



# ISCC PLUS for the Circular Economy and Bioeconomy

Dr Jan Henke, Director, ISCC System GmbH and Meo Carbon Solutions GmbH  
ISCC Regional Stakeholder Meeting North America,  
14 November 2023, New Orleans

## 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

## ISCC Japan FIT



- **Palm kernel shells and palm trunks for production of renewable electricity in Japan**
- **Japan Feed-in-Tariff (FIT)**

# ISCC PLUS in a nutshell



## Chain of Custody Options:

- Physical Segregation
- Controlled Blending
- Mass Balance



## Recycling routes for Circular Economy:

- Chemical Recycling
- Mechanical Recycling



## Certification of the whole supply chain

From farms/plantation or Point of Origin until Market



## Licensing for the Brand Owners

Correct Claims on ISCC PLUS certified materials

## Certification Allows Credible:

- Determination of recycling rates
- Reporting to regulators
- Claims towards customers, consumers, other stakeholders
- On-product ISCC logos use

# Why certification to grow the circular economy and bioeconomy?



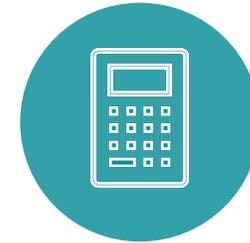
**Raw material identity**  
(e.g. waste and residue vs. virgin)



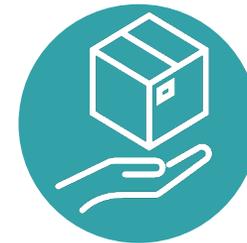
**Correct volumes and conversion factors throughout entire value chain**



**Traceability**



**Appropriate carbon intensity calculations**



**Correct use of respective chain of custody and attribution approaches**



**Sustainability and no deforestation on farms and plantations**

# Examples of ISCC PLUS certified feedstocks



## Bio



Corn



Canola



Sugarcane



Cotton



## Bio-circular



Tall Oil



UCO



Forestry residues



Straw



## Circular (technical)



Mixed Plastic Waste



End-of-life tires



Waste textiles



CO<sub>2</sub>  
(post-industrial)

## Renewable–energy–derived

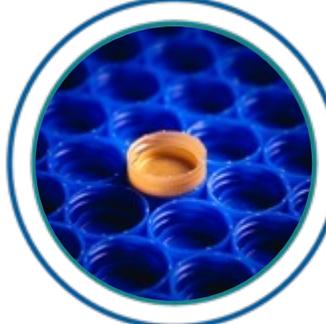


Hydrogen

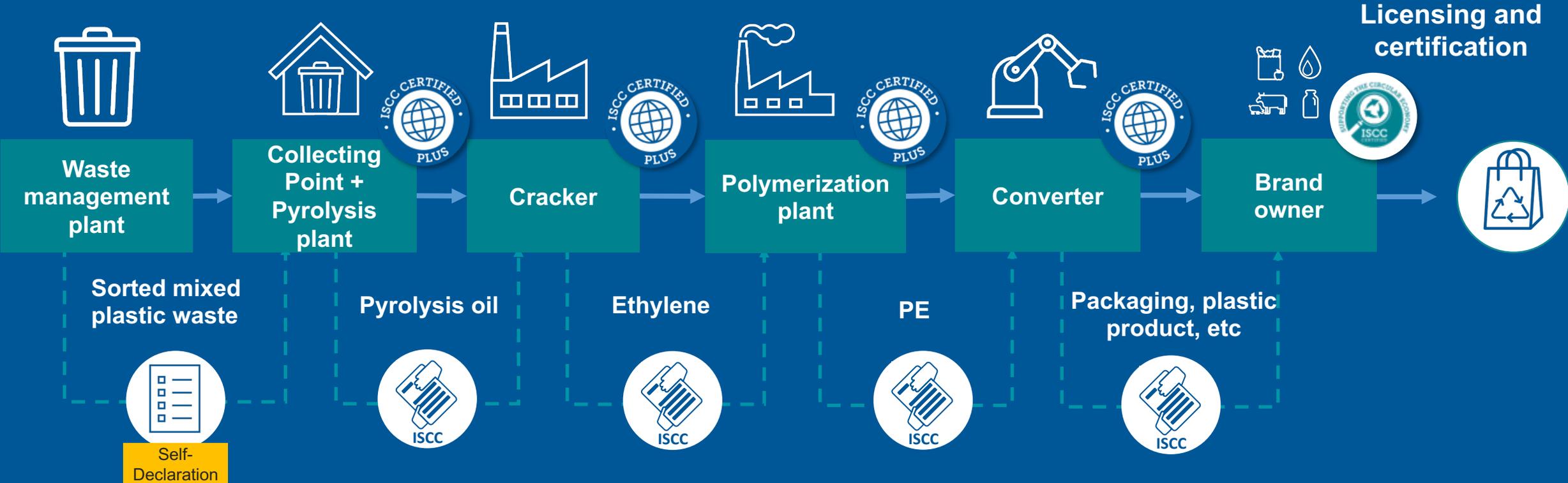


Power-to-X

# ISCC PLUS covers all types of final markets

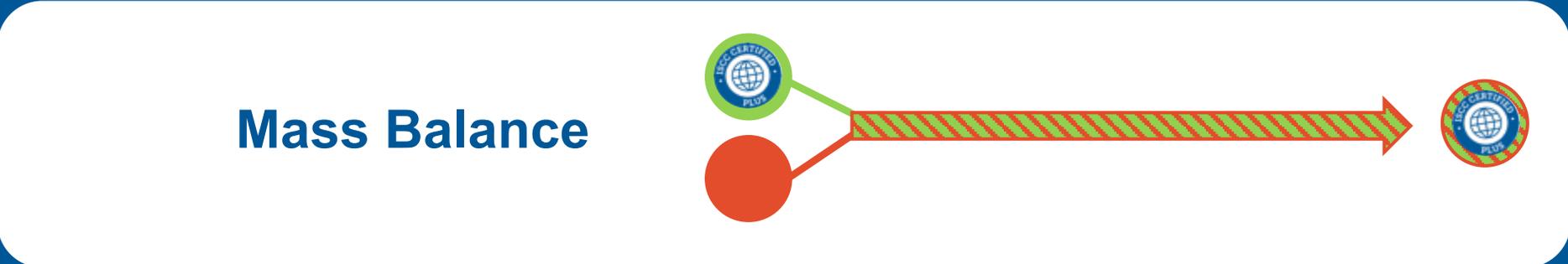
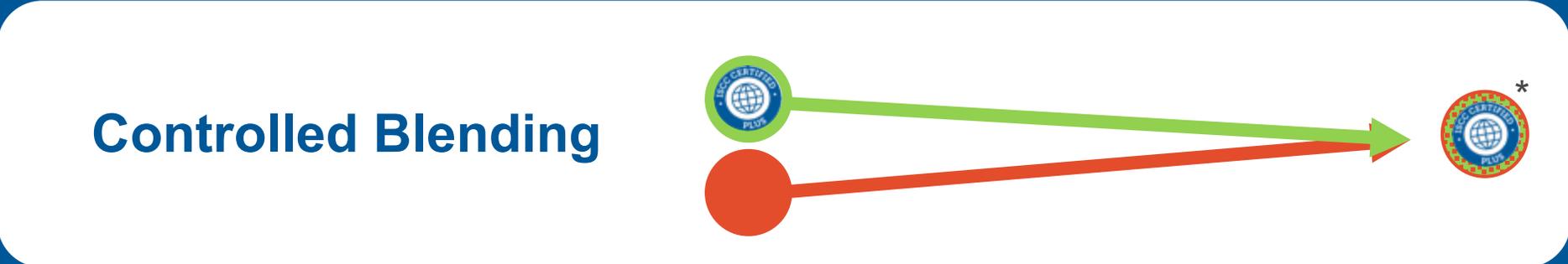
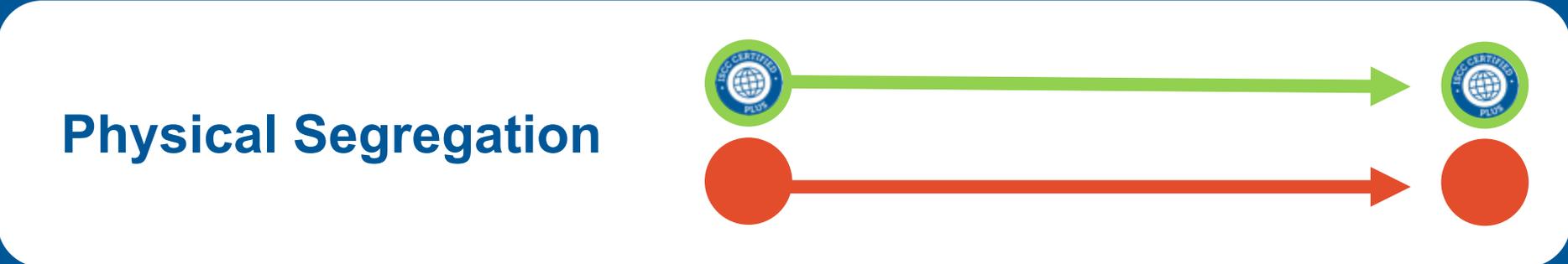


# ISCC PLUS ensures traceability, feedstock identity, correct volumes and claims with certification and licensing



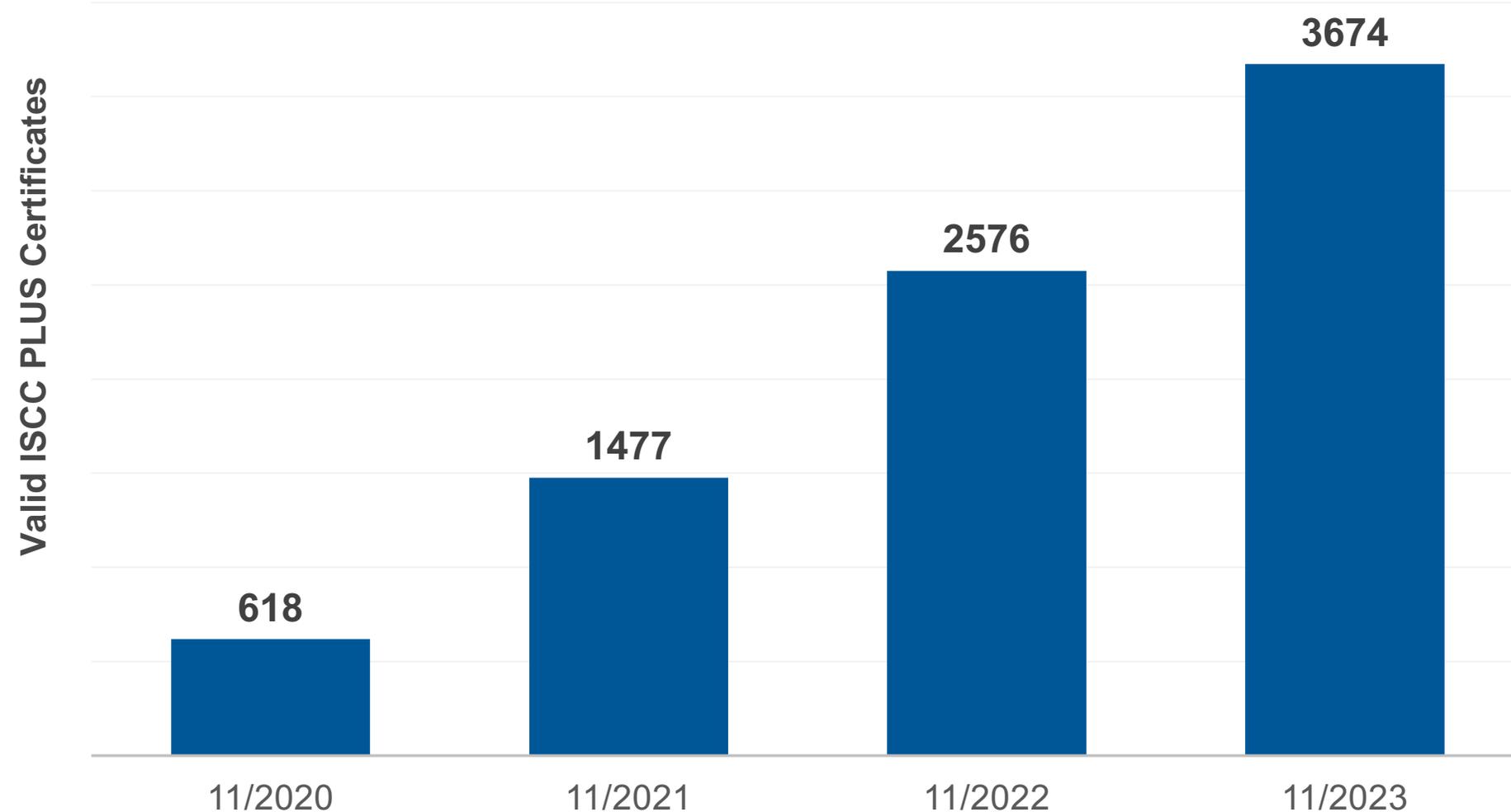
Certified parties issue sustainability declarations on certified recycled volumes to the next element in supply chain based on documentation of all incoming and outgoing volumes within a site-specific mass balance

# ISCC certifies different chain-of-custody approaches, recycling routes and creates transparency

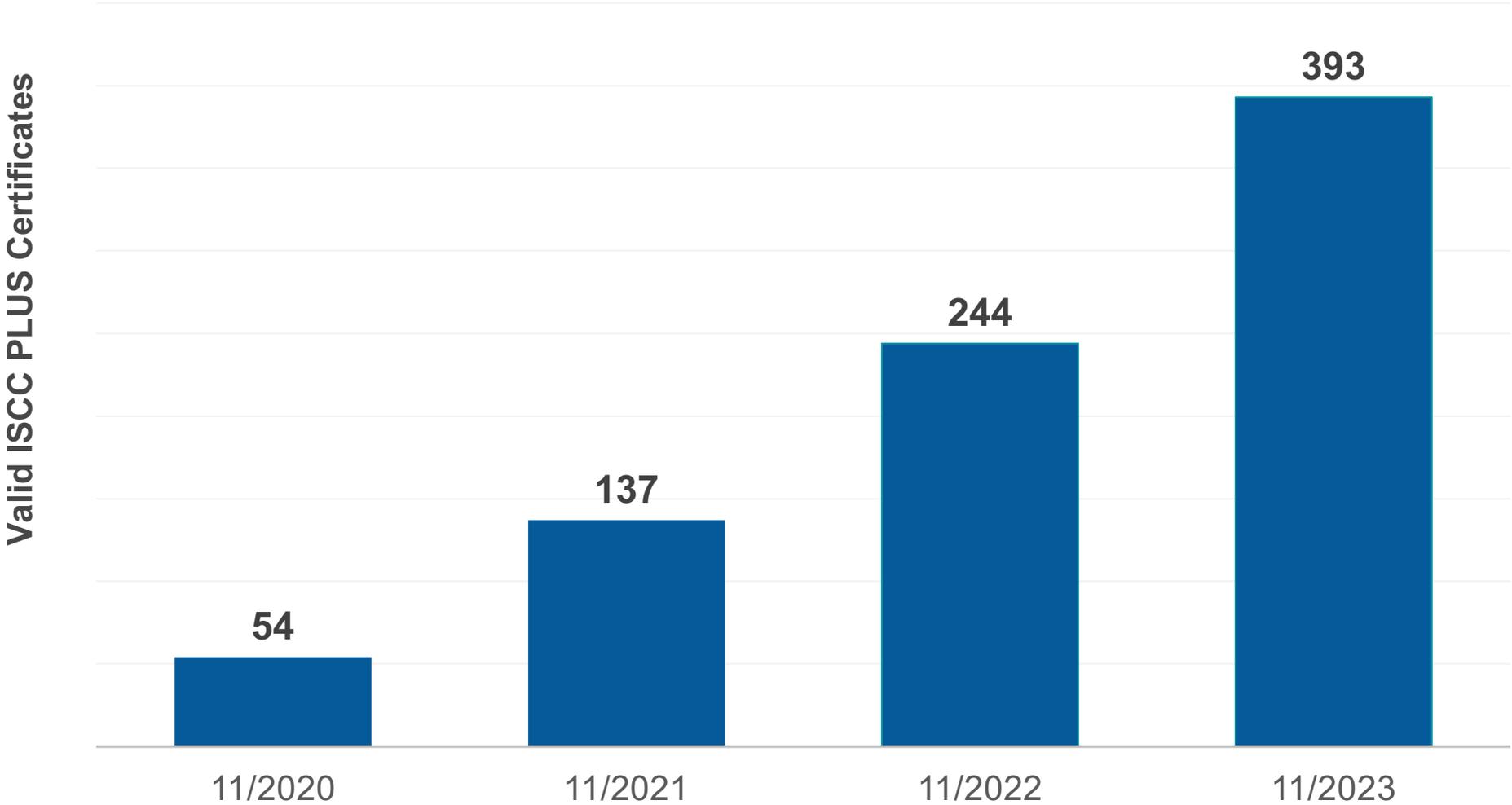


*\*known proportions of certified input in output*

# The number of ISCC PLUS certified companies has increased significantly for several years



# The number of ISCC PLUS certified companies in North America



# Recycled content: Key policy & legislative files in Europe – reference to certification included



## Single Use Plastic (SUP)

- Recycled plastic content in SUP beverage bottles
- Currently covering mechanical recycling
- Chemical recycling, mass balance and attribution likely to be included

## Packaging and Packaging Waste Regulation (PPWR)

- EC proposal from Nov 2022
- Legislative process ongoing
- Recycled content targets for all plastic packaging types

## End of Life Vehicles

- EC regulation proposal
- Automotive is 10% of overall European plastics demand after packaging and construction
- 2030: 25% post-consumer plastics into new cars (of which 25% from ELV)

# Ongoing development of plastic taxes and mass balance acceptance

Countries we receive the most inquires

## Certification scheme

## Mass balance acceptance

SPAIN

ISCC PLUS SD is sufficient in 2023. From 2024, recognition according to EN 15343 necessary.  
→ **ISCC in application process**

**Ley 7/2022** :“In the case of chemically recycled plastic, this quantity shall be attested by a certificate issued by the relevant accredited or licensed body.”

ITALY

Only one recognized certification scheme (PSV) for plastic recycling  
→ **ISCC contacted authorities**

PSV is using mass balancing for certification (according to EN 14021). **Therefore, yes.**

UK

It is the responsibility of the company to show recycled material is used.  
No recognised certification scheme is mentioned in the law

**Consultation opened** until 10 Oct 2023. ISCC was invited to roundtable discussion

# Ongoing development of plastic regulations

USA

FTC Green Guides,  
EPA National Recycling Strategy,  
EPA (draft) Plastics Pollution Prevention

AUSTRALIA

Developing a national framework for recycled content traceability  
**Public consultation** on the discussion paper was open until 31 Aug 2023

KOREA

Acceptance of **voluntary certification schemes** for mechanical recycling and its green claim being discussed

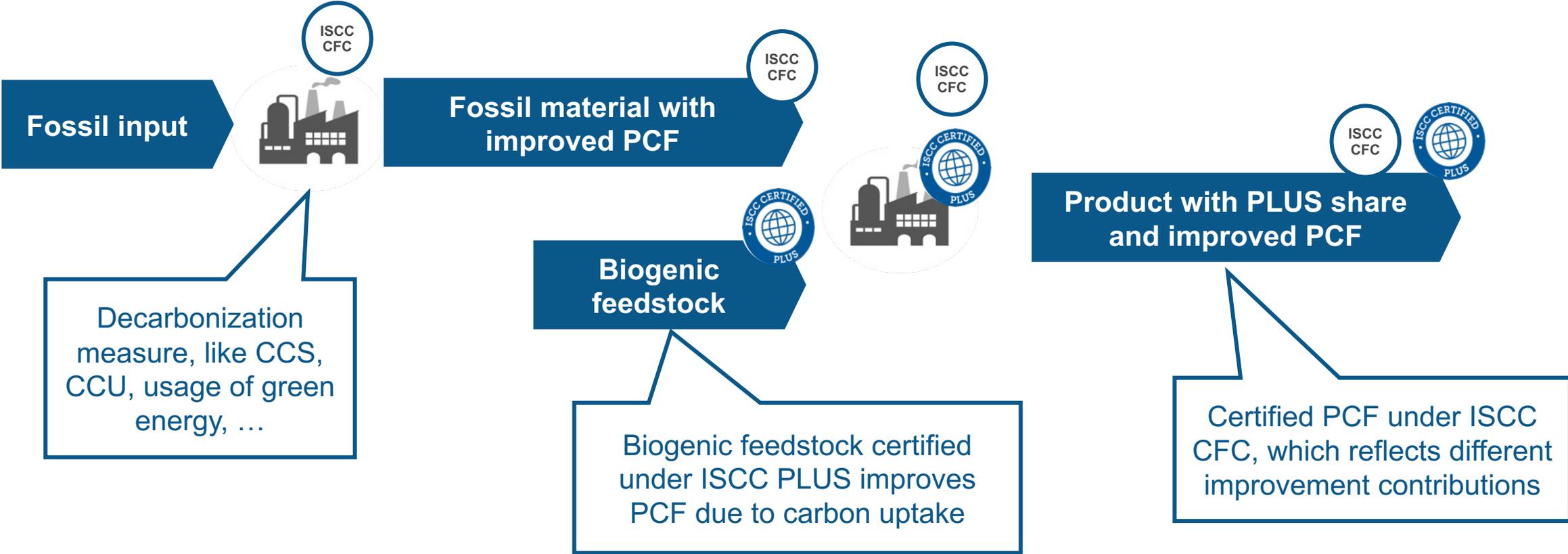
JAPAN

Japan's policy for bioplastics towards 2030 and 2050 & Position paper published on **mass balance approach**

CANADA

Recycled content and labelling rules for plastics Regulatory framework  
→ **Recycled content** and **labelling regulations**, before the end of 2023, followed by a public comment period.

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



--- ISCCs Vision of CFC and PLUS certification: not completely established yet! ---



# ISCC Integrity Assessments

- 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)

# Value created by ISCC PLUS certification



# ISCC PLUS Training & Technical Committee



**ISCC**  
International Sustainability  
& Carbon Certification

## ISCC PLUS Training

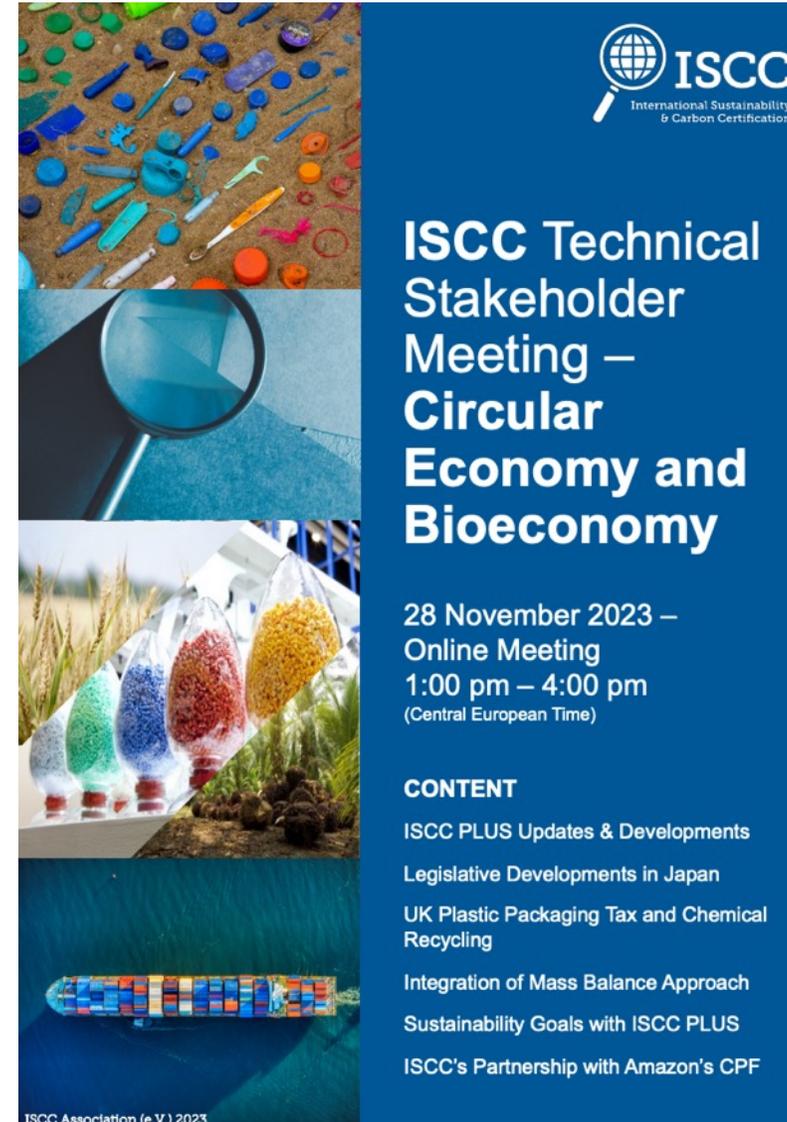
### Circular Economy and Bioeconomy

12 – 13 December 2023

**CONTENT**

- Comprehensive information about the ISCC PLUS certification system
- Chain of custody options, mass balancing, yield calculations and attribution approaches
- ISCC audit requirements and ISCC application along the supply chain
- Logos, Claims and ISCC Licensing scheme

ISCC System 2023



**ISCC**  
International Sustainability  
& Carbon Certification

## ISCC Technical Stakeholder Meeting – Circular Economy and Bioeconomy

28 November 2023 –  
Online Meeting  
1:00 pm – 4:00 pm  
(Central European Time)

**CONTENT**

- ISCC PLUS Updates & Developments
- Legislative Developments in Japan
- UK Plastic Packaging Tax and Chemical Recycling
- Integration of Mass Balance Approach
- Sustainability Goals with ISCC PLUS
- ISCC's Partnership with Amazon's CPF

ISCC Association (e.V.) 2023

**23 Jan  
2024**

**24 – 25  
Jan 2024**

**ISCC PLUS Conference –  
Sustainability Certification  
in Republic of Korea**

- legislative developments in Korea & EU
- Value chain examples
- Outlook on PLUS

**ISCC PLUS  
Training**

**Seoul,  
Republic of  
Korea**

**Please register at  
[iscc-system.org](https://iscc-system.org)**

## What's next?

- Monitor upcoming legislation in different regions and apply for recognition with regulators where possible
- Further integrate alternative attribution approaches where requested by regulators or stakeholders
- Continue working with brand owners to create additional demand for circular and biobased materials and meaningful consumer communication
- Integration of ISCC carbon footprint certification



# Thank you!

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