MAKE THE LABEL COUNT

Updating the Product Environmental Footprint

Solutions to better align the PEF methodology with the EU's Green Deal and circular economy objectives

Overproduction and overconsumption. Globally, we are producing, consuming, and wasting materials at an unsustainable rate, and the fast fashion industry is a lead driver in this practice. Between 2002 and 2015, global clothing production more than doubled with the average consumer buying 60% more but keeping each garment for half as long[1]. Research suggests some garments are discarded after 7/8 uses[2], indicative of the mindset around 'disposable' garments, and fast fashion's links to high product turnover, low product quality, and short lifespans.

Measuring clothing impact using the Product Environmental Footprint (PEF). The current PEF methodology does not adequately challenge fast fashion's business model and the industry's overconsumption of resources. The European Commission first started working on the PEF nearly a decade ago, and since then, there have been major advancements in research and knowledge around the environmental impacts of the textile industry. But these are not reflected in the PEF today. The PEF must be brought in line with the latest science or it risks legitimising unsustainable production and consumption.

Solutions to improve PEF. Make the Label Count has identified and proposed pragmatic solutions to update the PEF methodology through the addition of three new indicators to measure and reflect in the impact of microplastics, plastic waste and circularity.

Microplastics Indicator. Clothing[3] is one of the biggest contributors to microplastic pollution; however, microplastic release is not currently measured in PEF. The Commission has indicated that microplastic release might be included as "additional environmental information" in the PEF but fails to provide detail on how this information will reach consumers. Too much is known[4] about the scale of microplastic pollution and its environmental harm to prevent this information from influencing consumer purchasing choices. Omitting microplastics as an indicator effectively assigns zero impacts to this form of emissions, which risks unintentionally guiding consumers towards plastic products and fibres.

An 'inventory-level' indicator for microplastics should be added to PEF (i.e., a simple summation of modelled emissions across the life cycle) and given sufficient weighting against the other 16 indicators to have meaningful impact. Quantis' Plastic Leak Project[5] (PLP) was a key development in inventory analysis for garments with respect to microplastic emissions. The PLP begins with the mass of synthetic fibre by polymer type, an estimate of lifetime microplastic loss during washing, and ends with a country-specific estimate of release to the environment based on the efficiency of wastewater treatment. Gaps that can be filled using the latest research include microplastic release during manufacturing, release to air during garment use, and release upon landfill.

Plastic Waste Indicator. The EU is focused on reducing plastic waste; however, the PEF currently does not share this priority. The Commission claims that the life cycle environmental impacts of plastic waste are already accounted for in the PEF, yet fails to elaborate on how it is measured or how a consumer can be informed of a garment's plastic waste impact upon purchase. There is a

[1] Ellen MacArthur Foundation, A New Textiles Economy: Redesigning Fashion's Future, 2017
[2] McKinsey, Style that's sustainable: A new fast-fashion formula, 2016
[3] IUCN, Primary Microplastics in the Oceans, 2017
[4] EEA, Textiles in Europe's circular economy, 2019
[5] Quantis, Plastic Leak Project, 2020

need to reduce the volume of plastic waste by reducing the demand for this material, and/or by diverting plastic away from landfill to preferred end of life processes, including fibre recycling.

None of the current 16 PEF indicators directly accounts for solid plastic waste. The calculation of the PEF single score for a sweater going to landfill increases the score by less than 1% if it is made from polyester, confirming the minimal weight given to this impact. Similar to that of a microplastics indicator, a plastic waste indicator can initially be developed at inventory-level. Like the need to include microplastic pollution, ignoring plastic waste is akin to assigning the issue zero impact.

Circularity Indicator. Despite the EU's progressive Circular Economy Action Plan (CEAP), the current PEF currently places little emphasis on circularity. Fossil materials are not renewable or circular, and currently none of the PEF indicators directly measure circularity. Renewable and biodegradable raw materials (i.e., natural fibres) are inherently circular compared to those made from fossil fuels (i.e., synthetic fibres), which are finite and never biodegrade. Including circularity as an indicator in PEF is the best means of assessing the sustainability of raw materials originating from renewable and non-renewable sources.

Like plastic waste, the Commission claims that circularity is already addressed in the PEF, but its definition of circularity is narrow compared to indicators already established in the market, such as the Ellen MacArthur Foundation's Material Circularity Indicator (MCI) that measure circularity at the product scale. The MCI is more comprehensive than most as it recognises (1) material inputs to a product life cycle that are from a renewable and verified sustainable source, reused, or recycled, (2) products that last longer or deliver more functional units per lifetime, and (3) reuse, recycling, compost and energy recovery (of circular inputs only) as circular end of life pathways.

Circularity could easily be integrated into the PEF methodology as an additional indicator, enabling PEF to deliver on key EU circular economy policy objectives.