





### **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 PEF¹ method ensures a 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, acidification, eutrophication, the use of resources, and so on.²

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) 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. This is because LCT focuses on enhancing sustainable practices by improving production processes. This results in a smaller environmental impact and the minimization of resource use.

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.

## THE LIFE CYCLE ASSESSMENT (LCA) COMPONENT

Life Cycle Assessment (LCA) is also a quantitative approach, part of the 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.

### THE PATH TOWARDS SUSTAINABILITY

In 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.

Action implemented by:











# THE ROLE OF INSTITUTIONS AND EXPERTS

#### **ENGAGING INSTITUTIONS**

To successfully establish and promote sustainability practices in the country, it is important to empower key knowledge institutions and relevant organizations (NGOs, think tanks, NPOs, and so on) to create an ecosystem conducive to this development. Capacity building is also essential and it should involve all relevant stakeholders (including the industry sector, academia, civil society, and the Government). Any capacity-building programme should be tailored to the specific needs and contexts of each stakeholder group, and be delivered in a variety of formats. Specific elements of the capacity building programme should also include the design and implementation of PEF, means to ensure synergies between ongoing projects and initiatives in Moldova, ways to empower accreditation and certification bodies, and the provision of technical assistance to help organizations introduce the PEF methodology. As well, institutions should employ the available network of experts and create strong synergies to reach the goals of the SMGP initiative.

#### **ENGAGING EXPERTS**

To ensure the successful introduction of the SMGP and PEF awarenessraising efforts in the Republic of Moldova, it is important to carefully plan and execute a range of activities and engage relevant experts to effectively reach target audiences and create long-term impact.

## **BECOMING A NATIONAL PEF EXPERT**

Acquiring the expertise required to evaluate the environmental effects of goods and services is essential to becoming a Product Environmental Footprint (PEF) expert.<sup>4</sup> This includes being aware of the fundamentals of the environmental Life Cycle Assessment and the PEF method (established by the European Commission). It also requires familiarity with the numerous techniques available for evaluating a product's environmental impact, including the Impact Categories<sup>5</sup> and how they apply to goods and services. PEF experts should also be well-versed in the rules and requirements that pertain to PEF and how they apply to various products and services. Finally, PEF experts must be able to clearly explain the PEF procedures and impacts to stakeholders, and be willing to invest in continuous training and learning activities.

The collaboration between institutions and experts should:



include baseline studies to understand the drivers and current patterns of the target audiences



cover means to develop a robust digital presence (collaborating with influencer organizations) to align promotional campaigns with national policies or other relevant initiatives



include effective messaging (synthesizing the information from the baseline studies) to form a strong presence and establish an advocacy strategy for the introduction of the SMGP and the PEF methodology in selected industries

Creating effective synergies that foster knowledge creation, experience sharing, and the development of an expert base are all essential for making a strong impact on relevant stakeholder groups. In the Republic of Moldova, the following successful initiatives can be suggested and highlighted:

- The Atlas of Organic Agriculture in the Republic of Moldova, 2021
- The Resource Efficient and Cleaner Production (RECP) webpage
- The Farmer-to-Farmer Program in Moldova

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### **ABOUT EU4ENVIRONMENT**

The EU-funded EU4Environment Action aims to help the EaP countries preserve and better use their natural capital, increase the people's environmental well-being, and stimulate greener economic growth. 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 Result 2, "Circular Economy and New Growth Opportunities":

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



Developing Industrial Waste Maps in selected regions

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



Piloting PEF in selected SMEs

## 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.

[1,2] Source: www.ec.europa.eu/environment/eussd/smgp/pdf/EF%20simple%20guide\_v7\_clen.pdf
[3] Source: www.eplca.jrc.ec.europa.eu/uploads/LCT-Making-sustainable-consumption-and-productiona-reality-A-guide-for-business-and-policy-makers-to-Life-Cycle-Thinking-and-Assessment.pdf
[4] Please note that the current project does not train, nor prepare PEF experts. Instead, it introduces PEF to existing experts in relevant fields (sustainability, environmental performance, LCA, green marketing,

[5] Source: https://ec.europa.eu/environment/eussd/smgp/pdf/EF%20simple%20guide\_v7\_clen.pdf

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