



Open-BIO

Opening bio-based markets via standards, labelling and procurement

**Work package 7
Labelling**

Deliverable N° 7.3: Proposal on eco-criteria for bio-based products

Public summary

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1 Public summary

Work Package 7 of Open-Bio deals with the question, whether the EU Ecolabel can be extended to explicitly cover bio-based products, and if yes, how. The objective of task 7.1 was to assess the suitability of ecolabel criteria for bio-based products, or in other words, to find out whether the existing criteria of ecolabels can be applied to bio-based products, whether there are conflicts of harmonisation and whether additional criteria can or have to be added in order to adequately label bio-based products.

The research of task 7.3 presented here builds on previous conclusions (see Deliverable D7.1 “Analysis of existing ecolabel criteria” and Deliverable D7.2 “Dedicated group of bio-based products”) and presents a concept for integrating or adding a “bio-based” criterion to the EU Ecolabel.

During the research it quickly became clear that the research agenda of developing a combined “bio-based and ecolabel” as set out in the description of work was not possible to do in a general form, but rather required the work on several exemplary cases. This is both due to the structure of a multi-issue label that considers different environmental impacts and requirements per product group and also due to the complexity of the group of “bio-based products”. From intermediates and building blocks to complex end products, covering all kinds of materials from wood over plastics to lubricants, solvents, surfactants and others, it is impossible to create one ecolabel for all of them. This is why the work presented in this report is structured around different product groups. The analysed product groups are:

- Plant-oil based paints and varnishes
- Rinse-off cosmetics with bio-based ingredients
- Absorbent hygiene products
- Detergents
- Mulch films & other plastic agricultural equipment (plant clips etc.)
- Disposables for food
- Wood-plastic composites (WPC)
- Cellulosic pulp
- Bio-based solvents

However, several issues also arose during the work that pertained to all or at least several of the evaluated product groups. They can be summarised as the general topics that frame the whole exercise of creating an ecolabel for bio-based products and should be clear to the community of policy makers, label experts and bio-based producers.

One such issue has been to justify the promotion of bio-based products through the EU Ecolabel. Promoting bio-based products (a.o. through Open-Bio and ecolabelling) has been a **political decision** and there are different positive effects associated with doing so. Labelling is one tool to support the market uptake of bio-based products. The EU Ecolabel requires LCA evidence that bio-based products perform better in order to promote them. It is possible to provide this evidence in some cases, but not in all. However, the researchers

argue that while LCA evidence is important, it is also not the be-all and end-all to evaluate environmental impacts, and there are **overarching environmental reasons** to promote bio-based products (see Chapter **Fehler! Verweisquelle konnte nicht gefunden werden.**).

Other issues were the methods of declaring bio-based content, the discussion around different end-of-life options, sustainability certifications and the information about bio-based content appearing on the EU Ecolabel (see Chapter **Fehler! Verweisquelle konnte nicht gefunden werden.**).

In the chapters on criteria development, the report describes each product group in terms of market relevance, environmental impacts and suggested criteria development. The approaches differ from product group to product group, which is due to different reasons: First of all, the development needs are different for already existing criteria catalogues that could be amended than compared to newly suggested product groups. Also, the needs are different for end products compared to intermediate modules. Secondly, the product groups are very diverse in terms of typical application environments, disposal options, environmental impacts and also data availability. Therefore, the sub-structures of the chapters differ slightly. The basic structure looking at market relevance, environmental advantages and suggested criteria is the same for every group, however.

It is concluded that increasing the bio-based share in the EU Ecolabel criteria catalogues of all selected end product groups – possibly also through the selected intermediates – could provide potential environmental benefits, due to bio-based properties such as reduced toxicity, sustainable sourcing of feedstock, reduced CO₂ footprint during production and biodegradability, which avoids waste pollution at the end of product life. For each product group, criteria suggestions are made that cover some of the most relevant impact categories related to the specifics of using bio-based materials.