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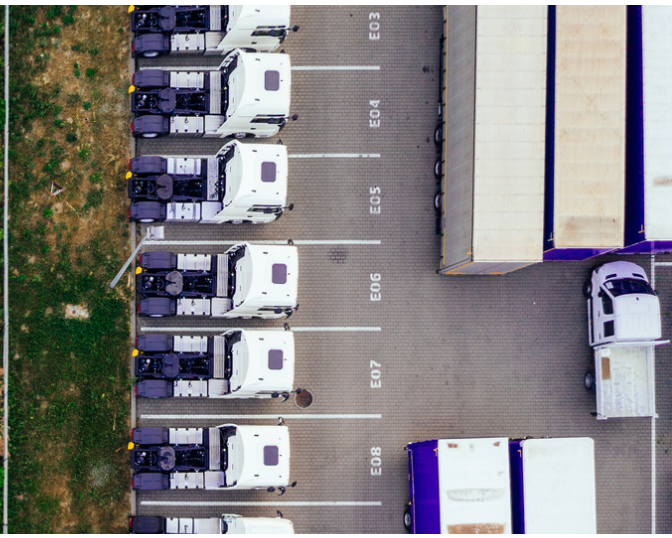
EU4Environment
Green Economy in Eastern Partner Countries

UNLOCKING THE POTENTIAL OF THE EU SMGP FOR MOLDOVAN EXPORTING COMPANIES



BACKGROUND

Within the European Union-funded EU4Environment Action, the United Nations Industrial Development Organization (UNIDO) is promoting the EU Single Market for Green Products (SMGP) initiative and the Product Environmental Footprint (PEF) in the Eastern Partnership (EaP) region. PEF is a methodology that helps companies measure the environmental performance of their products and position themselves with confidence in the market of sustainable products. In the Republic of Moldova and other EaP countries, UNIDO is also focusing on mapping existing practices and barriers to implementing PEF (and comparing those to the available labelling schemes), as well as raising awareness and understanding of the opportunities and benefits of the SMGP initiative to pave the way for piloting and promoting PEF in selected industries.

This leaflet is part of the PEF-dedicated resources created under EU4Environment to help promote environmentally-friendly practices in the Republic of Moldova.

THE EU SINGLE MARKET FOR GREEN PRODUCTS

The European Commission introduced the EU Single Market for Green Products initiative in 2013 to help foster a fair level playing field in the communication of environmental impacts for products or companies entering the European Union market. The initiative includes the use of the Product and Organization Environmental Footprint (PEF and OEF) methods which help companies substantiate the claims of being environmentally friendly. In turn, the methods also help ensure that enterprises follow a unified approach to assess the environmental impact of their products while raising the awareness of consumers on topics related to environmental impacts and providing them with correct information. This way, the EU SMGP initiative also aims to promote environmentally responsible economic growth.

PRODUCT ENVIRONMENTAL FOOTPRINT (PEF)

The PEF [1] method ensures fair competition among manufacturers and improves the comparability and communication of the environmental performance of products. The European Commission (EC) proposed the PEF method as the default way to evaluate and measure the environmental impacts of products throughout their life cycle (from the extraction of raw materials to their production, transportation, use, and disposal).

The PEF methodology also helps calculate the environmental impact of a product, based on a total of 16 different impact categories. Such categories include climate change, land use, water use, resources use, and so on. The results from the various impact categories are then standardized and multiplied by weighting variables to provide a single performance score. Together, these form the product's PEF profile. Product Environmental Footprint Category Rules (PEFCRs) [2] are afterwards used to allow for more precise modelling and to ensure comparability and benchmarking among products within the same product category.

LIFE CYCLE THINKING AS A PATH TOWARDS SUSTAINABILITY

Life Cycle Thinking (LCT) [3] is a holistic approach to consider the environmental impact of products, beyond the manufacturing process. LCT can become an effective tool for businesses in the organization of the production cycle. Here, LCA (Life Cycle Assessment) is an analytical and systematic method used for evaluating the potential environmental aspects of a product through all stages of its life cycle. LCA can support companies to communicate the environmental impacts of their products through appropriate market channels and achieve environmental labels based on quantitative and reliable metrics (currently, there is no regulation in place). In turn, this can ensure that enterprises stand out in a specific sector or category, thanks to their increased environmental efforts. Moreover, the products are also better showcased among those customers looking for more environmentally friendly items. Lastly, LCA can assist businesses in lowering their resource use and emissions, making them more sustainable by helping them identify potential cost savings, in the long-term. [4]

THE LIFE CYCLE ASSESSMENT (LCA) COMPONENT

Life Cycle Assessment (LCA) is also a quantitative approach to Life Cycle Thinking. The PEF and OEF methods (introduced under the EU SMGP initiative) are designed to measure the life-cycle environmental performance of products and organizations by applying LCA.

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THE PATH TOWARD SUSTAINABILITY

In the Republic of Moldova and across the EaP region, the involvement of policymakers, environmental institutions, design operations, and product design specialists is necessary to pave the way towards a sustainable and circular economy. In turn, this will help ensure that products are developed and used in an environmentally-friendly and sustainable manner.

WHAT ARE THE PEF-RELATED BENEFITS FOR EXPORT ORIENTED COMPANIES?

Companies wishing to market their products as environmentally friendly can expect several benefits, including reputational improvements and a stronger demonstration of corporate social responsibility, resulting in more sales, as well as the reduction of costs thanks to an improved production process which takes into account resource efficiency and cleaner production (RECP).

THE PHASES OF A PRODUCT ENVIRONMENTAL FOOTPRINT (PEF) STUDY

In order to conduct a PEF study,[5] several phases should be accomplished. The following steps describe the key phases in the development of an environmental footprint study. Whereas the list is not exhaustive, the aim of this section is to guide the reader in understanding the overall stages for conducting a Product Environmental Footprint study:

1. The company's decision to carry out a PEF or an OEF study
2. Searching for internal resources, external experts, and training needs
3. Searching for existing PEFCR/OEFSR (Product Environmental Footprint Category Rules/Organisation Environmental Footprint Sector Rules)
4. If no PEFCR/OEFSR study exists, carry out a PEF/OEF study based on the general PEF/OEF method. If a study exists, carry out a PEF/OEF based on PEFCR/OEFSR
5. Goal definition: The clear definition of goals aims to ensure that the objectives, methodologies, outcomes, and intended uses are aligned and that there is a common vision to direct those involved in the study
6. Scope and definition: The technical specifications and assessed systems are elaborately described in the scope of the PEF study
7. Life cycle inventory: To model a PEF, a compilation of all inputs and outputs for materials, energy, waste, and emissions into the air, water, and soil (for the product supply chain) must be inventoried
8. Life cycle impact assessment: After the compilation of the Life Cycle Inventory (LCI), an Environmental Footprint (EF) impact assessment should be conducted to determine the environmental efficiency of the product, utilizing all the EF impact categories and models. The EF impact assessment involves four stages: classification, characterization, normalization, and weighting
9. Interpretation: This phase ensures that the performance of the PEF model aligns with the study's goals and quality standards. Here, life cycle interpretation can provide feedback to enhance the PEF model until all goals and requirements are fulfilled. As well, it helps draw conclusions and recommendations from the analysis and contributes to environmental enhancements
10. Reporting: The PEF report serves as a relevant, comprehensive, consistent, accurate, and transparent synopsis of the PEF study, supplementing it
11. Verification and validation: It is mandatory to verify and validate the PEF study whenever it is used for any form of external communication, such as communication with any interested party aside from the commissioner or the method user of the PEF study

HOW DOES EU4ENVIRONMENT PROMOTE PEF?

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 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 more sustainable production. In addition, UNIDO will include local awareness and capacity-building activities that contribute to the broader support of the "green" efforts and policies in Moldova.

PEF can also be used as a basis for calculating a product's environmental impact, as recommended by the European Commission. A list of potential advantages can be found below.

The Eurobarometer conducted several surveys between 2017 and 2021.[6] The results demonstrated that environmentally-friendly labels played an important role in the purchasing behaviour of European consumers, though consistent awareness-raising was still needed to record progress:

- A survey conducted from September to October 2017 found that 27% of the surveyed Europeans were familiar with the EU Ecolabel
- About 32% of the respondents stated that eco-labels played a significant role in their purchasing decisions
- Among the respondents who were aware of eco-labels, 30% reported purchasing a product with the EU Ecolabel logo. Additionally, 78% of the respondents expressed trust in the environmental friendliness of the products carrying the EU Ecolabel
- A survey conducted from February to March 2021 found that 22% of the surveyed Europeans reported purchasing products with an environmental label as well as resource efficient and cleaner production (RECP) credentials

PEF OPPORTUNITIES FOR EXPORT-ORIENTED COMPANIES

- Customers' acknowledgment and the market's reward for the responsible preparation and delivery of sustainable goods or services
- Recruitment and retention advantages for the company's strong environmental reputation
- Community recognition that the company is an ecologically conscious and responsible enterprise
- Higher employee involvement resulting from the good environmental and sustainability stance
- Acknowledgment of essential environmental rules, which lead to thought-out sustainability projects
- Maintaining compliance with evolving EU environmental regulations (as all related specifications are periodically examined and modified, as appropriate)
- Greater sell-through as end users choose or require items that provide sustainability credentials
- Enhanced customer loyalty among environmentally concerned end users
- Meeting the prerequisites for various business-to-business and business-to-government bidding processes that relate to the environment or to resource efficiency and sustainability
- Potential benefits in terms of industrial synergies and access to other green initiatives

[1,2,5] Source: www.ec.europa.eu/environment/eussd/smgp/pdf/EF%20simple%20guide_v7_clen.pdf
[3,4] Source: www.eplca.jrc.ec.europa.eu/uploads/LCT-Making-sustainable-consumption-and-production-a-reality-A-guide-for-business-and-policy-makers-to-Life-Cycle-Thinking-and-Assessment.pdf
[6] Source: www.environment.ec.europa.eu/topics/circular-economy/eu-ecolabel-home/faq_en

Contact details

United Nations Industrial Development Organization (UNIDO)
EU4Environment Project Manager
Ms. Tatiana Chernyavskaya
Tel: +43 1 26 0 26 5520
E-mail: t.chernyavskaya@unido.org
Web: www.unido.org