

KEY TAKEAWAYS:

- Although laudable in its intent to dispel consumer confusion and encourage alignment in a common sustainability language, there is concern that the EU will use an incomplete methodology to calculate the impact of clothing and footwear, which will result in oversimplified and inaccurate claims on product labels for consumers.
- A collaboration of experts and organisations are working to promote awareness of this issue amongst European policy makers, asking them to amend the PEF methodology before implementation.
- We are asking for your support to advocate for methodology improvements to ensure consumers receive meaningful and balanced information about a product's footprint, which is not biased in favour of any raw material fibre type.

WHAT IS THE EU PROPOSAL FOR CLOTHING SUSTAINABILITY CLAIMS?

Currently, sustainability language is disparate and inconsistent, largely due to a lack of common terminology and relatively lax or varying labelling requirements. This leads to high levels of greenwashing, related consumer confusion and has delayed the fashion and textiles industry from truly addressing sustainability.

As part of its work around circular economy and consumer protection, the EU is proposing that companies substantiate the environmental claims they make on clothing using a harmonised methodology. While its aims are laudable, the current methodology being proposed – the Product Environmental Footprint (PEF) – is narrowly drawn and fails to adequately take account of key sustainability considerations including the benefits of using renewable and biodegradable fibres, the adverse impacts of microplastic pollution and the full environmental footprint of fossil fuel fibres. As such, the PEF risks misleading consumers about the impacts of their products, and ultimately undermining the EU's sustainability objectives.

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WHAT IS PEF?

PEF was first proposed by the European Commission (EC) in April 2013, under the Building a Single Market for Green Products Initiative. The focus at that time was on developing product footprinting methodologies to provide a harmonised system for measuring and validating environmental claims and a level playing field for competition between products made in different Member States.

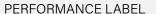
Subsequently, the EC partnered with industry experts and private companies to develop a methodology designed to convey a finished good's environmental impact in a common, product-level language that enables consumers to make informed decisions at the point of purchase. The PEF uses lifecycle assessment (LCA) data to evaluate the environmental impact of materials. See more about LCAs in the additional information on page 10 below.

The PEF methodology is now being considered for application on clothing and footwear products and policy.² The expectation is that consumers faced with claims using PEF on labels at the point of sale will make purchasing decisions in favour of the planet.

1 Single Market for Green Products Initiative. https://ec.europa.eu/environment/eussd/smgp/ (Last accessed: 05/11/2021)

THE PILOT STUDY EXPLORED HOW ENVIRONMENTAL IMPACT SCORING MIGHT APPEAR ON ALL CLOTHING AND FOOTWEAR PRODUCTS SOLD IN THE EU.







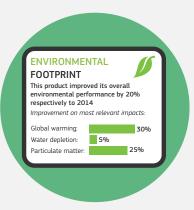
WEBSITES



TRAFFIC LIGHT LABEL



MOBILE APPS



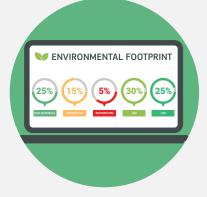
IMPROVEMENT LABEL



ONLINE SHOPS



FACT SHEETS



INFOGRAPHICS

Legislative train schedule: A European Green Deal, Substantiating Green Cl aims / Before 2022-01. https://www.europarl.europa.eu/legislative-train/theme-a-european-green-deal/file-substantiating-green-claims (Last accessed: 05/11/21)

Source: European Commission, https://ec.europa.eu/environment/eussd/smgp/pdf/infographic-env-info.pdf (Last accessed: 05/11/2021)

WHAT DOES PEF AIM TO MEASURE?

The PEF focusses on measuring and communicating harmful environmental impacts, with 16 environmental impact categories currently identified in the methodology:³

OZONE DEPLETION	HUMAN TOXICITY - CANCER EFFECTS	HUMAN TOXICITY - NON-CANCER EFFECTS
ECO-TOXICITY - FRESHWATER AQUATIC	PARTICULATE MATTER/ RESPIRATORY INORGANICS	PHOTOCHEMICAL OZONE FORMATION
ACIDIFICATION	EUTROPHICATION - TERRESTRIAL	EUTROPHICATION - AQUATIC FRESHWATER
EUTROPHICATION - MARINE	LAND USE	RESOURCE DEPLETION - WATER
RESOURCE DEPLETION - FOSSIL FUELS	RESOURCE DEPLETION - MINERALS AND METALS	IONISING RADIATION, HUMAN HEALTH
	CLIMATE CHANGE	

CURRENT CONCERNS WITH PEF METHODOLOGY

There are critical environmental impacts that either aren't fully accounted for, or aren't included in the PEF methodology, that could significantly distort the credibility of the EU's environmental impact ratings of clothing and footwear products.







MICROPLASTIC POLLUTION

FULL IMPACT
OF FOSSIL FUELS

PRODUCTION PRACTICES





RENEWABILITY & BIODEGRADABILITY

DURATION OF SERVICE LIFE

For consumers to understand the sustainability credentials of a product, they also need information on social impacts.

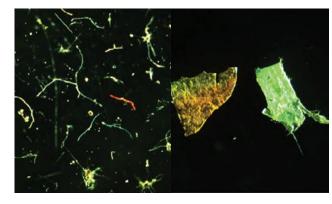


SOCIAL IMPACTS

³ Product Environmental Footprint Category 2 Rules Guidance 3. Version 6.3. May 2018. (see page 47) https://eplca.irc.ec.europa.eu/permalink/PEFCR quidance v6.3-2.pdf (Last accessed: 05/11/2021)

CURRENT CONCERNS WITH PEF METHODOLOGY

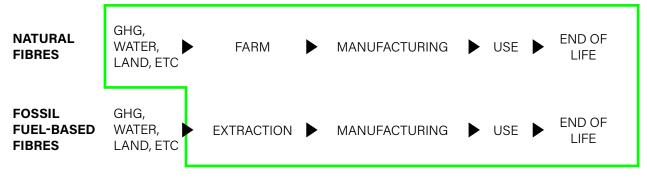
It is in the consumers' interest that any method used to assess a product's environmental footprint is holistic and includes all sustainability impacts of consequence. Being LCA-based, PEF suffers from limitations by focusing only on harmful impacts and failing to account for positive environmental impacts. Social impacts should also be considered for a holistic assessment of a product's sustainability.



Microplastic fibres (left) and microplastic fragments (right) both from Tyrrhenian Sea seafloor cores at a depth of approximately 800 metres. *Source: Textile World*

1. Microplastic pollution

Synthetic textiles discharge significant amounts of microplastic fibres through laundering and wear, releasing microplastics into both terrestrial and marine environments, and the human food chain. However, microplastic pollution from synthetic materials is not included in the current environmental impacts of the PEF methodology and therefore does not carry any negative scoring despite increasing scientific evidence of the harmful impact to both planetary and human health. Scientific studies have shown that a typical 5 kg wash load of polyester fabrics can release as many as 6 million microplastic fibres.4 It is estimated that, by 2030, synthetic fibres will represent 73% of fibre production, of which 85% will be polyester.5



SYSTEM BOUNDARY

Calculations are not the same for farmed natural fibres versus mined or 'extracted' synthetic fibres. Source: IntegrityAg

2. Environmental impact of fossils

The full environmental impacts of the formation of crude oil – a base material for producing synthetic fibres – are not accounted for in the PEF methodology. PEF accounting for synthetic fibres commences at extraction at the well-head, rather than the raw material formation. By contrast, all the impacts of forming natural fibres are fully taken into account, including the greenhouse gas emissions, land and water use, etc.

Given that textile fibres often show the greatest lifecycle impacts during the fibre formation stage, this limitation of PEF magnifies the inequity between products made from natural and fossil fuel-based fibres. It's impractical to capture and account for the ancient environmental impacts of forming crude oil, so methodology improvement is needed to enable equitable comparison of fibre types.

⁴ De Falco, F., et al., Evaluation of microplastic release caused by textile washing processes of synthetic fabrics. Environmental Pollution, 2018. 236: p. 916-925. https://hs0010910.inu.edu.cn/ upload/article/files/99/43/22e7ab944778a9b501a3eef5f328/6e9230ed-97d8-4ccd-9252-0c30e6705d73.pdf (Last accessed: 05/11/21)

⁵ Changing Markets Foundation. Fossil Fashion: the hidden reliance of fast fashion on fossil fuels. 2021. http://changingmarkets.org/wp-content/uploads/2021/01/FOSSIL-FASHION Web-compressed.pdf (Last accessed: 05/11/21)

CURRENT CONCERNS WITH PEF METHODOLOGY

3. Renewability & biodegradability

The circular attributes of natural fibres, such as renewability at the start-of-life, high levels of reuse and recycling during life and biodegradability at end-of-life are not counted or only minimally counted in the current PEF methodology. Natural fibres are renewable resources that can be regenerated by living systems, as opposed to the extraction of finite fossils to produce

NCREASE CLOTHING PHASE OUT SUBSTANCES UTILISATION OF CONCERN AND **MICROFIBRE RELEASE** RADICALLY IMPROVE **RECYCLING** MAKE EFFECTIVE USE OF **RESOURCES AND MOVE TO** RENEWABLE INPUTS **ANAEROBIC** DIGESTION & RENEWABLY OTHER SOURCED MATERIAL FEEDSTOCK STREAMS

synthetic fibres. Raw materials grown on farms are inherently circular. They can be grown and regrown indefinitely and biodegrade at end-of-life, returning their nutrients to the soil to be used again. PEF does not prioritise biodegradability and only minimally penalises non-biodegradable materials for adding solid waste to the world's landfills – further releasing microplastics to the soil, oceans and air.

This limitation could be addressed by including parameters that account for biological circularity in the overall score. Combining material circularity indicators i.e. Ellen MacArthur Foundation and Granta Design with lifecycle indicators such as PEF could provide a solution.

4. Duration of service life

The European Environmental Agency (EEA) recognises that natural fibres have better durability and lower impacts in the use phase and end-of-life, compared to synthetic fibres. Inherent attributes of animal fibre-based clothing, including its odour resistance and wrinkle resistance result in less frequent laundering, reducing water, energy and

detergent use.⁶ Less frequent laundering retains the 'as new' appearance of clothing, enabling a longer serviceable lifetime. Other important life-extending factors are omitted from duration of service assessment, such as adjustable clothing fit and enduring fashion design.

5. Production practices

Under PEF, the impacts of production practices are modelled without considering how they are derived, meaning the use of renewable resources and sustainable management practices aren't accounted for, or incentivised. For example, PEF doesn't reward environmentally-friendly raw material sourcing practices such as regenerative agriculture or organic farming and nor does it reward fossil fuel mining practices that restore the landscape and natural habitats.

A New Textiles Economy. Source: Ellen MacArthur Foundation

⁶ European Environmental Agency. Textiles and the environment in a circular economy. 2019. https://www.eionet.europa.eu/etcs/etc-wmge/products/etc-reports/textiles-and-the-environment-in-a-circular-economy (Last accessed: 05/11/21)

CURRENT CONCERNS WITH PEF METHODOLOGY

6. Social impacts

If the aim of harmonising sustainability claims is to encourage consumers to purchase more sustainable garments, causing brands to source more sustainable fibres, exactly who is going to be impacted must be carefully considered. The globally agreed definition of sustainability is consumption that meets the needs of the present without compromising the ability of future generations to meet their needs, and within needs, those of the world's poor must be given priority.

This means that traditional, localised and rural industries that support the thriving of communities must be considered. These industries include the production of wool, alpaca, cashmere, silk and cotton, which financially and socially support rural farmers, communities and regional supply chains across the globe.

Accounting for the social impacts of manufacturing textiles, with important considerations such as meaningful wages and working conditions, is also necessary to transition to a truly sustainable fashion and textile industry.



Cotton farming. Source: Dinesh Khanna for C&A Foundation

Growing natural fibres provides an income for rural, remote, and poor communities which is inseparable from their sustainability. Cotton is 50% of Benin's export income. Alpaca sales are crucial to 46 of Peru's poorest provinces, where 35.3% of the population had insufficient income to meet their basic needs in 2018. Consumers shouldn't be told to purchase or not purchase garments made of farmed fibres based solely on environmental impact. Socioeconomic impacts must be considered as part of sustainability claims made on clothing and footwear labels.

It should be noted that the majority of these concerns relate to the high-level PEF Guidelines that apply to all product categories, not just apparel and footwear. However, the problems are most pronounced for apparel and footwear because this category compares products made from biological raw materials with clothing made from mined/extracted raw materials.

To avoid the same problems arising for future product categories, we encourage the EC to prioritise addressing these limitations. Product categories such as building interiors, furniture and fuel for vehicles will be affected as they also include products made from biological raw materials and mined raw materials. Building interiors include bedding, carpets, curtains and upholstery which can be made from natural or synthetic fibres, while furniture can be made from wood, plastic or metal.

Other concerns, such as social impacts might be developed as a separate indicator that sits alongside PEF.



⁷ The World Bank, World Integrated Trade Solution. Trade Summary for Benin 2019. https://wits.worldbank.org/countrysnapshot/en/BEN (Last accessed: 05/11/2021)

⁸ Bates Kassatly, V and Baunmann-Pauly, D. The Great Greenwashing Machine Part 1: Back to the Roots of Sustainability. Geneva Center for Business & Human Rights; Geneva School of Economics and Management; Eco-Age. 2021. P 15. https://eco-age.com/wp-content/uploads/2021/09/REPORT. Final. 72doi2.pdf (Last accessed: 05/11/2021)

DOES PEF ALIGN WITH THE EU'S OWN SUSTAINABILITY AND CIRCULAR ECONOMY GOALS?

By omitting or downplaying the inherently circular attributes of natural fibres (including renewability and biodegradability), duration of product life, the impact of microplastics, and production practices and social impacts, the EC risks losing an important opportunity to deliver its commendable goals detailed in the Circular Economy Action Plan (CEAP) and EU Strategy for Textiles. Similarly, without accounting for microplastics, the opportunity to deliver the Plastics Strategy is reduced. Both the Green Deal and CEAP have prioritised addressing harmful sources of pollution such as microplastics.

Circular Economy Action Plan (CEAP)

The CEAP, adopted by the European Commission in March 2020, is one of the main building blocks of the European Green Deal. The CEAP's aims are to ensure products placed on the EU market are "designed to last longer, are easier to reuse, repair and recycle"; that "consumers will have access to reliable information on issues such as reparability and durability of product"; and has a focus on "avoiding waste altogether".9 Textiles have been identified as one of the sectors that use most resources and where the potential for circularity is high. The CEAP commits that "the Commission will also propose that companies substantiate their environmental claims using **Product and Organisation Environmental** Footprint methods".10

The CEAP presents a set of interrelated initiatives to make sustainable products, services, and business models the norm and transform consumption patterns:

EU Strategy for Textiles

The EU Strategy for Textiles will include a comprehensive set of measures to "help the EU shift to a climate-neutral, circular economy where products are designed to be more durable, reusable, repairable, recyclable and energy-efficient", provide incentives for "circular materials and production processes" and boost the sorting, re-use and recycling of textiles.¹¹ Furthermore, the strategy will address the "environmental and social impacts" of the EU textile sector.¹²

Empowering Consumers for the Green Transition

This directive will amend the Unfair Commercial Practices Directive (UCPD) and the Consumer Rights Directive (CRD) to introduce more explicit rules on what brands can say about their products' sustainability credentials. This level of transparency has the potential to counter greenwashing consumers as long as the requirements for sustainability credentials are reflective of accurate, scientific information. If the PEF methodology becomes the basis for these credentials, it must first be updated to include omitted criteria.

EU Plastics Strategy

Through the EU Plastics Strategy, the Commission will develop "labelling, standardisation, certification and regulatory measures on unintentional release of microplastics".¹³

The use of the PEF methodology in its current form will not adequately reflect the EU's own sustainability and circularity considerations. However, with some revisions it can be made fit for purpose for clothing and footwear products.

- 9 Changing how we produce and consume: New Circular Economy Action Plan shows the way to a climate-neutral, competitive economy of empowered consumers. https://ec.europa.eu/commission/presscorner/detail/en/ ip 20 420 (Last accessed: 05/11/2021)
- 10 Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions. COM (2020) 98. Section 2.2. https://eur-lex.europa.eu/legal-content/EN/TXT/?gid=1583933814386&uri=COM:2020:98:FIN (Last accessed: 05/11/2021)
- 11 Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions. COM (2020) 98. Section 3.5. https://eur-lex.europea.eu/legal-content/EN/TXT/?uri=COM:2020:98:FIN&WT.mc_id=Twitter (Last accessed: 05/11/2021)
- 12 EU strategy for textiles, Document Ares(2021)67453, EUR-Lex, (2021), https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=PI_COM:Ares(2021)67453 (Last accessed:05/11/21)
- 13 Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions. COM (2020) 98. Section 3.4. https://ec.europa.eu/environment/topics/plastics/microplastics en (Last accessed: 05/11/2021)

HOW CAN PEF BE IMPROVED

The PEF system is designed to facilitate like-with-like comparisons, but assessment of textiles made from natural and synthetic fibres are not yet comparable. Current PEF limitations present a significant challenge to the delivery of both EU strategy and the PEF goal of providing fair comparisons of products based on their environmental credentials.

Our analysis recommends three main methodological improvements to deliver EU environmental policy through fair comparisons of natural and synthetic fibre textiles in PEF.



The PEF system must include microplastic emissions as an indicator

The PEF system must include an indicator for microplastic emissions to be consistent with EU strategies and to follow the precautionary principle. Omitting microplastics effectively assigns zero impacts to this emission, which risks unintentionally guiding consumers towards plastic products and fibres, further increasing microplastic emissions.

Microplastics can be added as an inventorylevel indicator ahead of complete integration into the PEF system.



The PEF system should include plastic waste as an indicator

The PEF system must include a plastic waste indicator to be consistent with EU directives on plastic waste. There is a 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. At present, the recycling of synthetic fibres is negligible, and end of life energy recovery is not sustainable because the incineration of plastic waste releases fossil CO₂, contributing to global warming.



The PEF system should be based upon sustainability principles

The PEF system must include a circularity indicator to be consistent with the Circular Economy Action Plan (CEAP). Fossil materials are not renewable or circular and currently, none of the 16 PEF indicators directly measure circularity. Including circularity as an indicator in PEF is the best means of equitably assessing the sustainability of raw materials originating from renewable and non-renewable sources.

Appropriate weighting would need to be given to each of these indicators in the PEF single score to deliver EU strategies.

Failure to address these limitations now risks entrenching a system that is counter-productive to EU environmental policy, and misses opportunities for the transition to a circular economy.

Note: Delivery of EU social policy would require further improvements to PEF methodology.

WHY IS IT SO IMPORTANT TO GET THIS RIGHT?

The European Commission's policy and legislative initiative to substantiate sustainability claims is likely to set a global standard and could deliver great environmental outcomes if the PEF methodology is amended. It's important to act now and get it right to help establish the system's credibility and ensure well-intentioned consumers are not misled.

We owe it to the planet to produce sustainable clothing, and we owe it to consumers to make sure they know how sustainable that clothing is – and the claims on their product labels need to reflect that.



HOW CAN YOU BE INVOLVED?

We invite you to join us in raising awareness and providing solutions to support the EC to achieve its objective for apparel and footwear.

Sign up to the Make the Label Count newsletter to stay up to date on the latest news and events at www.makethelabelcount.org

SHARE THE CAMPAIGN!

#MakeTheLabelCount



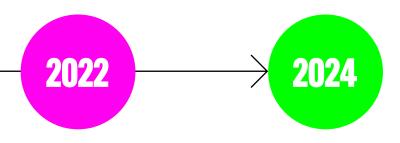
@MakeLabelCount



www.linkedin.com/company/make-the-label-count



TIMELINE FOR IMPLEMENTATION



The EC is currently preparing the policy and legislative proposal on requirements for sustainability claims on clothing and footwear products, with anticipated release in late-2022.

PEF Category
Rules for Apparel
and Footwear
are anticipated to
be finalised.

ADDITIONAL INFORMATION

Useful Resources:



Make the Label Count: PEF explainer



<u>Delivering EU environmental policy through fair</u> <u>comparisons of natural and synthetic fibre textiles</u> <u>in PEF – Executive Summary</u>



<u>Delivering EU environmental policy through fair</u> <u>comparisons of natural and synthetic fibre textiles</u> in PEF - White Paper



<u>Fossil Fashion: the hidden reliance of fast fashion on fossil fuels – Changing Markets Foundation</u>



Was It Polyester All Along? Veronica Bates Kassatly



The Great Greenwashing Machine

What is an LCA?

A Lifecycle Assessment (LCA) is a detailed study of the total environmental impact of a product, activity or service's raw material acquisition and manufacturing phases. It can also examine the active use and end-of-use phases. Generally, LCA results are often used to inform decisions and enable comparisons between materials, products, and services. However, comparisons are only valid where analyses are made 'on like terms' and consider the same life stages to ensure equivalence between the products being compared.

Lifecycle Assessment (LCA)

WHAT IS AN LCA?

A Lifecycle Assessment (LCA) is a detailed study or examination of the total environmental impact of a product, activity or service's manufacturing. They can also examine the active use and end-of-use phases.

PURPOSE

Generally, LCA results are used to inform decisions and enable comparisons between materials, products, and services.

CRADLE TO CRADLE

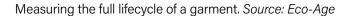
A specific type of cradle to cradle assessment that reconnects the end of use phase with material extraction and production through recovering and recycling post-consumer materials

CRADLE TO GATE 1easures environmental fo

- Measures environmental footprint of material extraction and production phases
- Does not consider impact beyond
 manufacturing
- Active use and end of use / disposal phases are not considered

CRADLE TO GRAVE

- Measures environmental footprint from production to end of use
- Measures environmental footprint of complete lifecycle and considers all inputs and outputs of all phases



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