



ISCC TC Circular Economy and Bioeconomy – Results of Working Group “Mass Balance”

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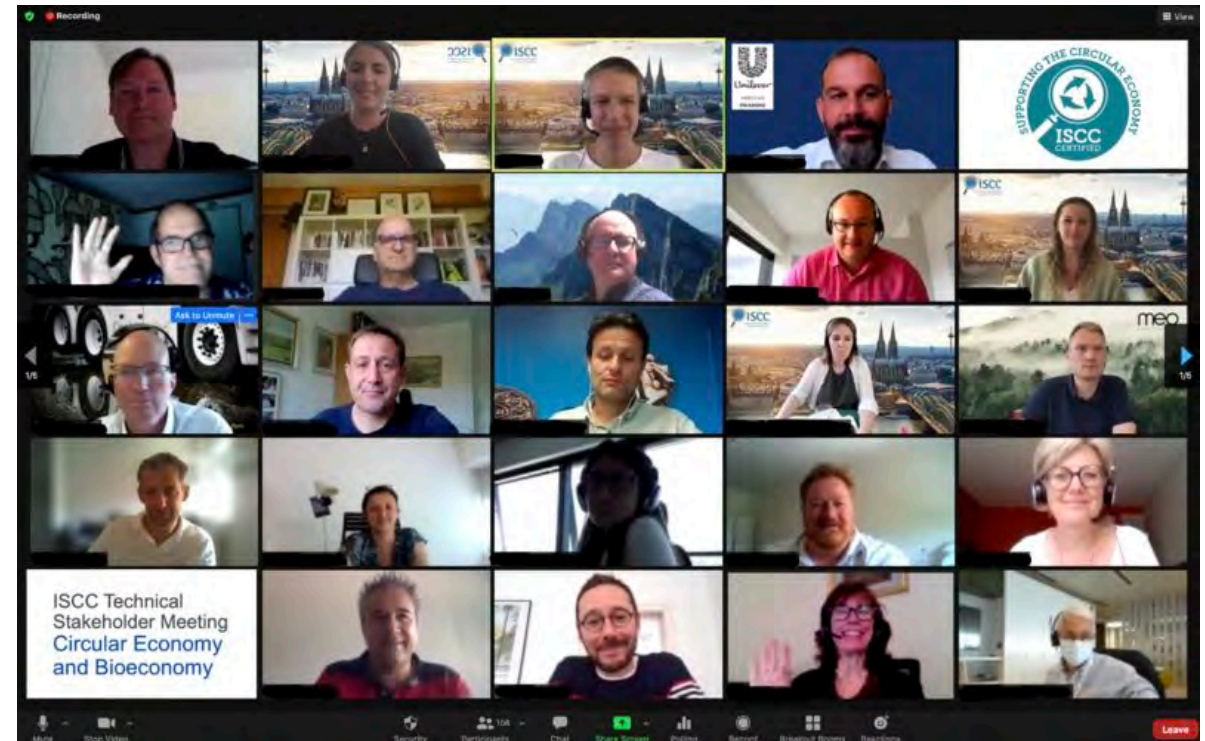
ISCC Technical Stakeholder Meeting Circular Economy and Bioeconomy, 9 December 2021

The working group mass balance discusses latest developments related to mass balancing in the bioeconomy and circular economy

- Working group of the Technical Committee Circular Economy and Bioeconomy
- Two meetings in 2021, each with ~20 participants
- Contributions from different stakeholders (associations, companies)

Topics

- Mass balancing options
- Further development of the ISCC PLUS scheme
- Guidance for system users & certification bodies



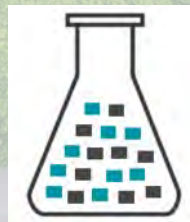
Screenshot of 3rd Technical Committee

Next to reduced plastic use and use of more sustainable substitutes, increased recycling rates are key to overcome the plastic waste challenges

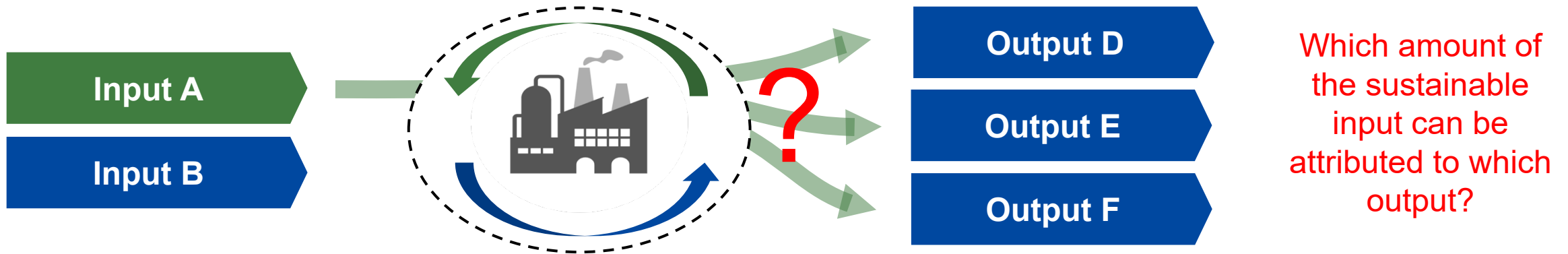
Mechanical and chemical recycling are both options to re-use plastic waste. **Both must be scaled up.** The mass balance approach supports advanced recycling.

The mass balance approach offers several benefits:

- **Integration** of sustainable raw material into supply chains, **existing** processes and assets
- Mix with conventional feedstock which is **still required**
- **Cost-efficient and quick scale-up** of sustainable volumes and new technologies
- Chemical recycling allows applications for **food contact**
- **Traceable and credible** handling of sustainable material



For the mass balance approach several attribution options are discussed from authorities and stakeholders



Which amount of the sustainable input can be attributed to which output?

Legislative guidelines are expected to come

- In the EU, an Implementing Act of the Single Use Plastic (SUP) Directive may include the mandatory use of a specific attribution option
- Discussed attribution options: proportional, free attribution, fuel exempt (and auto consumption exempt), polymer only

ISCC contributed to the ongoing discussions on mass balancing under consideration of stakeholder feedback

- Discussions with authorities and their consultants
 - EU: Single-use-plastic directive implementing act, ISCC contribution in the context of sustainability certification, verification measures and credible governance structures
 - UK, ES, Japan: Discussion about possible recognition of ISCC PLUS in the context of national plastic taxes and recycling targets
- Participating in conferences explaining ISCC's concept and measures for credible mass balancing along complex supply chains
- Exchange with associations like CEFIC, Plastics Europe and Consumer Goods Forum
- ISCC added to the discussion the implications of specific attribution options in terms of practical auditing



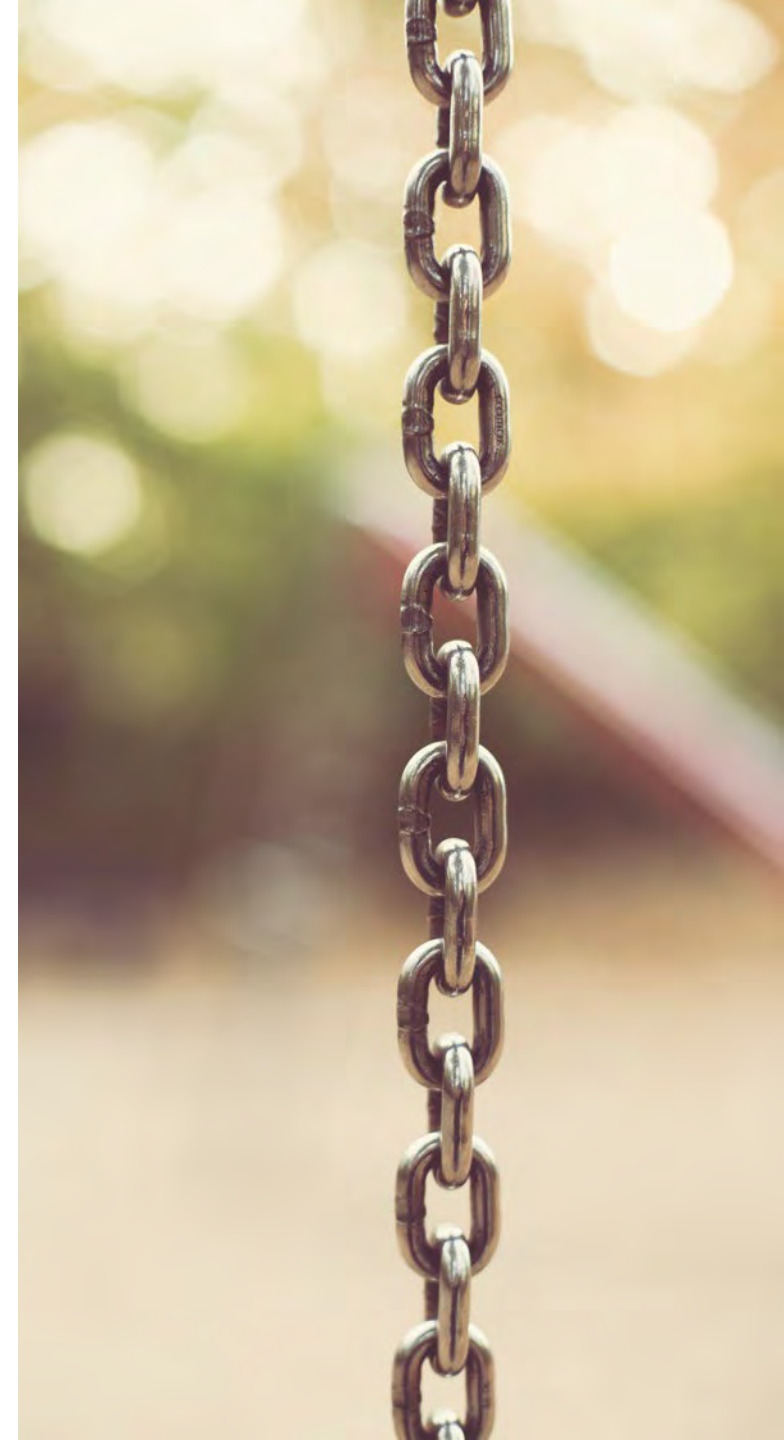
To bring a first stakeholder feedback in the discussions, early this year ISCC collected feedback from stakeholders on free (certified) attribution

Stakeholder feedback/ recommendations:

- **Clear guidelines within defined system boundaries for verification by 3rd parties are needed:**
 - Site-specific mass balances
 - Calculation of conversion factors (e.g. taking into account losses)
 - Reasonable limitations for sustainable share allocation (e.g. chemically/technically possible)
- **Core benefits of the free (certified) attribution approach:**
 - Allows the use of existing assets
 - Supports sourcing of additional feedstock and a continuous cost-efficient scale-up of sustainable volumes
 - Drives investment into new technologies
 - Certain flexibility important in early development stage of supply chains
 - Too restrictive allocation approaches reduce economic feasibility of certified products and stop transition to circular economy because generating of significant volumes becomes too expensive. Some companies may stop their activities again

In its recent meeting the working group discussed the implications of different attribution options

- ISCC provided concrete example numbers to illustrate the application of the different attribution options as a basis for the discussion
- Discussed implications of attribution options on sustainable materials and products:
 - Availability of sustainable material upstream
 - Implications for prices of the sustainable material
- Feedback to brand owner perspective covering the consumer view: Transparency on raw material category and used attribution option important
- Global companies need certification options for the EU market and for other markets without the mandatory use of a specific attribution option (other regions than EU, markets within the EU not covered under SUP)



ISCC provided insights on practical audit implications of the different attribution options

**For some attribution options a product classification is needed (e.g., as a fuel).
This product classification is not straight forward in complex value chains of chemical industry.**



From a certification point of view a clear way to determine the product classification in an audit is required.

- Does the producing company know the further use of its products or parts of it (e.g., sold to traders/ external companies)?
- How can the auditor verify the further use of a product in an onsite audit?
- How to provide clear guidelines for products/ streams?

- Example: “Whitelist”, which defines default usage of products. Producer needs to proof different usage of material if it should be considered differently.
- ISCC brought up the issue of practicable auditability of the different attribution options to consultants of the commission



ISCC will take regulatory developments and feedback from all stakeholder into account

- ISCC thanks all system users and stakeholders for their fruitful input and helpful discussions
- ISCC will address the needs of stakeholders and regulatory frameworks in the further development of ISCC PLUS
 - Continue offering certified attribution
 - Develop solutions for future regulated markets according to requirements from competent authorities
- ISCC will provide guidance for system users on the requirements of the offered attribution options

The working group “Mass Balance” will continue its discussion on market and regulatory developments of the attribution options in the following year.



Many thanks for your attention!

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