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EU4Environment

Green Economy in Eastern Partner Countries

Advancing Product Environmental Footprint (PEF) in selected industries of the EU's Eastern Partner (EaP) countries



Environmental performance in a nutshell

To become “environmentally-friendly” or obtain “eco-labels”, products and services can use a variety of voluntary methods to prove they are environmentally preferable within their product category or sector. In the European Union (EU) alone, there are over 230 eco-labels which, among other things, address issues such as deforestation, biodiversity, toxicity, circularity, resource efficiency and carbon emissions.¹

For companies trying to market their products as environmentally friendly, striking the right balance between market opportunities and market challenges can be difficult. The wide variety of “eco-labels” – each with its own methodological requirements, may result in additional costs or delays for the companies, and confusion for the consumers. To address these issues, enhance comparability within a product category, and give clear indicators to producers and consumers alike, the European Commission introduced under the 2013 Single Market for Green Products (SMGP) initiative, the Product Environmental Footprint (PEF).² The PEF method helps companies measure their environmental performance and position themselves with confidence in the market of sustainable products. Other related EU initiatives include the “Green Deal” and the 2020 “Circular Economy Action Plan”, which, together with the PEF, can establish a strong and coherent product policy framework that will make sustainable products, services and business models the norm rather than the exception.

What is Product Environmental Footprint (PEF)?

The PEF is a multi-criteria measurement of the environmental performance of a good or service throughout its life cycle. PEF information is produced with the purpose to reduce the environmental impacts of goods, taking into account their supply chain activities (from the extraction of raw materials, through production and use, to final waste management). In brief, PEF is the EU-recommended tool, based on the Life Cycle Assessment (LCA) of a product or service, quantifying its environmental impacts.³ It does so by modelling the environmental performance of the flows of resources, materials, or energy, and by looking into the supply chain of the product to better identify waste

streams associated with production.⁴ The PEF method has important similarities to the LCA, but it is not identical to it. LCA is a standardized methodology quantifying environmental pressures, benefits, trade-offs, and areas where improvements can be made in the life-cycle of a product. The LCA looks at product phases (such as production, transport, use and end of life). Separately, PEF is a way of doing an LCA, but with an added strength to deliver more consistent, reliable, and reproducible results. This is because the PEF methodology is less flexible than LCA, and has more stringent requirements on data quality.⁵

What does PEF mean for my company?

PEF enables enterprises to effectively improve the sustainability of their supply chain. A PEF study will provide valuable insights into the most impactful ingredients, processing steps or life cycle stages of a product; and is, therefore, the perfect starting point for impact reduction (for instance, by rethinking the design, closing resource loops, or giving by-products a new purpose).

Besides offering datasets, impact indicators and calculation methods, PEF also gives general rules to product groups so companies can benchmark their progress on a product within their sector or category. In turn, enterprises better understand their environmental performance against competitors (national and European). Benchmarking is also a powerful incentive to build a reputation and to create sustainable and environmentally-friendly goods and services appreciated in the everyday life of consumers.

Hence, being a good environmental performer, especially in a market as dynamic and competitive as the EU Single Market, is in itself an added value that can ensure good business prospects and sound strategies for any company. On the consumers’ side, making informed purchasing decisions has become a common practice, in Europe, and around the globe. Only by comparing the performance of similar products or services, can consumers learn to trust new brands and diversify their spending habits.

1. Source: <https://ec.europa.eu/environment/ecolabel/did-you-know.html>

2. Source: [Understanding PEF and OEF methods](#)

3. Source: <https://eplca.jrc.ec.europa.eu/EnvironmentalFootprint.html>

4. Source: <https://ec.europa.eu/environment/eussd/pdf/footprint/PEF%20methodology%20final%20draft.pdf>

5. Source: https://www.meti.go.jp/committee/kenkyukai/sanji/lca/pdf/001_04_00e.pdf

Action implemented by:





How does EU4Environment promote PEF?

Currently, in the Eastern Partner (EaP) region, the PEF methodology is promoted as an activity led by the United Nations Industrial Development Organization (UNIDO), through the EU-funded **EU4Environment Action**. Here, among others, the planned work includes mapping existing practices and barriers to introducing PEF; comparing those to the available labelling schemes; raising awareness and understanding of the opportunities and benefits of the SMGP Initiative through PEF; and leading the way to pilot and promote PEF in selected EaP industries.

The Action will make the local stakeholders more aware of the potential benefits and impact of applying PEF; create local capacity in the EaP region; help the national industries be better prepared for potential policies involving PEF; and, provide learning opportunities for local experts (by using pilot studies and making concrete suggestions for a manufacturing shift towards more sustainable products). In addition, the EU and UNIDO will include local awareness and capacity building activities which contribute to the broader support of the “green” efforts and policies.

Success stories from similar UNIDO-led projects

UNIDO holds a firm experience in raising awareness about PEF with a regional project funded by the EU which promotes Circular Economy: **SwitchMed**. Here, UNIDO introduced PEF to reinforce the development of greener industry, and, sustainable consumption and production in the Southern Mediterranean region.

One of the objectives there was the presentation of the PEF in Egypt, Lebanon, Morocco, and Tunisia, to help companies improve their position in the European market. Success stories include two studies on wine production, as well as olive oil, pasta, dairy products, leather, and intermediary paper producers.

About EU4Environment

The EU-funded EU4Environment Action aims to preserve and better use the natural capital, increase people’s environmental well-being, and stimulate greener economic growth in the Eastern Partner countries. Its initiatives help deliver policy and legislative changes, make planning and investment greener, and stimulate the uptake of innovative technologies by adopting new business models and creating green jobs. Within it, UNIDO is responsible for the following outputs under the Result 2 Component, Circular Economy and New Growth Opportunities:

1. Scaling up Resource Efficient and Cleaner Production (RECP) among Small and Medium-sized Enterprises (SMEs) through

- Capacity building and awareness about resource efficiency in industry
- RECP assessments for manufacturing SMEs
- Establishing RECP Clubs of enterprises
- Evaluating the feasibility of applying the Eco-Industrial Parks framework at existing industrial sites; and
- Developing Industrial Waste Maps in selected regions

2. Introducing and promoting the concepts and tools of the SMGP initiative and PEF methodology through

- Mapping barriers and opportunities for PEF
- Promoting SMGP awareness
- Building capacity for PEF application; and
- Piloting PEF in selected SMEs

Relevant institutions, organizations, and manufacturing enterprises from the Eastern Partner (EaP) region are invited to learn more about the PEF methodology and help promote it.

For more information about the programme, the SMGP initiative or the PEF, as well as the opportunities for using them in each of the Eastern Partner countries, please contact the EU4Environment Project Manager from UNIDO.

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