# Draft second PEFCR & PEF-RP study report: Apparel and Footwear

## **Comment types:**

G = general; T = technical; E = editorial

Comments sorted by:

Name/Organization; Document; Subject; Figure/Table/Note; Type of comment; Comment; Proposed change; Reference if relevant

1 Oslo Metropolitan University PEFCR Product Lifetime

One fundamental problem with the PEF modelling of duration of service is that it lacks scientific, empirical evidence. We have developed a research method that uses waste audit interviews to facilitate quicker and easier study of the relationship between different garment properties and extended use, see detailed project suggestion in the references.

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It is surprising that PEFCR still believes in the myth that durable clothing will be used longer, despite increasing analyses of textile waste showing that many clothes are discarded before being worn out (in Norway, 2/3rds, Syversen et al., 2024), and consumers justify disposal for reasons other than wear and tear (also 2/3rds). Requiring durability in clothing, when most of it is discarded for entirely different reasons, is unfortunate. This requirement is not only futile; it can be directly harmful to both the environment and consumers. Demands for greater durability promote indirectly the use of plastic and thus contribute to Fast Fashion. Additionally, it may lead to increased environmental impact due to greater material consumption.

Conduct independent research to properly characterise the influence of a product's intrinsic attributes on duration of service.

Suggestion for research project: <a href="https://clothingresearch.oslomet.no/2024/04/18/new-method-to-capture-relationship-between-properties-and-use/">https://clothingresearch.oslomet.no/2024/04/18/new-method-to-capture-relationship-between-properties-and-use/</a>

Waste audit data from Norway. Syversen, F., Klepp, I. G., Skogesal, O., Rabben, K., Sigaard, A. S., Berg, L. L., & Laitala, K. (2024). Dypdykk i materialstrømmene for tekstiler fra husholdninger i Norge. Retrieved from <a href="https://mepex.no/wp-content/uploads/2024/01/05.01.24\_Mepex\_Dypdykk-i-materialstrommene-for-tekstiler-fra-husholdninger-i-Norge-1.pdf">https://mepex.no/wp-content/uploads/2024/01/05.01.24\_Mepex\_Dypdykk-i-materialstrommene-for-tekstiler-fra-husholdninger-i-Norge-1.pdf</a>

Relevant discussion papers: <a href="https://clothingresearch.oslomet.no/2024/04/25/feedback-delivered-on-eppr-1st-milestone/">https://clothingresearch.oslomet.no/2024/04/25/feedback-delivered-on-eppr-1st-milestone/</a>

https://clothingresearch.oslomet.no/2023/05/14/ecodesign-position-paper-textiles-and-footwear/

Oslo Metropolitan University PEFCR Consultations and stakeholders G

To ensure an effective public consultation, sufficient information about proposals and their outcomes is crucial. Unfortunately, this transparency is lacking in these PEFCRs. Due to the lack of clarity on how PEF scores different products and the reasons for variations, providing informed feedback on these PEFCRs is not feasible. The system is so complex that even for those who work with it, it is difficult to see the actual results of it. This is a democratic problem. How should consumers understand why something is "better" than something else - and how should politicians who make this decision know what they are deciding? It seems that much of the background documentation is not available, and therefore much of what is available does not make sense. A minimum requirement would be that before anything is decided, it must be tested. Which types of products will be winners and losers in such a system?

Make all documents available - show the consequences of the system before it is decided or taken into use.

The absence of reliable Life Cycle Assessment (LCA) data and various system limitations favor the use of plastic, which contradicts the EU's (and Norway's) commitment to reducing plastic pollution. The lack of this data could render the use of Product Environmental Footprint Category Rules (PEFCR) illegal for marketing purposes, similar to the situation with the Higg Materials Sustainability Index (MSI) (see reference). The issues associated with outdated, poor-quality, and non-comparable LCAs have long been recognized and should not be incorporated into a system that further obscures these errors from both industries and consumers.

To address this, either provide the missing data (along with a better-defined functional unit) or acknowledge that there is currently insufficient basis for implementing PEFCR given the state of the data.

https://www.forburkertilsynet.no/eng-articles/consumer-authorities-issue-guidance-on-environmental-claims-to-the-textile-industry

4 Oslo Metropolitan University *PEFCR* System Boundaries T

PEFCRs unfairly disadvantage products made from natural fibers due to differences in system boundaries compared to those made from fossil fuel-based fibers (Wiedemann 2022). While the environmental impacts of farming natural fibers are fully considered in PEF, those of fossil fuels are not. This bias stems from treating oil and natural gas as environmentally benign raw materials in LCAs, resulting in better scores for fossil fuel-based clothing. Such inconsistent boundaries create an unfair advantage, contrary to the intended purpose of PEFCRs to ensure fair product comparisons. Norwegian consumers prefer natural materials in their textiles, yet fast fashion drives increased plastic use. If PEFCRs continue favoring plastic, both the environment and consumers suffer. This bias must be addressed to prevent PEFCRs from perpetuating harmful practices.

Avoid using LCA methods like PEF to compare products from extractive and non-extractive industries. Instead, establish separate categories for fossil-fuel based and natural products. Enhance PEF with circularity indicators that prioritize sustainability attributes like naturalness, renewability, and biodegradability. Ensure the interpretation phase of PEF for extractive industry products accounts for the environmental impacts of raw material acquisition by reporting and weighting fossil and biogenic carbon percentages appropriately according to EU environmental goals.

SG Wiedemann, Using LCA and Circularity Indicators to Measure the Sustainability of Textiles—Examples of Renewable and Non-Renewable Fibres, SUSTAINABILITY, Dec 2022 <a href="https://clothingresearch.oslomet.no/wp-content/uploads/sites/1026/2023/02/Background-paper-on-PEF.pdf">https://clothingresearch.oslomet.no/wp-content/uploads/sites/1026/2023/02/Background-paper-on-PEF.pdf</a>

5 Oslo Metropolitan University *PEFCR* Relevant impact categories G

It is important to focus on microplastics instead of microfibers to align with EU strategies aimed at reducing plastic pollution. All synthetic textiles ultimately break down into microplastics unless they are incinerated. Therefore, quantifying the potential release of microplastics can be easily achieved by determining the weight of synthetic fibers in the product, providing a simple measure of the potential impact. Currently, only a few textiles are incinerated, and fibers are lost during use and disposal, not just during laundering. Consequently, they contribute to the dissemination of microplastics throughout their entire lifecycle, including during transportation due to spillage of containers containing pellets, etc. It should be feasible to incorporate microplastics in a manner that penalizes synthetic materials more severely within the system, aligning with consumer and political desires to curb the proliferation of microplastics.

Include microplastics as a PEF indicator and incorporate it in the overall PEF score.

### 6 Oslo Metropolitan University *PEF-RP study*

Relevant impact categories

PEFCRs fail to align with EU directives like the Circular Economy Action Plan (CEAP) because they overlook the renewable aspect of raw materials. While LCA-based methods quantify environmental harm, sustainability aims to preserve the environment's capacity and avoid the accumulation of extracted substances. Neglecting to evaluate raw material renewability is a significant oversight, crucial for long-term sustainability.

Land use presents another challenge. Grazing animals in uncultivated areas, particularly in mountainous or forested regions, contribute to biodiversity and climate mitigation, which is overlooked in current assessments. This oversight also disregards animal welfare concerns. Equating land use across vastly different contexts, such as grazing areas versus factory sites, undermines the purpose of comparison. Land use can have positive or negative impacts, and focusing solely on the negative promotes plastic use.

The normalization process of PEF indicators needs reassessment to ensure they closely reflect the principles of sustainability, including Earth system carrying capacity. Additionally, the positive impacts of land use must be considered, along with the inherent biological circularity and renewability of resources.

#### 7 Oslo Metropolitan University PEFCR

Limitations

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PEFCR Section 3.8 and Annex VI recognize the lack of scientific foundation in non-physical durability attributes crucial for garment lifetime (DoS) and calls for targeted research. However, Section 3.8 fails to acknowledge the equally deficient evidence base for including repairability and physical properties like strength. Despite this lack of evidence, arbitrary multipliers for physical durability and repairability have been implemented, disproportionately inflating their impact on estimated clothing lifetime and consequently on the overall PEF score.

Conduct independent research to properly characterise the influence of a product's intrinsic attributes on duration of service.

https://clothingresearch.oslomet.no/wp-content/uploads/sites/1026/2024/04/NewMethod.pdf

#### 8 Oslo Metropolitan University *PEFCR*

Default duration of service

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For improving information on the default duration of service, it is important that one of the mandatory labeling requirements will be the production date for all garments imported or sold in the EU. This will enable the calculation of how long they will be used before disposal. Such data will be crucial for promoting textiles with long lifespans in a PEFCR system or other environmental comparisons. Strength is not a reliable measure of longevity, so more documentation should be obtained, as we advocate for around Targeted Producer Responsibility (TPR).

https://clothingresearch.oslomet.no/2023/09/13/eu-wants-data-on-textile-waste-and-we-havethe-answer/

#### 9 Oslo Metropolitan University PEF-RP study

**EF Dataset** 

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The current formulation of PEFCR perpetuates disadvantages for small, vulnerable, and impoverished entities across the value chain. This occurs through several mechanisms: Firstly, it promotes the use of plastic, which tends to benefit larger, more robust companies capable of

meeting stringent data requirements and documentation standards. The costs associated with obtaining certifications are prohibitive for many, especially if these certifications are provided by commercial entities lacking sufficient independence and oversight from regulatory authorities.

Secondly, both the data utilized and the processes involved in developing and adopting PEFCR do not align with the EU's objectives for social sustainability and justice. The system's complexity renders it

inaccessible to many, while its bias towards plastic fosters fast fashion at the expense of numerous small-scale natural fiber producers, often situated in impoverished regions. Furthermore, the system's reliance on self-reported data and intricate documentation requirements further advantages larger companies.

Ultimately, the emphasis on impact categories such as land use over waste exacerbates the favoritism towards plastic and disadvantages smaller actors in the industry. Ensure the data in the PEFCRs/ EF datasets properly balance social as well as environmental aspects.

10 Oslo Metropolitan University PEFCR Functional unit G

We believe it's crucial that requirements impacting textiles, whether directly or indirectly, are based on well-founded, documented, and comprehensible criteria. Failure to do so poses a democratic problem. Moreover, there's a need to enhance understanding of the functional unit under consideration. The duration and frequency of textile usage are paramount factors influencing environmental impact per use—the essence of LCA. The system's significant weakness lies in the insufficient development of the Duration of Service (DoS) parameter, both theoretically and empirically.

We advocate for action to address this deficiency, and question whether PEF should continue to be applied to textiles, given the potential harm to quality clothing, vulnerable producers, and the environment.

Improve the functional unit to include the actual function of the specific garments to enable comparisons

11 Oslo Metropolitan University PEFCR TS members Table 1 G

PEFCR, if implemented, will have major consequences for the supply of clothing to consumers. However, consumers' interests are notably absent from the system's development. On the contrary, the system's structure dictates that only members capable of affording high participation fees possess voting rights. Consequently, large companies, which stand to gain the most from maintaining current social inequity and environmentally detrimental practices, hold the majority influence.

Participating in the development of PEFCR is complicated, time-consuming, and expensive. This is another democratic problem. We see that the result of the work reflects this and takes far too little account of consumers' demands for transparency and good clothes.

Allow observing and non-voting members to get voting rights in the development process, and support smaller companies, consumer organisations and other relevant NGOs to to enable their participation in the process.