経済とバイオエコノミーのためのISCC PLUS                       | ISCC          | 09:10 - 10:10                  | 加工    |
| 09:40 - 10:40 | ISCC PLUSにおけるサブライチェーン、システムの<br>要素、プロセスと原材料 (I)   | ISCC          | 10:10 - 11:30                  | グルマス  |
| 10:40 - 11:00 | コーヒーブレイク   |               | 0.00                           | 14.00 |
| 11:00 - 12:00 | ISCC PLUSICおけるサブライチェーン、システムの<br>要素、プロセスと原材料 (II) | ISCC          | 11:30 - 12:00<br>12:00 - 01:00 | 結果    |
| 12:00 - 12:30 | ISCC PLUSにおける廃棄物と残留物                             | ISCC          | 01:00 - 02:00                  | 90 JI |
| 12:30 - 01:30 | BR   |               | 10.45 3411                     | 22    |
| 01:30 - 03:00 | グループワーク (I):                                     | 参加者 +         | 02:00 - 02:30                  | 1SC   |
|               | 化学産業と下流部門における複雑なサブライチェー<br>ンの認証                  | ISCCのサポー<br>ト | 02:30 - 02:55                  | 被拼    |
| 03:00 - 03:20 | 結果免表   | 参加者           | 02:55 - 03:30                  | FL    |
| 03:20 - 03:45 | コーヒーブレイク   |               |                                |       |
| 03:45 - 04:25 | 認証と監査手続き   | ISCC          |                                |       |
| 04:25 - 04:30 | 総括   | ISCC          |                                |       |

| ı | 時間            | 職組  | 担当者                    |
|---|---------------|---|------------------------|
|   | 08:30 - 09:00 | 查錄及規則金  |                        |
|   | 09:00 - 09:10 | トレーニング2日目への歓迎と導入  | ISCC                   |
|   | 09:10 - 10:10 | 加工流通過程の管理 (Chain of Custody) (三間する<br>オプション – 収率と帰属の計算と認証 | ISCC                   |
|   | 10:10 - 11:30 | グループワーク (II):<br>マスパランスの計算と認証、収率と帰属                       | 参加者 +<br>ISCCのサポー<br>ト |
|   | 11:30 - 12:00 | 结果免疫  | 参加者                    |
|   | 12:00 - 01:00 | <b>提致</b>   |                        |
|   | 01:00 - 02:00 | 帰属製品におけるロゴ、適格性宣言とISCCライセンススキーム                            | ISCC                   |
|   | 02:00 - 02:30 | グループワーク (III):<br>ISCCのロゴと適格性宣言の適用                        | 参加者 *<br>ISCCのサポー      |
|   | 02:30 - 02:55 | 結果発表  | 参加者                    |
|   | 02:55 - 03:30 | トレーニングの総括とフィードバック   | ISCC                   |
|   |               |   |                        |





ISCC Academy 1月22日 – 23日, 2025 ホテルグランドニッコー 東京 台場

#### 概要

ISCC PLUS認証制度に関する包括的 情報

加工流通過程の管理 (Chain of Custody) に関するオプション、マスバランス、収率計算及び帰属的アプローチ

ISCC監査の要求事項とサプライチェ ーンにおけるISCCの適用

ロゴ、適格性宣言とISCCのライセン ススキーム





### Thank you!

**ISCC System GmbH** 

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www.iscc-system.org









