ISCC
International Sustainability & Carbon Certification

# Developments and Market Expansion of ISCC Carbon Footprint Certification (CFC)

October 10th, 2024

Stefan Gärtner
Meo Carbon Solutions GmbH

# Introduction to ISCC Carbon Footprint Certification (ISCC CFC)


- **Certification of product carbon footprints (PCFs)**
- **Low carbon claims for products with improved carbon footprint due to**
  - Decarbonization measures during production (and use of conventional feedstock)
  - Use of ISCC PLUS certified feedstock
- **Applicable for co-processing setups with annual verification of mass balance and volumes**
- **Module can be used on its own or combined with ISCC PLUS feedstock**
- **Iterative approach for further development of document:**
  - Certification scope specific requirements for PCF calculation to aim for comparability and reproducibility of PCF results
  - Currently developed approaches include e.g. CCS and CCU
  - CFC module is under development, currently restricted certification possibilities with direct involvement of ISCC

*https://www.iscc-system.org/certification/iscc-certification-schemes/iscc-carbon-footprint-certification/

# The introduction of the ISCC Carbon Footprint module allows a differentiation from ISCC PLUS as well as its combination

## ISCC Carbon Footprint Certification

- PCF of material is certified. Material itself, its origin / feedstock is not certified.
- No non-conventional feedstock necessary for certification

## ISCC PLUS certification

- Material (and its origin / feedstock) is certified.
- Non-conventional feedstock necessary for certification

**→ CFC Module can be used on its own or combined with ISCC PLUS feedstock**

- "ISCC PLUS logo" remains for materials from non-conventional feedstock
- Additional "logo" (to be developed) for GHG performance of PLUS certified products

**→ Update of GHG addon of ISCC PLUS will be developed as one / several certification approach(es) for the different PLUS feedstocks under the CFC Module**

ISCC
International Sustainability & Carbon Certification

# Current CFC certification approaches

- **Supply chains including Carbon Capture and Storage (V1.1)**
- **MeOH production from CO2 (Carbon Capture and Utilization, V1.1)**
- **Silicon metal production with reduced PCF (V1.2)**
- **Downstream entities handling CFC material (V1.2)**

**Under development**

- **PCF calculation for mass-balanced PLUS products under CFC**
- **Allocation of Renewable Energy to dedicated product volumes**

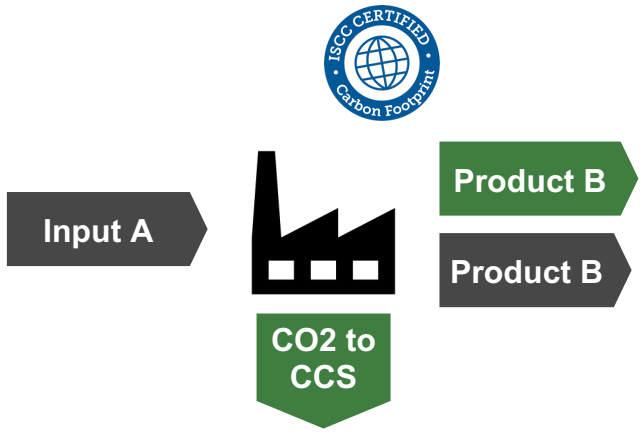
Please see V1.2. of the ISCC system document in public consultation under this link*.
We are looking forward to your feedback!

ISCC International Sustainability & Carbon Certification

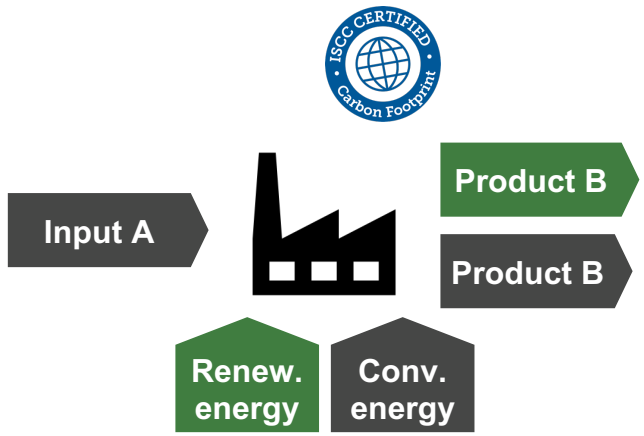
*https://www.iscc-system.org/governance/public-consultation/

# ISCC CFC approaches combine a mass balance with PCF information in a two-PCF-approach

**Example 1: Carbon Capture and Storage**




**Example 2: Renewable Energy** — Under development

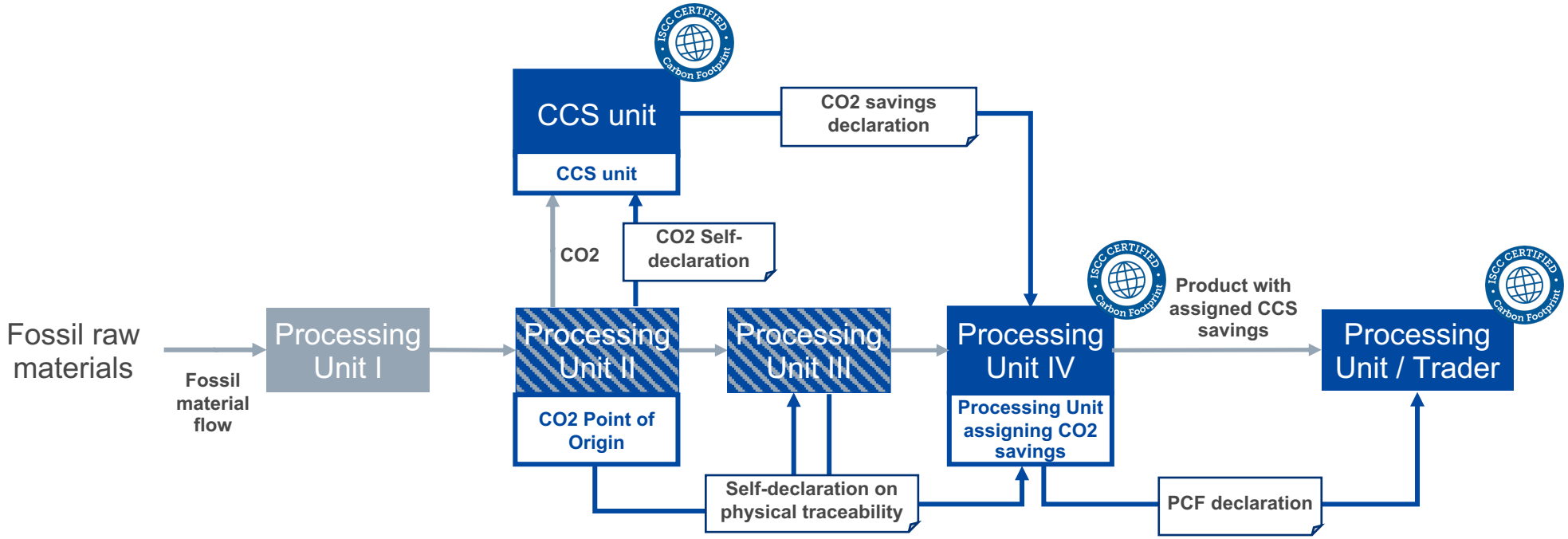



**Example 3: Combination PLUS - CFC** — Under development


- **Two-PCF-approach: baseline PCF and low carbon PCF**
- **Annual verification of mass balance verifies sold product amounts with low carbon PCF and baseline PCF**

ISCC International Sustainability & Carbon Certification

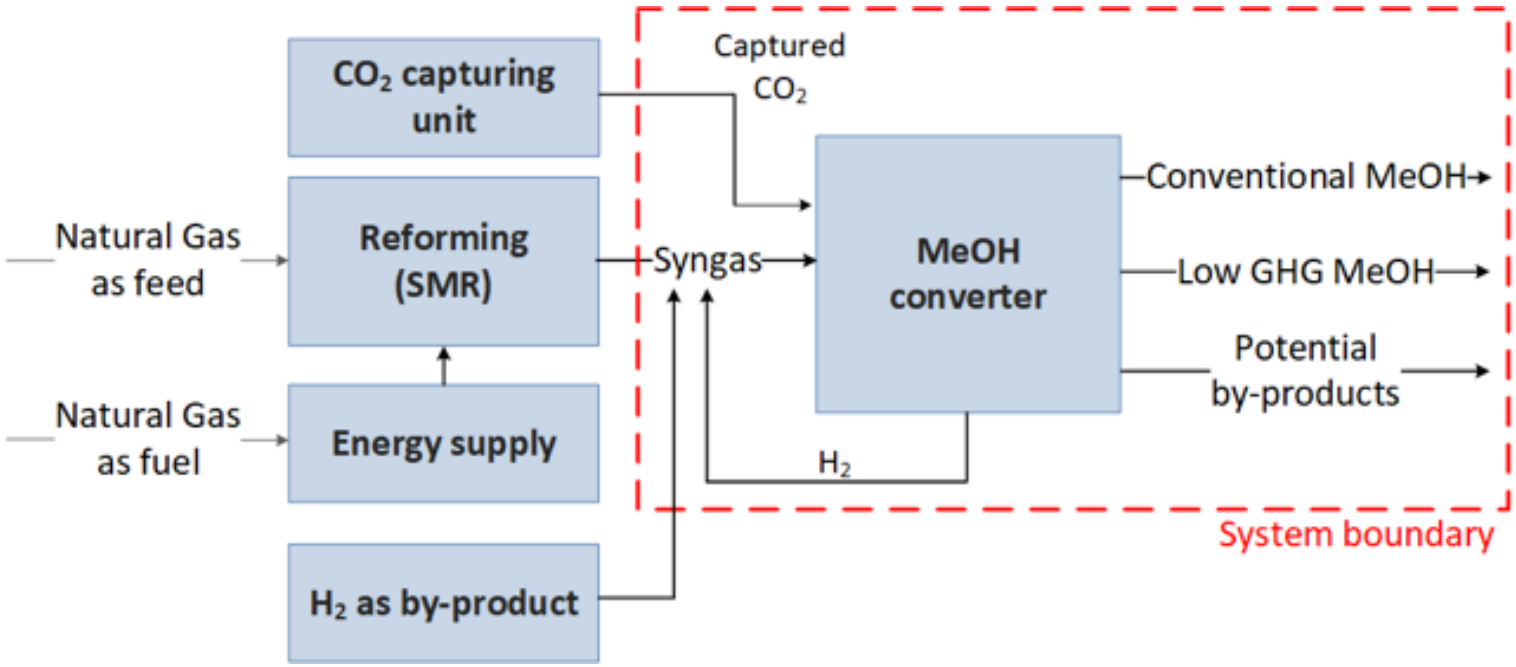
# Current approaches (1/4): ISCC CFC certification approach for supply chains with CCS



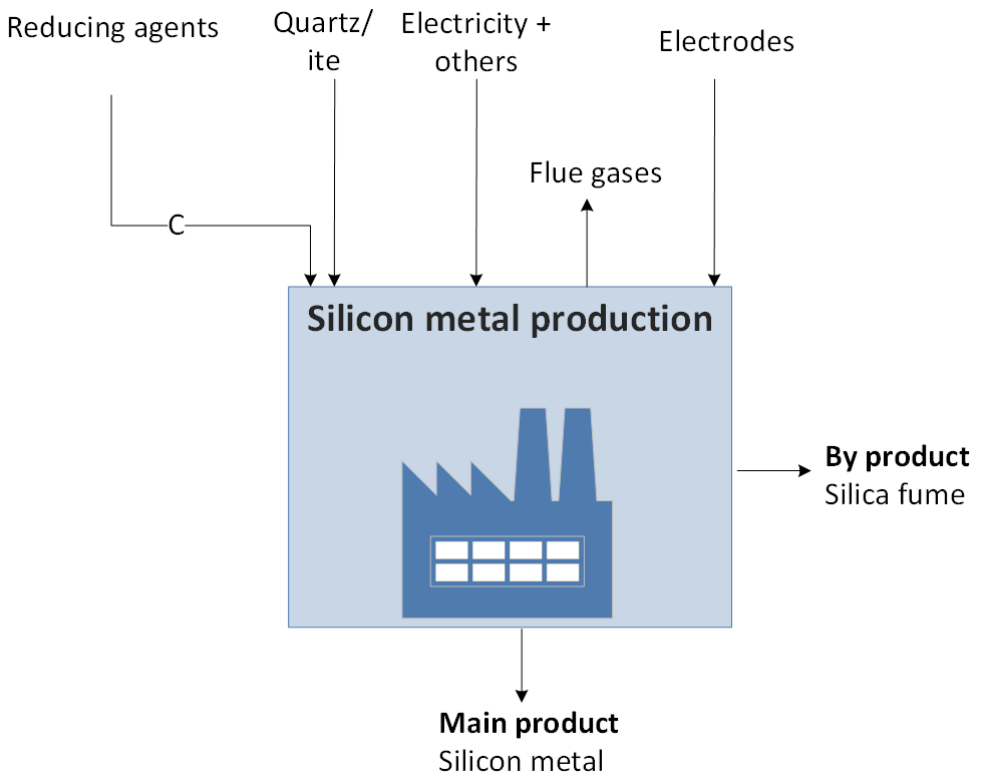

- Applicable also for fossil supply chains
- CCS unit needs to be physically linked to supply chain, ensured via documentation
- Calculation of baseline PCF and net CO2 savings
- Emission balancing approach: net zero PCF possible (compensation), no double counting
- Pilot certificate issued

ISCC International Sustainability & Carbon Certification

# Current approaches (2/4): Methanol from $CO_2$ (CCU)

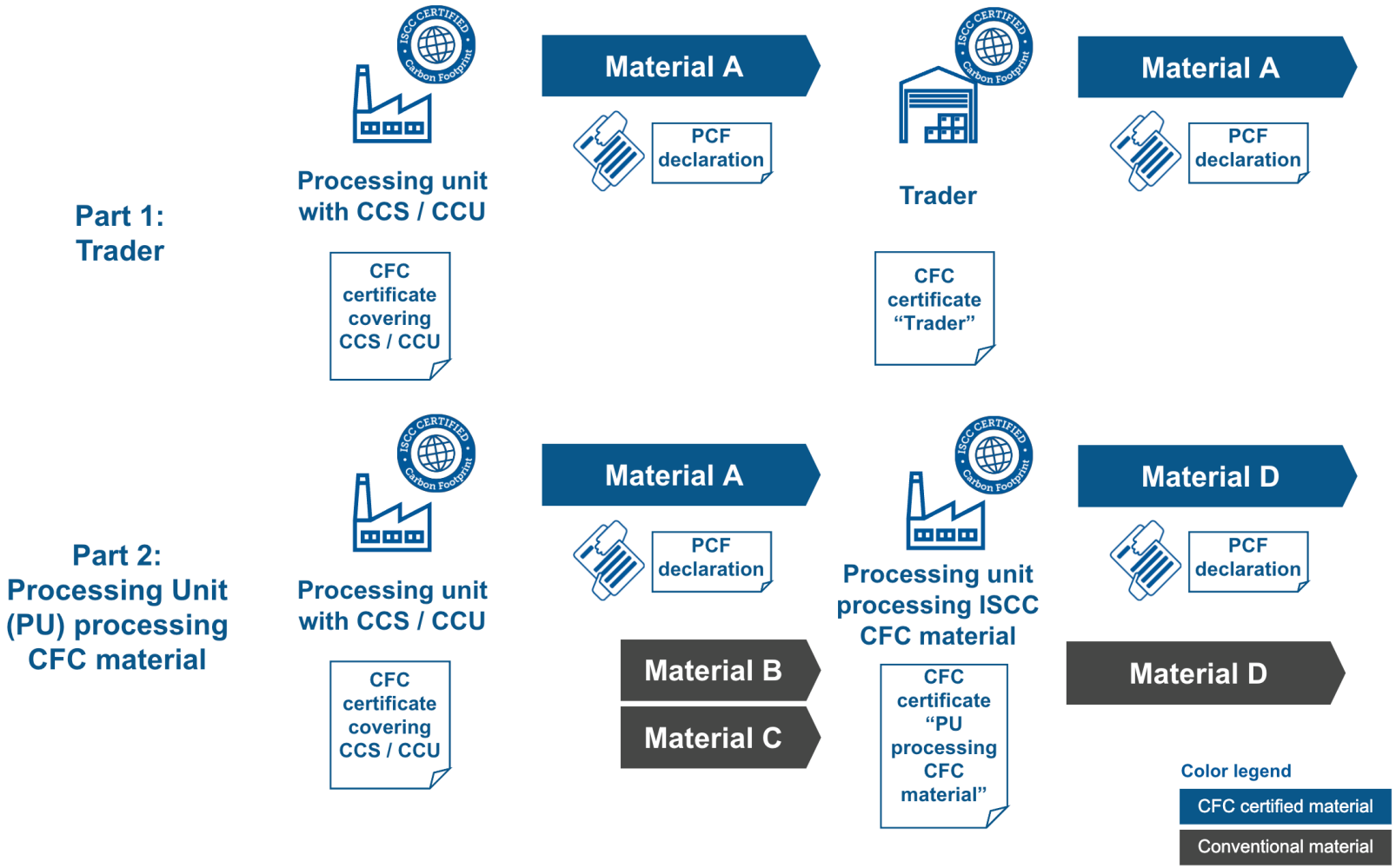


# Current approaches (3/4): Silicon Metal production with reduced PCF




ISCC International Sustainability & Carbon Certification

# Current approaches (4/4): Downstream entities handling CFC certified material




ISCC International Sustainability & Carbon Certification

# The certification approach for mass-balanced ISCC PLUS products under ISCC CFC aims to…

…offer a cradle-to-gate PCF with -1/+1 approach to allow e.g. consideration of a carbon uptake for biogenic feedstock.

…be in line with ISO 14067 and TfS.

…allow a third-party verification for PCFs of mass-balanced PLUS products.

…calculate PCFs of mass-balanced PLUS products comparably, reproducibly and in a transparent manner.

…allow calculating two distinct PCFs for the same material with and without attributed PLUS certified input.

… align the attribution of feedstocks to products (mass balance) with allocating emissions to products (PCF calculation) in one consistent approach.

ISCC International Sustainability & Carbon Certification

ISCC
International Sustainability & Carbon Certification

# Thank you!

**ISCC System GmbH**

**Hohenzollernring 72, 50672 Cologne, Germany**

**www.iscc-system.org**