

INTRODUCING PRODUCT ENVIRONMENTAL FOOTPRINT IN UKRAINE

For companies seeking entry into the EU market, the Single Market for Green Products (SMGP) initiative emphasizes the imperative to adhere to green product standards. To foster fair competition within the industry and enhance comparability and communication about environmental performance, the European Commission (EC) proposed the Product Environmental Footprint (PEF) method as the standard approach for evaluating the environmental impacts of products throughout their life cycles. Currently, the PEF method is increasingly used to support the reporting of environmental aspects in the forthcoming European Union (EU) legislation. For example, its application is mandatory in the adopted [batteries regulation](#), and it has potential use in the adopted [EU Taxonomy classifications](#).

To facilitate adherence to these regulations, the United Nations Industrial Development Organization (UNIDO), under the EU-funded “European Union for Environment” (EU4Environment) Action, is introducing the Product Environmental Footprint (PEF) as one of the instruments of the EU SMGP initiative for the EU’s Eastern Partnership (EaP) countries.

In Ukraine, this initiative is supported by the Resource Efficient and Cleaner Production Centre (RECP) Centre of Ukraine.

TECHNICAL BACKGROUND

THE SINGLE MARKET FOR GREEN PRODUCTS (SMGP)

Introduced by the EC in 2013, the SMGP initiative recommends a set of principles for communicating the environmental performance of products and organizations. This enables producers to substantiate their claims of being environmental friendly. The initiative addresses the need to establish and apply a single environmental assessment approach for products traded across the EU.



SOURCE Introducing the PEF methodology in “snEco”, Ukraine

PRODUCT ENVIRONMENTAL FOOTPRINT (PEF)

PEF is an EU-recommended methodology that involves a multi-criteria measurement of the environmental performance of a good or service throughout its life cycle (from resource extraction to product manufacturing, and its end of life). It considers 16 environmental impact categories and provides concrete labelling rules that reduce freedom of interpretation while promoting stringent data quality and verification requirements. Product Environmental Footprint Category Rules (PEFCRs) are being developed for specific product groups. The objectives of PEFCRs are to provide consistent labelling rules for all products within a defined scope, to focus on the key environmental impacts within the product categories, and to facilitate product comparison. A PEFCR often includes the PEF results for one or several representative products, which serve as a benchmark within their product category or subcategory.

LIFE CYCLE THINKING (LCT)

Life cycle thinking considers the environmental, economic, and social impacts of a product throughout its entire life cycle. This way, LCT aims to improve a product’s sustainability by identifying opportunities to enhance production processes.

ECO-LABELLING

Eco-labelling is a voluntary initiative designed to confirm a product's environmental quality. It encourages businesses to label their products and adopt environmentally friendly practices, ultimately providing dual benefits for both businesses and consumers.

Action implemented by:

THE READINESS OF UKRAINE TO ACCESS THE SMGP

CURRENT LEGISLATIVE FRAMEWORK

Since 2018, Ukraine has enforced the Law No. 5448-d "on Basic Principles and Requirements for Organic Production, Treatment and Labelling of Organic Products", prohibiting the unauthorized use of terms such as "eco", "bio", and "organic" within its borders. Producers and service providers aiming to reduce their environmental impact and market their products as being eco-friendly can obtain certification and the right to use eco-labels from a competent independent organization.

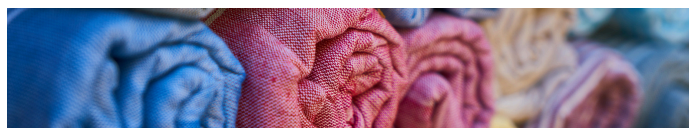
Furthermore, Ukraine has harmonized its national system of standardization with the international standards of the ISO 14020 series "eco-labels and declarations".

Additional regulations, directly or indirectly affecting the eco-agriculture industry include:

- Law of Ukraine on "the Basic Principles (Strategy) of the State Environmental Policy of Ukraine until 2030"
- Technical Regulations on Ecological Labelling (from 2011 until 2018)
- Standard DSTU ISO 14024: 2002 Eco-labels and declarations. Eco-labelling type I. Principles and methods (ISO 14024: 1999, IDT)
- Article 15-1 of the Law of Ukraine on "Protection Against Unfair Competition"
- Organic Standard
- Law of Ukraine on "Accreditation of Conformity Assessment Bodies"
- Articles 8 and 15 of the Law of Ukraine on "Standardization"
- The Technical Committee for Standardization TC 82 "Environmental Protection"
- Law on "the Basic Principles and Requirements for Organic Production, Circulation and Labelling of Organic Products"

ORGANIC CERTIFICATIONS

In Ukraine, eco-certification and eco-labelling are voluntary practices, although the country is transitioning to a European system of independent certification as part of its Association Agreement with the European Union. Environmental certification and validation of environmental benefits of goods and services under eco-labelling programmes adhere to ISO 14,024 standards. In this case, assessment and eco-labelling bodies must hold state accreditation in accordance with the Law of Ukraine "on Accreditation of Conformity Assessment Bodies". Accreditation by the National Accreditation Agency of Ukraine confirms that the conformity assessment body meets national standards and is aligned with relevant international and European Union norms.



Since 2003, eco-labelling functions have been carried out by a product certification body established under the All-Ukrainian public organization "Living Planet", which represents Ukraine in the Global Ecolabelling Network (GEN). Within it, the issued environmental certificates are valid for three years.

GREEN PROCUREMENT

The Law of Ukraine on "Public Procurement" plays an important role in enhancing the environmental performance of goods. Article 22 specifically mandates that the technical and qualitative characteristics of procurement items must be aligned with environmental protection measures. These measures encompass the safety and functional qualities of products, energy and water efficiency, waste reduction, greenhouse gas emission reduction, and the creation safe and comfortable environments for learning, work, and life. The implementation of Sustainable Public Procurement (SPP) in Ukraine is governed by the Law of Ukraine on "the Fundamental Principles (Strategy) of the State Environmental Policy until 2030." The updated Law of Ukraine on "Public Procurement" introduces new provisions, facilitating the adoption of SPP practices, in line with Ukraine's commitments under Article 152 of the Association Agreement with the EU.

MAPPING THE KEY STAKEHOLDERS

Stakeholder mapping ensures that all pertinent voices are considered during policy development and implementation, preventing any oversight that could hinder the successful adoption of PEF practices. An effective stakeholder engagement fosters open dialogue and transparency, and is crucial for promoting green products on the market. Hence, PEF initiatives unite diverse stakeholders (such as international organizations, public authorities, expert institutions, and end-users). The current stakeholder landscape indicates a robust support for mandatory environmentally friendly product certifications, with PEF emerging as a pivotal verification tool. Other institutions and stakeholders involved in PEF-related initiatives include:

International organizations: UNIDO, OECD, UNECE, UN Environmental Programme, Austrian Development Agency, the World Bank, World Trade Organization, UNDP, EBRD, and ABD.

Regional PEF stakeholder experts and institutions: Federation of Organic Movement of Ukraine, Organic Standard, All-Ukrainian public organization "Living Planet", and Certification of Seeds and Planting Material

Public authorities: Ministry of Agrarian Policy and Food of Ukraine, Cabinet of Ministers of Ukraine

Foreign certification bodies in Ukraine: 20 in total (including organizations from the Netherlands, Switzerland, Italy, Germany, Hungary, Lithuania, Poland, and Armenia)

NATIONAL MARKET TRENDS FAVORING THE SMGP INITIATIVE

LIMITED RECOGNITION OF THE BENEFITS FOR OBTAINING ORGANIC CERTIFICATIONS

A pilot project under the EaP GREEN programme, implemented by the Organization for Economic Co-operation and Development (OECD), underscored the need to bolster market incentives for environmental improvements. These incentives can be achieved directly through green public procurement, and, indirectly, through green certifications and eco-labels, stimulating demand for enhanced environmental performance and green products and services. The survey revealed a limited adoption of environmental management standards among companies in Ukraine. A small percentage of companies had implemented ISO 14001 (2.5% of respondents), ISO 50001 (0.7%), ISO 90001 (1%). The primary motivations for these implementations were customers' requests and the desire to improve the company performance. The survey also highlighted a lack of information about environmental management systems (EMSs) and their benefits (a main reason for their underutilization). Only 3.4% of respondents had successfully bid for a public procurement tender that included environmental requirements.

GROWING DEMAND FOR GREEN PRODUCTS

Several factors are driving the development of the national market for environmentally friendly goods in Ukraine: (i) growing consumer demand, (ii) commitment to sustainable development, and the (iii) European integration enshrined in national law. Currently, the demand for environmental certification and labelling is increasing among companies targeting both national and international markets. This trend can be attributed to the reinforcement of national policies, heightened awareness of environmental product criteria, and international ecological requirements for products. However, the Ukrainian market for eco-products does not fully meet consumer demands. While detergents, paints, and varnishes are available as environmentally certified products and are generally affordable, other product categories have limited eco-friendly options made in Ukraine. Imported goods and products, mainly from European countries, often meet the demand, but these are significantly more expensive compared to national products.

GROWING CASES OF NATIONAL GREEN PRACTICES

Various national cases indicate a general shift in state and business activities toward green practices. In this sense, educational institutions provide notable examples for means of implementing sustainable procurement in Ukraine.

The purchase of eco-products is also gaining interest among companies implementing environmental management systems, green offices, and green building projects. Examples include green procurement implementation at Kyiv Palace of Children and Youth, and the state institution "State Ecological Academy of Postgraduate Education and Management". Additionally, examples of green spaces include the National Transport University of Ukraine and VOLIA CABLE LLC. The green buildings projects were implemented by the Business Centre "Optima Plaza", and by UNIT City.

THE BENEFITS OF APPLYING THE PEF METHODOLOGY FOR EXPORT-ORIENTED COMPANIES

PEF empowers enterprises to enhance the sustainability of their supply chains and product life cycle. Conducting a PEF study will offer valuable insights into the most impactful ingredients, processing steps, or life cycle stages of a product, making it an ideal starting point to mitigate negative environmental impacts. The potential benefits of applying the PEF methodology include:

- Ability to benchmark products within a specific category (when a PEFCR is present)
- Improved reputation and customer loyalty
- Cost reduction through process improvement
- Effectively meeting client demands
- Increased employee involvement
- Extended sale opportunities
- Potential for industrial synergies
- Meeting sustainability requirements in bidding processes
- Compliance with EU environmental standards

DISCOVER HERE HOW TO UNDERTAKE A PEF STUDY FOR YOUR ENTERPRISE



THE SMGP READINESS ROADMAP FOR UKRAINE

The SMGP initiative aims to provide clear, reliable, and comparable information on the environmental performance of products and organizations by establishing a unified environmental assessment approach for products entering the EU market. The below SMGP readiness roadmap outlines the guided recommendations, actionable opportunities, and milestones suggested for Ukraine to achieve readiness to access the SMGP. This preparation will enable the trading of environmentally friendly products across the EU.

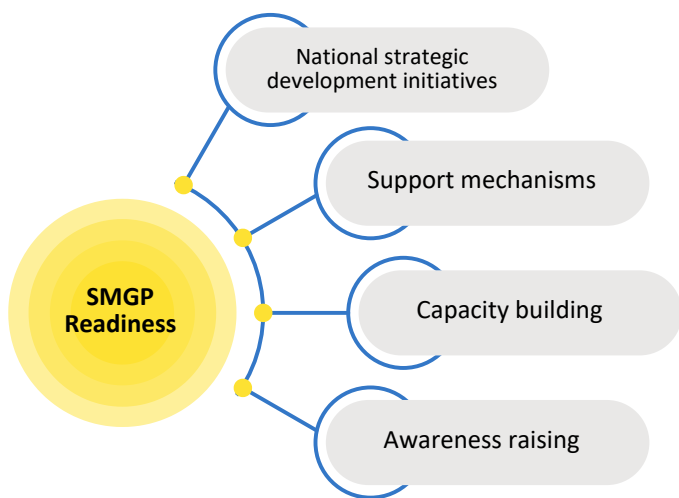


FIGURE 1 The SMGP readiness building blocks

NATIONAL STRATEGIC DEVELOPEMENT INITIATIVES

Policy development: Ukraine has strong legislative frameworks to regulate the use of labels such as “eco”, “bio”, and “organic”, and to accelerate the reduction of negative environmental impacts. These frameworks set good preconditions for the successful implementation of PEF on a national scale. In this case, ensuring that new policy modifications adhere to EU standards is crucial to maintaining competitiveness in the EU market, where PEF can become a valuable tool.



SOURCE Introducing the PEF methodology in “ALFA” HT, Ukraine

Monitoring and evaluation systems: To ensure the successful implementation of policy and strategy initiatives, it is essential to create a strong monitoring and evaluation system. To achieve optimal results, an executive body should also be formed, engaging stakeholders from key industrial clusters. Moreover, identifying product categories that can be significant market players in Europe is crucial for Ukraine. In this regard, it is recommended to take the lead in developing Product Environmental Footprint Category Rules (PEFCRs) for these product groups and ensure consistent monitoring.

This approach can also help Ukraine increase its competitiveness in the EU market, be at the forefront of upcoming EU developments, and prepare its key industries.

Green public procurement: Green public procurement plays a key role in popularizing PEF studies by incentivizing the adoption of life-cycle assessment practices in evaluating and selecting environmentally sustainable products and services. The Law of Ukraine on “Public Procurement”, which contributes to the development of improving the environmental performance of goods, as well as its updated version provide a strong regulatory base for green procurement practices in Ukraine.

Currently, public procurement in Ukraine accounts for about 13% of GDP, annually. This gives the Government significant influence on the market, providing an opportunity to drive innovative and sustainable development, strengthen environmental responsibility in business, and transition to a “Green Economy” model. Leveraging this influence can create more incentives to further accelerate green procurement practices in Ukraine.

CAPACITY BUILDING

Enhancing the availability of local PEF experts is a crucial component for capacity building, one that requires the implementation of targeted training programmes. Hence, prior knowledge of LCA and hands-on experience with modelling in LCA software such as SimaPro are essential prerequisites for engaging in PEF studies.

The PEF methodology can be also considered a form of “advanced LCA”, necessitating a strong foundational understanding for effective “learning on the job”. Thus, PEF experts must possess specific and relevant experience in developing Environmental Footprint (EF) models using dedicated software tools such as SimaPro or equivalent. This expertise entails a comprehensive grasp of software functionalities and intricacies, particularly in applying them in EF model development. Therefore, training programmes should ensure that PEF experts acquire a deep understanding of these essential software tools, and have access to databases containing ready-made datasets of various industry processes (EF data).

SUPPORT MECHANISMS

Financial incentives: To create favorable conditions for the development of a fair and level playing field for green products in Ukraine, all businesses should be incentivized to green their products. Additionally, a close cooperation between the Government, business support organizations, and financing institutions should be established to raise awareness and to financially stimulate the implementation of the PEF methodology. Environmental tax incentives (such as reduced tax schemes for resource efficient and cleaner production technologies) can also be designed and assessed, as well as support programmes in the form of subsidies or co-financing advisory and consultancy services to substantiate environmental performance.



SOURCE Introducing the PEF methodology in “ALFA” HT, Ukraine

Data development: Currently, significant data gaps exist due to the lack of regional data available on processes occurring within the country. Some companies face difficulties providing data to experts (often because of the unknown upstream or downstream processes, and the absence of systems to store or monitor operational data). The availability of sufficient data would facilitate more accurate and efficient PEF studies, enabling companies to better understand their environmental footprint, identify areas for improvement, and make informed decisions toward sustainability and reduced environmental impact.

This aspect can be improved through enhanced supply chain communication and transparency, and by implementing internal monitoring systems to measure inputs and outputs. It is also advisable to foster collaboration among local groups, Government, businesses, and international organizations to share information and conduct research. Additionally, enterprises should have access to specific IT tools to support calculations and data analysis, such as SimaPro, Ecochain, and OpenLCA.

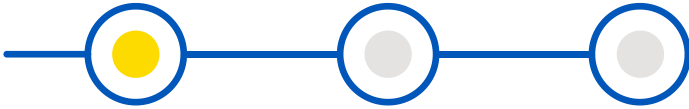
AWARENESS RAISING

Conducting PEF studies requires expert knowledge and a deep understanding of both supply chains and the consequences of methodological choices. It also necessitates collaboration among experts from diverse fields to obtain reliable data. Any rollout of PEF should prioritize building a strong foundation and setting a realistic timeline. The region would also benefit from universities integrating PEF courses into relevant programmes. Hands-on experience could be facilitated through industry collaborations for real-world applications.

For instance, inviting PEF practitioners for guest lectures or workshops can contribute to knowledge development and capacity building. This way, it is recommended to expand training initiatives for experts by raising awareness about the need for PEF capacity in the region and by engaging additional stakeholders to increase capacity in Eastern Europe. The increased presence of experts would also increase the opportunities for conducting PEF studies on a larger scale, thereby amplifying the potential impact and scope of sustainable initiatives in the region.

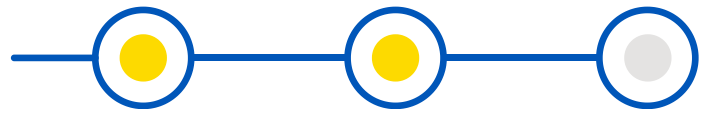
FUTURE OUTLOOK

Based on the recommendations presented above, the proposed SMGP readiness stages offer potential development scenarios for Ukraine to establish an ecosystem for successfully entering the EU SMGP. The stages outlined below can create synergies based on actions and effective collaborations between stakeholders. In practice, Ukraine may commence with the initial stage while simultaneously preparing to transition into the facilitating and consolidation stages.



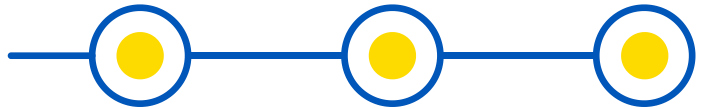
INITIATING STAGE

This stage represents a think-tank-empowered ecosystem, enabling effective awareness-raising and capacity-building initiatives. In this model, PEF aspects are integrated into a wide range of public policy and strategy documents, although specific plans for dedicated regulations are lacking. The designated national body pursues international recognition and builds internal capacities. NGOs and think tanks play a crucial role in preparing the country for PEF practices, with the private sector demonstrating awareness and interest in starting the initiative.



FACILITATING STAGE

This stage represents a synergetic ecosystem that creates an enabling environment for the application of PEF methodology in Ukraine. Within it, PEF aspects are explicitly integrated into public policy and strategic documents and supported by dedicated regulations. The designated national body gains international recognition, while the Government takes a coordinating role, leading state-level support programmes, ensuring financial incentives, and promoting the use of Information Technology (IT) tools for data calculation and modelling. NGOs and other think tanks serve as experts, and the private sector can select successful business cases of implementing PEF practices to enhance Ukraine's presence in export markets.



CONSOLIDATING STAGE

This stage represents a mature level in which Ukraine's PEF system evolves into a comprehensive and well-functioning ecosystem with strong quality infrastructure supporting the scheme for implementing PEF. This stage entails the application of the PEF methodology on a nationwide basis, ensuring adherence to environmental standards. By now, the designated national body has achieved international recognition, and the local certification bodies, in compliance with EU eco-labelling protocols, do not only certify Ukrainian companies, but also engage with clients, worldwide. Moreover, the Government collaborates closely with NGOs and partners, aligning policies and development priorities with PEF practices. The private sector demonstrates a robust commitment to sustainability by establishing strong PEF practices and by achieving recognition through PEF labelling.

About EU4Environment

The European Union (EU) funded EU4Environment Action aims to help the EU's Eastern Partnership countries preserve their natural capital and increase people's environmental well-being. It does so by supporting environment-related action, demonstrating and unlocking opportunities for greener growth, and setting mechanisms for better management of environmental risks and impacts. EU4Environment is implemented by five partner organizations: OECD, UNECE, UNEP, UNIDO, and the World Bank between 2019-2024, with a budget of EUR 20 million.

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