European Environmental Citizens Organisation for Standardisation

Organisation Européenne environnementale citoyenne pour la normalisation

STANDARDISATION DEVELOPMENTS ON BIO-BASED PRODUCTS: THE RISK OF GREEN WASHING

ECOS' position

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SUMMARY

ECOS has long been advocating for bio-based products to have a verifiable physical bio-based content, sufficient to claim that the product is largely derived from biomass, and therefore truly promote the sustainable use of renewable sources in our circular economy. ECOS has been involved in the standardisation developments in the area of bio-based products which were triggered by a European Commission Mandate (M/492) aimed to support the EU 'Lead Market Initiative'.

In this context, we strongly oppose the recent proposal by standardisers to include non bio-based products in the scope and work of CEN/TC 411 'Bio-based products'. Addressing both types of products simultaneously represents a threat to achievements made so far and a risk of greenwashing.

The development of products without a physical bio-based content, where biomass is fed in the production processes of conventional products (derived from fossil fuels) constitutes a very niche market. They are very different from bio-based products, have different composition, production methods and applications. These new products are not to enter standardisation work at the expense of bio-based products. Standardisation bodies should instead take the unique chance to develop tailor-made standards that demonstrate their unique specificity and characteristics of products without a physical bio-based content and to inform consumers about their potential benefits. ECOS believes that products without a physical bio-based content should be addressed in other product specific CEN Technical Committee that are not dealing with bio-based products.

ECOS' main concerns regarding addressing bio-based products with and without a physical bio-based content simultaneously changing the scope of CEN/TC 411 are:

- **The risk of green washing and consumer misguidance**
- **The risk of unfair competition**
- **The lack of verification methods for products without a physical bio-based content (type III products)**
- **The recyclability of biomass feedstock is no longer possible**

1. POLITICAL CONTEXT AND RECENT STANDARDISATION DEVELOPMENTS

In 2011, the European Commission issued a Standardisation Request (Mandate) in the framework of the 'Lead Market Initiative' for the development of horizontal standards and other standardisation deliverables for **bio-based products** (EC Mandate M/492)[1]. More specifically, M/492 required the European standards organisations to develop consistent terminology, sampling, certification tools, bio-based content, application of and correlation towards life cycle analysis, sustainability criteria for biomass used and for final products, and aspects where further harmonisation is needed on horizontal level.

As a result of M/492, CEN established CEN Technical Committee 'Bio-based products' (CEN/TC 411) to develop standards covering horizontal aspects of bio-based products. The standards that are being developed in the framework of M/492 are mainly focused on bio-based products other than food, feed and energy.

Standardisation efforts within CEN/TC 411 so far have led to the development of key standards which will enable the further market uptake of sustainable bio-based products providing clear, reliable claims to consumers that are verifiable. Such standards include harmonised methods for the determination of bio-based content, the definition of sustainability criteria for bio-based products, end-of-life options, and business-to-consumer communication.

An important discussion has now started about extending the scope of CEN/TC 411 Bio-based products to '*Products without a physical bio-based content'*, also known as '*Renewable Sources Products',* or '*Type III Products'*.

2. "BIO-BASED PRODUCTS" VERSUS "RENEWABLE SOURCED PRODUCTS"

Bio-based products are products that are wholly or partly derived from biomass with a certain amount of (physical) bio-based content. The bio-based content shall be verifiable (**Type I**), or measurable with a guaranteed minimum (**Type II**). To ensure this, harmonised calculation methods[2] are being developed by European standardisers in CEN/TC 411. The concept "bio-based" aims at further promoting the use of renewable raw materials as products and product components. Examples of bio-based products include disposable tableware, cleaning products, personal hygiene products, bio-solvents and paints, and bio-plastics.

Renewably sourced products (or **Type III**) is a new category of products where biomass is fed in the production processes of conventional products (derived from fossil fuels). Unlike bio-based products, there are no minimum requirements on the physical biomass content for this product type. At the same time, the biomass attributed to single final products

[1] http://ec.europa.eu/growth/tools-databases/mandates/index.cfm?fuseaction=refSearch.search#

[2] Methods for determining bio-based content (CEN/TR 16721, CEN/TS 16640, EN 16785)

cannot be measured with existing harmonised methodologies nor can it be verified. Despite this, there are on-going discussions within the technical committee considering the inclusion of Type III products in the scope and work of CEN/TC 411.

3. ECOS KEY CONCERNS

ECOS expresses deep concerns on the proposal to extend the scope of CEN/TC 411 'Bio-based products to Type III for the following reasons:

- **The risk of green washing and consumer misguidance**

Consumers have the right to make an informed choice, and should be able to distinguish between products with physical bio-based content and fossil products with attributed biomass. The risk of this is that certain products could be 'green washed' and marketed as bio-based despite being derived from fossil resources. This will compromise consumer confidence towards bio-based products (Type I and II) and the market use of existing standards for which the technical committee CEN/TC 411 was originally created.

- **The risk of unfair competition**

ECOS highlights two scenarios of unfair competition expected to occur:

'Fossil resource saving' claims will be a requirement for Type III products. However, certain bio-based products (e.g. paper and wood derived products) cannot make such a claim because there is no equivalent petrochemical manufacturing process.

In addition, if a Type III product claims 100% attributed bio-based content and an equivalent bio-based product with a smaller percentage of physical bio-based content is present, it is likely that consumers might prefer the first despite the fact that the bio-based content is not there and cannot be reused or recycled, in the view of promoting a circular economy.

- **The lack of verification methods for type III products**

Existing biomass calculation and verification methods for bio-based products cannot be applied for Type III products. The biomass used as feedstock in a Type III production process could be attributed downstream to a multitude of single final products, which then poses a risk of double-counting. To solve this issue, a certification scheme would be necessary, however such a requirement cannot be included in standards, according to CEN rules. This would show how inappropriate it is to attempt to extend the scope TC/411 'Bio-based products' to include fossil based Type III products.

- **The recyclability of biomass feedstock**

The recycling of bio-based content/biomass from products mitigates the need to source new biomass feedstock and therefore contribute to promote the circular economy approach. Type III products do not contain any biomass that can be recycled or recovered, and therefore do not potentially contribute to the ultimate objective to close materials loops.

Unlocking the full potential of the circular economy for bio-based products, including wood and wood-based material is key for the promotion of a circular economy. ECOS calls for only bio-based products to have a mandatory recyclability target to ensure that they truly promote the sustainable use of renewable sources.

4. CONCLUDING REMARKS

In conclusion, ECOS wishes to express support towards actions and initiatives that effectively promote the EU's bio-economy, hereunder application of sustainably produced biomass in consumer products, and the promotion of bio-based products from which biomass can be recycled and recovered. However, this EU effort must properly address key environmental and consumer protection issues with the development of ambitious European standards that allow for the verification of the above mentioned condition. We believe that an inclusion of Type III products in CEN/TC 411 would lower the level of ambition initially set by CEN and the European Commission mandate M/492 and bring negative consequences for the future of bio-based products.

5. ANNEX

Overview of Product/Type categories in the context of bio-economy:

- **Category/Type I Products** with a claimed bio-based content which is verifiable with a method as described in CEN/TR 16721 bio-based content (which is WI 2 of mandate M/492) can be called "bio-based products".

- **Category/Type II Products** with a measurable bio-based content, but a claimed bio-based content that deviates systematically from the actual bio-based content, can be called a bio-based product. Also that the boundaries for this claim "bio-based product" are that it shall be accompanied by statement of the minimum guaranteed bio-based content, can be called "bio-based products".

- **Category/Type III Products** with an attributed bio-based characteristic, but an actual bio-based content which can potentially be zero, cannot be called a bio-based

product.

Example on biomass allocation in complex processes

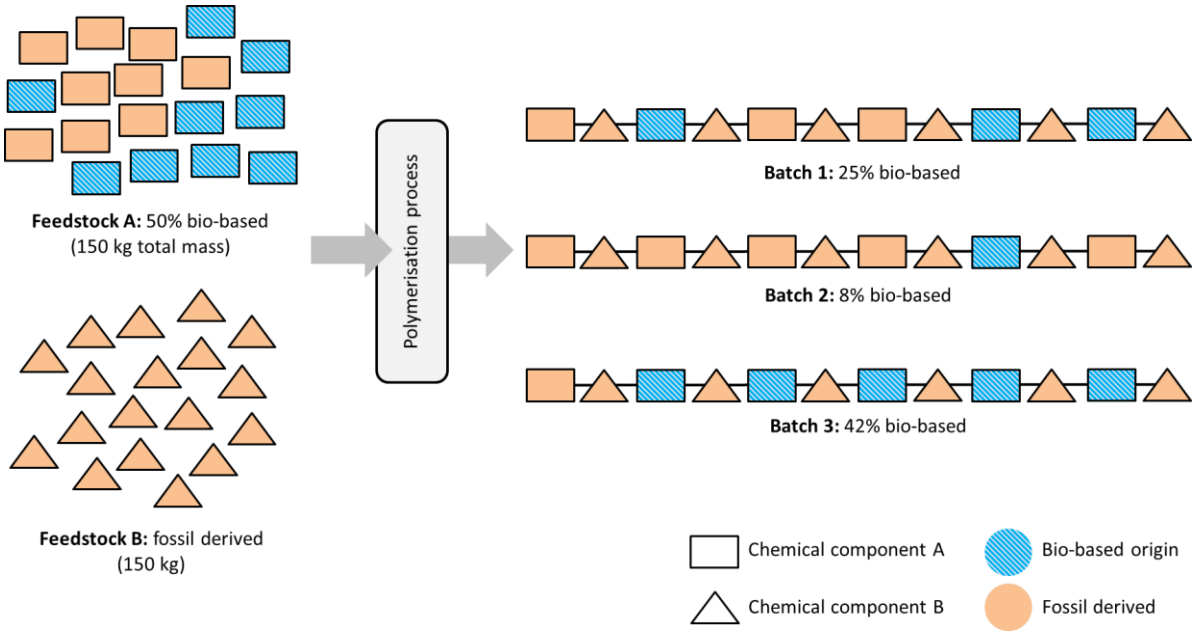
This example attempts to reflect the case of when a certain amount of biomass is introduced into a chemical process, and the supplier can allocate that biomass content in whatever proportion suits the customer (i.e. what they are willing to pay: “Depending on the customer’s wishes, between 25% and 100% of the feedstock needed can be replaced”). This is limited by amount of biomass feedstock, hence it is described as a mass balance.

To take a theoretical example, a polymer that is made from equal amounts of two feedstocks, shown as monomers A (rectangles) and B (triangles) are in the diagram below.

Component A can be 100% bio-based. However, in this example, half of it is bio-based and the other half is fossil derived. This composition can change over time, going down to even 0% bio-based feedstock, meaning this is potentially a category/type 3 product.

Component B is always fossil derived. The maximum bio-based content of the product is 50%, but only if all of component A is bio-based.

Three batches are made, indicated as a polymer of the two monomers A and B. The actual bio-based content of each batch depends on how much bio-based monomer was introduced at the time of production, and will fluctuate (possibly to 0% bio-based content).



If a customer wants a polymer with 55% 'fossil resource saving', they could purchase the first available batch (batch 1) at the relevant asking price. A second customer requiring 20% 'fossil resource saving' would then be able to buy batch 2. This means no more biomass is left unallocated, and so batch 3 could not be sold with any 'biomass content' or 'fossil resource saving' attributed to it. As the table shows, there is no relationship between the bio-based content and the claimed 'fossil resource saving'. In theory, with this approach it would also be possible to purchase 100% 'fossil resource saving' products that are completely fossil derived without any biomass contained within it.

As the maximum possible bio-based content in this example is 50% it would be misleading to sell products with higher values of 'fossil resource saving' or equivalent claims.

Batch	Customer requirement	Bio-based content of product
1	55%	25%
2	20%	8%
3	0%	42%