

# Harmonization of regulatory requirements for sustainable fuels and products

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# Harmonization of regulatory requirements for sustainable fuels and products.

- Traceability and calculation of full lifecycle impact are keys to avoid green washing.
- Certification is not a guarantee of sustainability.
- Methods/standards are on its way.

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# Green Deal

154 initiatives and 96 submitted. 49 still to come and 4 withdrawn.

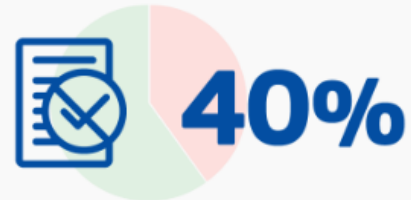
**Directive on substantiation and communication of explicit environmental claims (Green Claims Directive).** Stop companies from making misleading claims about environmental merits of their products and services.

And many others -SUP DIRECTIVE, PPWR....

Source [https://environment.ec.europa.eu/topics/circular-economy/green-claims\\_en](https://environment.ec.europa.eu/topics/circular-economy/green-claims_en)



53% of green claims give vague, misleading or unfounded information



40% of claims have no supporting evidence



Half of all green labels offer weak or non-existent verification



There are 230 sustainability labels and 100 green energy labels in the EU, with vastly different levels of transparency

## 3 areas of concern

Show how the product performs environmentally significantly better than what is common practice.

How to calculate footprint?

Sustainability criteria?

Chain of custody method?

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Calculate footprint?

## CARBON UPTAKE

Reducing the environmental impact with biochemicals-methods need to acknowledge the *carbon uptake during growth of the biomass*.

With PEF method recognition of carbon uptake only after incineration, but not recognized at gate. This means that fossil product show lower footprint than biobased or recycled product!

PEF=Product Environmental Footprint

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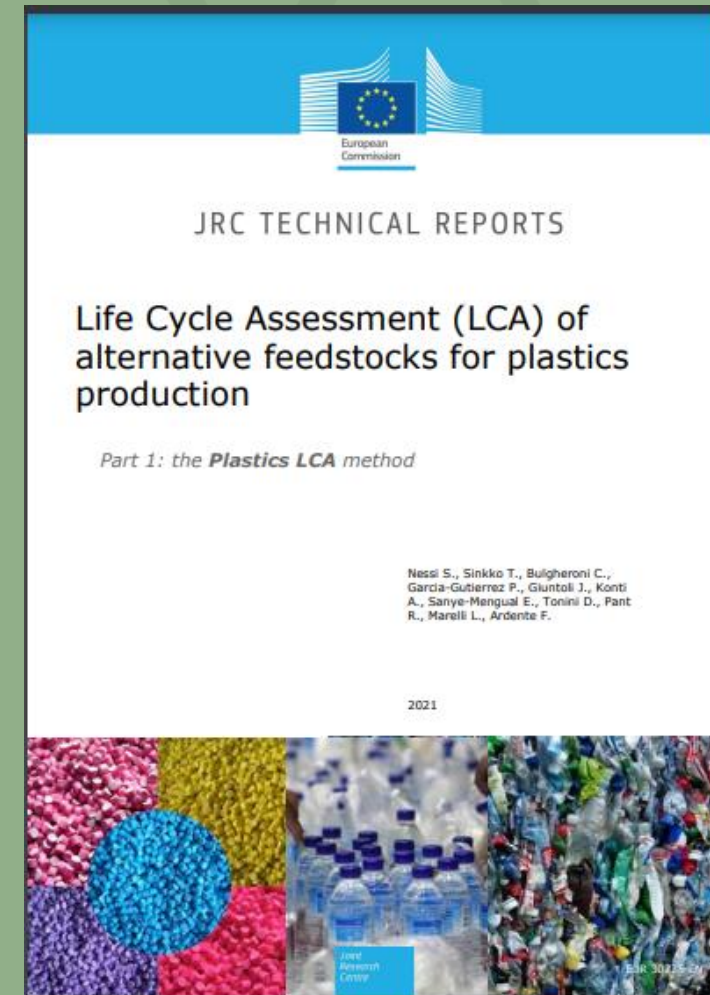
Report from Joint Research Centre (JRC) about how to compare bio-based and fossil-based plastics through LCA.

European Bioplastics evaluated report and discovered that bio-based plastics are disadvantaged in more than ten areas.

Ongoing work – CEN TC 411/WG4 Comparing bio-based and fossil-based products through LCA,

EN 18027. Expected public consultation 2023-11-30

*Bio-based Products – Life Cycle Assessment - Additional requirements and guidelines for comparing the life cycles of bio-based products with their fossil-based equivalents.*



## No legal criteria for Sustainability

EU Taxonomy Environmental Delegated Act (DG FISMA),  
Manufacture of plastic packaging goods.

Sustainable bio-waste feedstock refers to industrial bio-waste and municipal bio-waste, it **excludes** primary biomass in the absence of legally agreed sustainability criteria.

Suggestion; Implement RED II sustainability criteria for products and materials.

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# Chain of Custody 5 models in ISO 22095

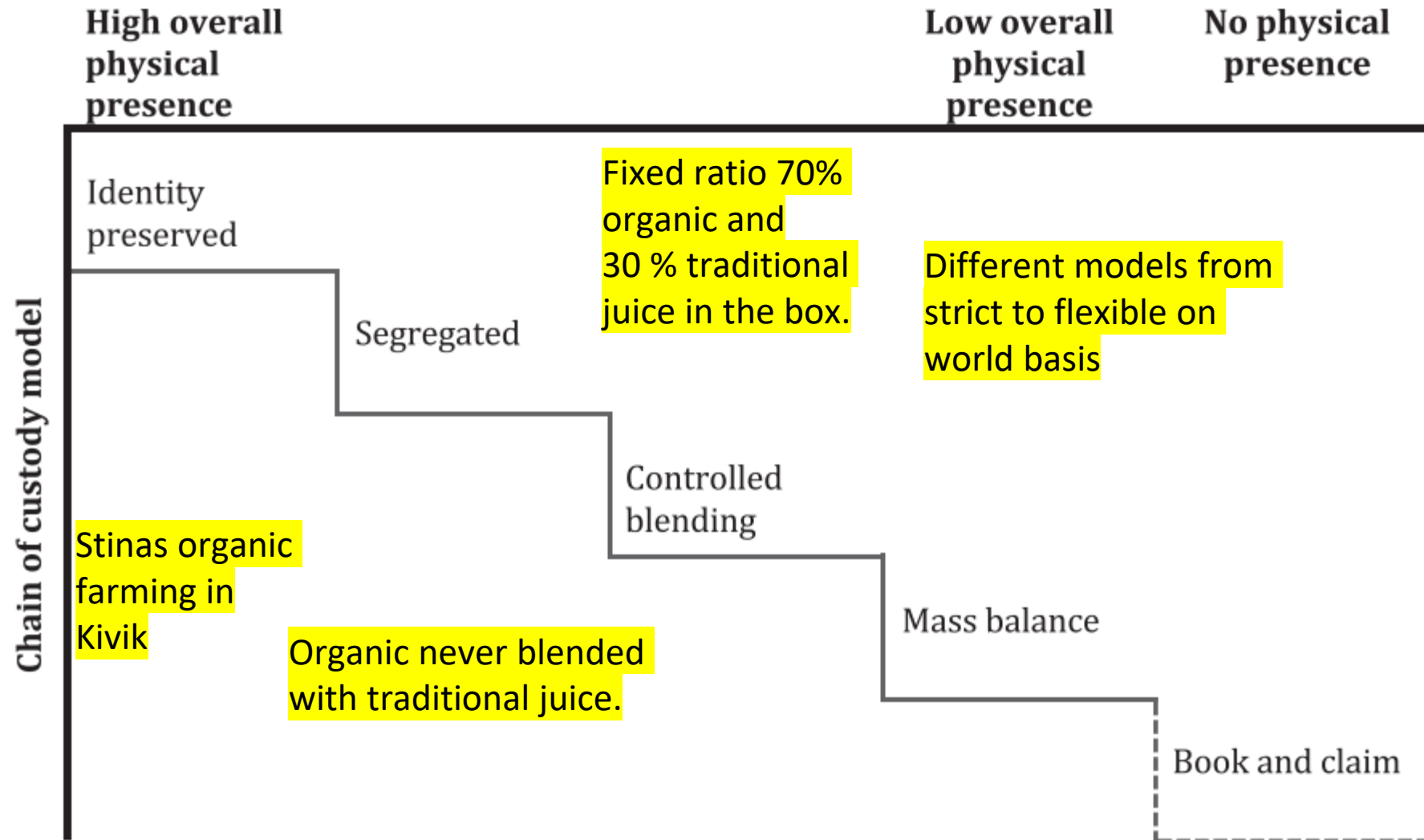


Figure 1 — Indicative illustration of chain of custody models ranked according to the physical presence of specified characteristics



Traceability and claims for sustainable fuels regulated in REDII

Product footprint references to ISO 22095 or certification schemes, 3<sup>rd</sup> party verification, not to be mixed up with the ones legally regulated in REDII.



***ISO 22095:2020***  
***Umbrella standard***

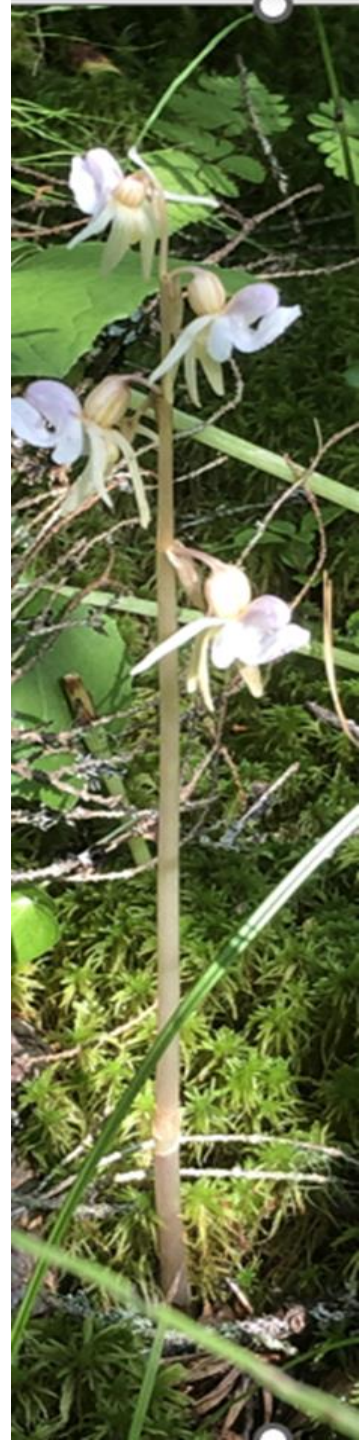
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Mass-balance-important to drive market for recycled/renewable content.  
Mass-balance as a steppingstone to increase volumes of responsible sourced raw materials.



Understandable for consumers? Drive the production of more organic chocolate? Fair competition? Used just as an example to explain one flexible type by which segregated and measurable content will not be reached in a longer run.

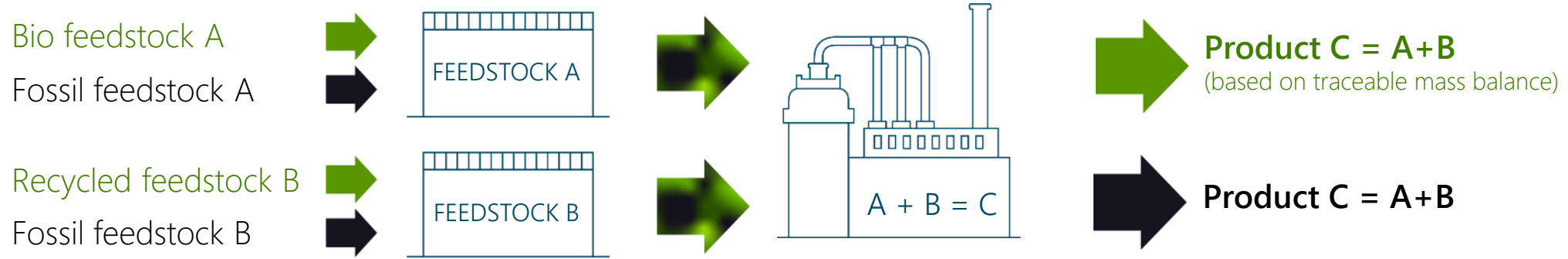


# References to the mass balance method-3<sup>rd</sup> party certification??

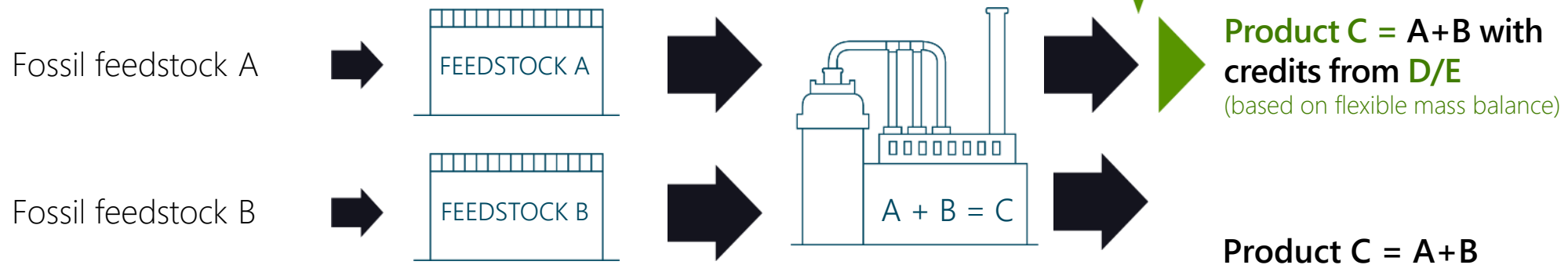
<b>Traceable mass balance</b>	<b>Flexible mass balance-many variations</b>
<b>Chemical traceability</b>	<b>Chemical traceability</b>
Only the raw materials used to produce the product.	Any raw material can be used for calculation.
One raw material can only replace its own share of the product.	One raw material can be used for calculation even if the product is produced from several raw materials.
<b>Physical traceability</b>	<b>Physical traceability</b>
A production process, the steel, exists for producing the product from the raw materials.	No real process needs to exist, allocation of credits from any raw material to any product is allowed.
No credit transfer within or between companies. There has to be a physical connection between the raw materials used and the production site.	Credit transfer allowed on organization level (globally). There is no physical connection between the raw materials used and the production site.

# Mass balance-Chemical traceability for enabling the transition

## Chemical traceability- real development



## No Chemical traceability- any feed stock



# Ways forward

- EU-RED
- ISO TC 308/WG2 ISO 13662, Chain of Custody — Mass balance — Requirements and guidelines. Book and claim ISO 13659, Chain of Custody — Book and Claim — Requirements and guidelines.
- Single-use plastic beverage bottles – Implementation Act EU rules for calculating, verifying and reporting on recycled plastic content.

European Policy makers to set clear rules and limits for using mass balance.

The methodology affects possibility to make green claims for brand owners. Claims and methods should give level playing field for mechanical recycling and biobased products. New technologies and feed stocks to be developed.

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EU Renewable Energy Directive 2009!

Time to act for products!

The transition to circular feedstocks has to be made in a sustainable and credible way.

Thanks for listening.

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