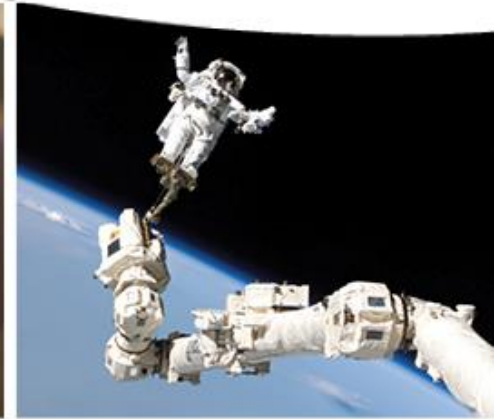


Bio-based products

Maria Gustafsson 2015-07-01



Starting point for CEN/TC 411 – Mandates on bio-based products



- Mandate: request from EC to develop specific standards
- Within framework of Lead Market Initiative
- Mandates in the field of bio-based products:
 - M/429 on the elaboration of a standardization programme for bio-based products
 - M/430 on bio-polymers and bio-lubricants
 - M/491 on bio-solvents and bio-surfactants
 - M/492 for the development of horizontal standards for bio-based products

CEN/TC 411 *Bio-based products*



- **Scope** of mandate: standards for bio-based covering horizontal aspects:
 - consistent **terminology**
 - sampling
 - certification tools
 - **bio-based content**
 - application of and correlation towards **life cycle assessment**
 - **sustainability criteria** for biomass used & final products
 - aspects where further harmonisation is needed at horizontal level
- Focus on bio-based products, **other than** food & feed and bioenergy
- (Also development of standards for bio-solvents according to M/491)

Setting the scene in CEN/TC 411

What is a **bio-based product**?

product wholly or partly derived from biomass

Note 1 to entry: The bio-based product is normally characterised by the bio-based carbon content or the bio-based content. For the determination and declaration of the bio-based content and the bio-based carbon content, see the relevant standards of CEN/TC 411.

Note 2 to entry: Product can be an intermediate, material, semifinished or final product.

Note 3 to entry: "bio-based product" is often used to refer to a product which is partly bio-based. In those cases the claim should be accompanied by a quantification of the bio-based content.

What is **biomass**?

material of biological origin excluding material embedded in geological formations and/or fossilized

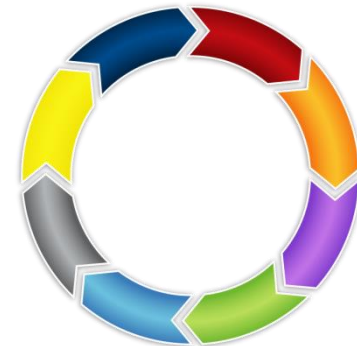
EXAMPLES (whole or parts of) plants, trees, algae, marine organisms, micro-organisms, animals, etc.

Bio-based content

- Definitions mean that there needs to be a physical bio-based content (%)
 - Mandatory to report both in B2B and B2C
- Proposal was raised to extend the scope to cover also products with an attributed bio-based content and/or characteristics of biomass (such as sustainability)
 - But not accepted due to risk of confusion and misleading claims, causing negative effects for the whole bio-based economy

Examples on standards under development in CEN/TC 411

Life cycle assessment (prEN 16760)



- Based on existing standards (EN ISO 14040 and 14044)
- Focus on specificities of the bio-based content/biomass
 - But the whole product is covered
- Streamlining the methodology so that it is used consistently for different types of bio-based products
- Published in December 2015 if approved

Includes areas such as:

- Resource use
- Land use
- Water inventory

- Modelling of
 - Agriculture
 - Forestry
 - (Aquaculture)



End-of-life



- A technical report is under preparation: Bio-based products – Guidelines for Life Cycle Inventory (LCI) for the End-of-life phase
 - Focusses on the specificities of the bio-based part of the product
 - Complement to the LCA standard
- Published in July 2016 if approved
- Proposal to develop horizontal standard on Biodegradability within CEN/TC 411
 - Not approved since not all bio-based products are biodegradable while fossil products can be = out of scope of CEN/TC 411

Sustainability criteria (prEN 16571)



- Based on the approach used in ISO 13065
- All three pillars
 - Environmental
 - Social
 - Economic
- No thresholds so no claims to be sustainable based on this standard alone
- Needs to be used for the biomass production, then you can choose to pass on the information regarding the biomass you use or to apply it for the entire supply chain
- Only for the bio-based part of the bio-based product
- Published in March/April 2016 if approved

Use of the sustainability criteria standard

- Basis for product specific standards / certification schemes
- Can be used as is for B2B communication
- Gives the economic operator a good overview and can be used for self-evaluation and –improvement
- A Technical Report is proposed to be developed containing practical examples of reporting



Finding the right balance



Acceptance



Questions?

Thank you for your attention!

For more information visit:

www.biobasedeconomy.eu

www.cen.eu/cen/Sectors/Sectors/Biobased

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