Any future for PEF/PCF in ESPR?

Position

The idea for a voluntary PEF/PCF information requirement for the textile manufacturing stage in the context of ESPR, is welcomed by the EU textile machinery industry. Though, with the current obstacles for effective PEF rollout, our industry believes that the use of a voluntary PCF information requirement is a more realistic. At the time of enforcement, there should be effective market surveillance

The European Commission is preparing legislation to implement the Eco-design for Sustainable Products Regulation for Apparel. Currently, a preparatory study for the legislation is running. In that study, proposals are launched for Ecodesign requirements, among which the voluntary use of Product Environmental Footprint (PEF) or Product Carbon Footprint (PCF).

What is PEF/PCF?

Both, PEF and PCF, are science-based methods to compute the environmental impact of a product and applications are developed for a wide set of products.

PEF method

Product Environmental Footprint (PEF) computes the impact of a product along its lifecycle (raw materials production, production, transportation, use faze, end-of-life …) on climate change, the atmosphere, the sea, soil, biodiversity, health, resource use and land use. PEF is applied via so-called Product Category Rules (PEFCR) developed for reference (average) products. The "average" product is a theoretical product, with no reference to an actual product in the market, though reference to a type of product (e.g. T-shirt …). The computation of the PEF requires a vast amount of data. The most accurate and preferred way is to use company specific data sets (primary data), directly obtained at the facilities involved in the value chain of the product. The data may be collected, measured or calculated using company-specific activity data. In the absence of company specific data (primary data), so-called secondary data can be used. That is generic data from industry (association) reports, industry studies, governmental statistics, patents, literature or scientific papers. PEF computations require mass balances, energy balances etc. from all activities for every step of the product life cycle, and thus also for every step of the manufacturing process. It is a very extensive process which full automation and verification, requires substantial investments.

PCF method

Product Carbon Footprint also applies to the full product lifecycle, though only involves quantifying total greenhouse gas (GHG) emissions—measured in CO2 equivalent. Though, one should not underestimate this, as direct emissions (called scope 1) as well as indirect emissions (so-called scope 2 & 3 emission) linked to the product are in scope. Examples of such indirect emissions of scope 2 are indirect emissions from purchased electricity, steam, heat, or cooling. Examples of scope 3 indirect emissions are all other indirect emissions in the value chain (e.g., raw materials, transportation, waste). As for PEF, PCF computation can be done via primary data (preferred), either secondary data.

Outlook for PEF/PCR

The EU is progressively developing PEF, primarily through Product Environmental Footprint Category Rules (PEFCRs) to standardize the method for different product categories. Sectors with finalized PEFCRs include construction materials (EN15804+A2), dairy products, batteries, metal sheets and thus also apparel. These sectors can use the method for EU Ecolabel certification or voluntary environmental claims. There is an undercurrent in society to have PEF in place for more products.

From 2025 onwards, the EU Battery Regulation (2023/1542) sets a mandatory carbon footprint declaration for electric vehicle (EV) batteries and some categories of industrial batteries. Next for those products, is a maximum allowable carbon footprint limit. Other than that, the Corporate Sustainability Reporting Directive, sets that large companies need to report their PCR scope 1, 2, and 3 emissions as part of their sustainability reports. And the Green Claims Directive heavily relies on PEF to substantiate environmental claims. Also, the Construction Products Regulation will require mandatory PEF-like declarations for construction products.

What is currently on the table for apparel?

The European Commission is preparing legislation to implement the Eco-design for Sustainable Products Regulation for Apparel. Currently, a preparatory study for the legislation is done by the Joint Research Centre of the EU Commission. In that study, proposals are launched for Ecodesign requirements, among which the voluntary use of Product Environmental Footprint (PEF) or Product Carbon Footprint (PCF) to cover impact on the environment of the manufacturing stage only. So, the method is currently not proposed to cover the impact on the environment over the full product life cycle.

For the calculation of the environmental or carbon footprint indicator, the JRC proposes that the rules defined in the PEFCR for apparel and footwear are followed (as applicable to the manufacturing stage). This also allows the use of secondary datasets and default values that facilitate the calculations in absence of primary data.

The proposed approach would allow the voluntary reporting of the footprint indicator. Those not providing the calculations would simply not be eligible for the ‘excellence’ labelling. The manufacturers reporting the footprint indicator would be required to also indicate whether primary or secondary data was used. A different label or label elements would be used for the former, thereby encouraging the use of primary data. This approach provides manufacturers with an incentive to assess their performance accurately, while allowing consumers to identify products that exceed average performance standards. Expectation is that only those with PEF above average performance, will communicate.

What are the policy options and their impact for the textile machinery and textile industry

Long term trajectory of PEF/PCF legislation

As the manufacturing stage is responsible for approx. 20% of the environmental footprint of a T shirt and the second most important cause (behind fibre production), it is highly expected that the EU Commission at some point, will include manufacturing related eco-design requirements for apparel. If not under the Ecodesign regulation, she might do it via other legislation. Given the proposal from the JRC to have PEF/PCF as a voluntary information requirement, the Commission is aware that the industry currently is not ready for mandatory PEF/PCF declaration, let alone mandatory PEF/PCF thresholds. Also, the EU Commission is aware, Europe is currently not ready for effective market surveillance on the issue.

Impact on the short term

The proposal from the JRC to have PEF/PCF as a voluntary information requirement from 2028/29 onwards, will not have a big impact, neither positive, neither negative on the EU textile ecosystem. It will not lead to substantially increased investments by the textile industry in new equipment, neither retrofitting. For overseas textile producers, importing into the EU, most do not focus on environmentally conscious consumers, so a voluntary PEF declaration is not high on their priority list. EU textile industry that wants to generate PEF declarations to support green claims towards customer segments susceptible for that, can make use of secondary data. It is expected that only a small set will go for PEF declarations using primary data. To reward those, the EU Commission foresees an excellence label.

Cematex' Position

As presently, PEF is computed for theoretical apparel products, its application is not yet suited to compare the impact of real apparel products. That is also a comment of the European Confederation of the textiles & apparel industry. Our industry is ready to support its continued development to enable application to real apparel. We support the JRC proposal for voluntary PEF/PCR information requirement for the manufacturing stage, once the method is ready. *At the time of enforcement, there should be effective market surveillance*

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