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# INTRODUCING PRODUCT ENVIRONMENTAL FOOTPRINT IN ARMENIA

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 the Republic of Armenia (hereafter “Armenia”), this action is facilitated by CIVITTA, an international consortium blending digital and advisory services for public and private clients.

## 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 also addresses the need to establish and apply a single environmental assessment approach for products traded across the EU.



### 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 ARMENIA TO ACCESS THE SMGP

## CURRENT LEGISLATIVE FRAMEWORK

The Law on “Organic Agriculture” regulates the production, preservation, processing, transportation, and sale of agricultural products and materials, as well as the storage of wild plants. It defines the principles and legal grounds for the management of organic agriculture, its main circulation demands, the directions of state support, and the duties of the authorized body. According to this law, all products in Armenia labelled as “organic” or with an equivalent label must have the appropriate marking and be accompanied by a certificate.

Additional regulations in Armenia, indirectly related to eco-agriculture industry, include:

- the Law on Food Safety
- the Law on the Foundations of a National Water Policy
- the 2018 Tax Code
- the Law on Environmental Impact Assessment and Testing
- the Law on Waste
- the Law on Energy Saving and Renewable Energy
- the Draft Law On Ecological Policy

Furthermore, Armenia has three strategic documents that emphasize the significance of environmental and economic aspects. These documents encompass the principles of a green economy, resource efficiency, relevant infrastructure, and capacity-building for future initiatives:

- 2014-2025 Strategic Programme of Prospective Development
- 2021-2026 Programme of the Government of the Republic of Armenia
- 2021-2026 Action Plan of the Government of the Republic of Armenia

## SUPPORT MECHANISMS

In June 2022, the Government of Armenia, in collaboration with the World Bank, the European Union, and the United Nations Development Programme, launched the platform “Growth and Recovery for the Strengthening, Upgrading, and Prosperity of Armenia”. Known as the GREEN Armenia platform, this platform aims to consolidate policies and investment projects towards Armenia's green economic development. To achieve sustainability goals and ensure the platform's effectiveness, the initiating parties emphasize the importance of close cooperation between public, private, and international partners. This intention sets a positive precedent for the introduction of the PEF methodology.

## ORGANIC CERTIFICATIONS

The Government of Armenia has an established procedure for obtaining organic certification, requiring individuals or entities involved in organic agriculture to rely on certification companies for a relevant certificate. Upon approval, a certificate of compliance is issued, and an agreement on “Issuing a Certificate of Conformity of Organic Agricultural Products” is signed. Currently, three bodies are authorized to issue such certification: the Food Safety Inspectorate (FCI), the Competition Protection Commission, and the National Accreditation Body of the Ministry of Economy (SNCO). The FCI plays a primary role in assessing the food products' conformity with applicable standards, regulating veterinary and sanitary services, and enforcing control measures and sanctions acting on behalf of Armenia. Notably, ECOGLOBE LLC is the only international organic certification body based in Armenia. Overall, the robust framework of organic certification provides a solid foundation for compliance with European regulations governing green products. However, it is important to note that organic certification and PEF are two distinct initiatives.

## MAPPING THE KEY STAKEHOLDERS

Stakeholder mapping ensures that important voices are not overlooked during policy development and implementation. By engaging all stakeholders, synergies can be built, increasing the likelihood for the successful and widespread implementation of PEF practices in the country. Furthermore, stakeholder engagement fosters open dialogue and transparency, which is crucial for marketing green products. Throughout the implementation cycles managed by producers and manufacturers, PEF practices and related areas also bring together various stakeholders, such as international organizations, public authorities, expert institutions, and end-users. The current stakeholder landscape shows significant support for the mandatory certification of environmentally friendly products, with PEF serving as a key verification tool.

The institutions and stakeholders related to PEF 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:** Chamber of Commerce and Industry of Armenia, Union of Manufacturers and Businessmen of Armenia, Investment Council of Armenia, Regional Environmental Centre for the Caucasus (Armenia branch), Green Lane NGO, Organic Armenia Agricultural Association NGO, EcoGlobe, the Acopian Center for the Environment, and Circular Economy Club Yerevan
- **Public Authorities:** Ministry of Economy of Armenia, National Body for Standards and Metrology (SARM) of the Ministry of Economy of Armenia, National Accreditation Body of the Ministry of Economy of Armenia, Ministry of Environment of Armenia, Environmental Protection and Mining Inspection Body, Food Safety Inspectorate (FCI), State Commission for the Protection of Economic Competition, and Enterprise Armenia.

# NATIONAL MARKET TRENDS FAVORING THE SMGP INITIATIVE

## LIMITED INCENTIVES FOR GREEN IMPLEMENTATION AMONG NATIONAL SMES

Small and Medium-sized Enterprises (SMEs) constitute 97% of all enterprises in Armenia and serve as significant economic drivers. However, they often face challenges in leveraging the benefits of green production due to limited awareness and understanding of this domain. Barriers preventing SMEs from initiating environmental assessments include limited environmental compliance requirements in tender processes, competing business priorities, limited financial resources, and a lack of expertise. Moreover, SMEs that communicate their environmental performance exhibit significant diversity in their environment certification practices, influenced by their respective business sectors. Currently, the ISO 14001 certification is the most widely adopted method for implementing green practices at the company level, yet only 2% of SMEs have acquired it. This low adoption rate is primarily attributed to the lack of a local market demand for these systems, with enterprises believing that demand primarily stems from international markets. However, ensuring the compatibility of Armenian products with EU standards requires obtaining ecological certifications. Here, the PEF methodology emerges as a valuable tool in guaranteeing the environmental friendliness of products, as it goes one step further and requires a comprehensive assessment of the entire supply chain and the life cycle of the product put on the market.

## GROWING DEMAND FOR RESOURCE EFFICIENCY

Resource efficiency is gaining recognition in business operations, as enterprises utilize it to reduce costs and gain competitive advantage. This trend extends beyond businesses to the private sector, where financial instruments from international organizations and state-supported subsidy programmes for renewable energy are emerging, benefiting both businesses and households. Employing PEF as an assessment tool would further enable companies to quantify the potential environmental benefits of implementing resource efficiency systems.



SOURCE Advancing Resource Efficient and Cleaner Production (RECP) in "KARMIR KATAR" PE, Armenia

## GROWING DEMAND FOR GREEN PRODUCTS

The demand for green products is steadily increasing in Armenia, with approximately 10% of entities currently engaged in producing eco-friendly goods or services (of which 2% have received an eco-label), and another 9% planning to initiate green production processes in the near future. Producers are also motivated to integrate green production principles into their value chains to increase company value and reputation, adapt to international and local market trends, and increase their competitive advantage.

# 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 for mitigating 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

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HOW TO UNDERTAKE  
A PEF STUDY FOR  
YOUR ENTERPRISE





# THE SMGP READINESS ROADMAP FOR ARMENIA

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 Armenia to achieve readiness to access the SMGP. This preparation will enable the trading of environmentally friendly products across the EU.

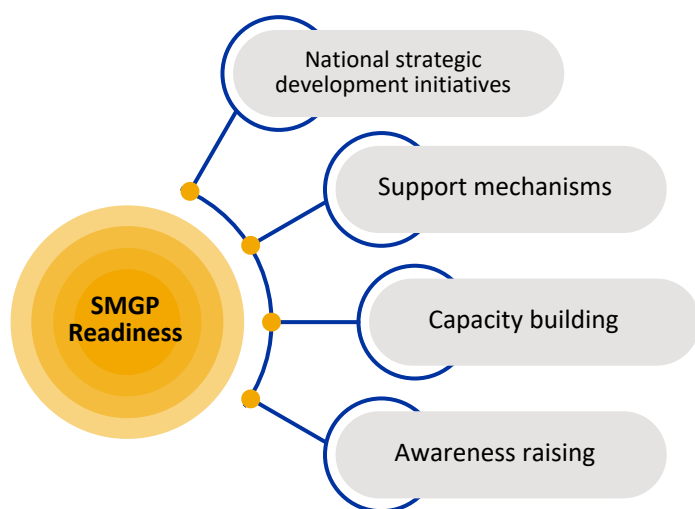


FIGURE 1 The SMGP readiness building blocks

## NATIONAL STRATEGIC DEVELOPEMENT INITIATIVES

**Policy development:** The current national policy framework in Armenia provides a solid foundation for promoting green practices. However, there is a need for additional mechanisms to ensure that green claims are well-substantiated, comparable, and understandable. A supporting document aligned with the latest EU recommendation 2021/227, is essential. This document should outline specific goals, targets, measures, and calculation approaches for defining green products, as well as incentives for promoting green products within Armenian industries. Sectoral trade associations and unions also play a crucial role in developing and implementing sector-specific guidance. This approach should involve a diverse group of stakeholders and prioritize evidence-based policies, supported by timely and reliable data collection and analysis. This way, enhancing the national strategic framework for green products will provide a clear and comprehensive approach towards embracing environmental footprint actions.

This initiative will also enable Armenia to effectively address environmental imperatives at both national and SMEs levels, as well as align the country with EU priorities, and help it advance its path towards a green and circular economy.

**Monitoring and evaluation systems:** To ensure the successful implementation of policy and strategy initiatives, establishing a robust monitoring and evaluation system is essential. Such systems should involve creating an executive body with representation from key industrial clusters, and the engagement of stakeholders. As such, it is essential to identify product categories that could serve as relevant market players in the EU, as well as investing in developing Product Environmental Footprint Category Rules (PEFCRs) for these product groups and ensuring their consistent monitoring. This can enhance Armenia's competitiveness in the EU market and position its industries ahead of upcoming EU developments. Finally, it is necessary to develop local and geographically specific data in order to conduct PEF studies more effectively. For example, data should cover Armenia's electricity mix and other relevant technologies or activities for which background information is already available.

**Legislative changes:** The field of green or environmental labelling started developing in Armenia in 2008 with the introduction of a labelling system for agricultural products. Currently, authorized supervisory state bodies play a crucial role in the sector's core development. However, harmonizing legislation across Armenia's ecological sphere is recommended to ensure coherence between norms and policy documents. As current labels solely focus on organic farming methods and requirements, adopting comprehensive environmental footprint frameworks like PEF should be considered as a strong step in moving forward. Additionally, legislation and administrative frameworks for environmental labelling of non-agricultural products, services, and organizations need to be established. This should be aligned with the Proposal for a Directive on substantiation and communication of explicit environmental claims (the Green Claims Directive).

**Green public procurement:** Green public procurement plays a crucial role in promoting PEF by encouraging the adoption of life cycle assessment practices in the evaluation and selection of environmentally sustainable products and services. Implementing green public procurement involves strategic planning, including defining the scope, setting priorities and targets, as well as providing training for staff, and monitoring performance. In this regard, the OECD's work on Sustainable Public Procurement (SPP), as part of the 2017 EaP GREEN programme, serves as a reference for enhancing the environmental and social performance of products. Market-driven product information tools like eco-labelling can also benefit from this framework. Armenia should support the use of PEF for life-cycle assessments and labelling to enhance product performance, stimulate demand and supply for green products, and empower consumers to make informed choices.

The Armenian Government can leverage insights from SPP initiatives and work closely with international organizations to effectively integrate PEF into sustainable procurement practices (SPP). This collaboration would help increase demand for sustainable goods and improve environmental performance across products and services.

## CAPACITY BUILDING

To successfully establish and promote the use of PEF and sustainability practices, it is crucial to empower relevant government agencies to create an ecosystem conducive to this development. Hence, capacity building is essential for the long-term success of PEF and should engage all relevant stakeholders, including industry, academia, civil society, and government bodies.

Capacity-building initiatives should also be customized to the specific needs and contexts of each stakeholder group. Key elements should include designing and implementing PEF practices, fostering synergies among ongoing projects in the country, empowering accreditation and certification bodies, providing training on environmental footprint standards and requirements, and offering technical assistance to implement labelling systems that support sustainability and Circular Economy goals. In this context, conducting PEF studies requires expertise in supply chains and methodological choices. Thus, introducing PEF courses into university programmes would benefit the country, overall.

Hands-on experience could also be gained through industry partnerships, facilitating practical applications. For example, organizing guest lectures or workshops with PEF practitioners could enhance knowledge and build capacity more effectively.

## SUPPORT MECHANISMS

**Synergy between mechanisms:** The Government Programme for 2021-2026 clearly underlines the Government's long-term vision in fostering the development of a green economy. Nevertheless, targeted support programmes remain essential to encourage green practices among entities and to effectively communicate environmental performance. Introducing inputs from existing projects can lay the groundwork for enhancing synergies among relevant institutions.

**Financial incentives:** To promote a fair and level playing field for green products in Armenia, it is essential to incentivize all businesses to adopt environmentally friendly practices. Close cooperation between the Government, business support organizations, and financing institutions should therefore be established to raise awareness and provide financial support for implementing the PEF methodology.

Furthermore, exploring environmental tax incentives, such as reduced tax schemes for resource efficient and emission-reducing technologies, should be designed and evaluated. Support programmes in the form of subsidies or co-financing for advisory and consultancy services can also be instrumental in substantiating environmental performance and promoting green initiatives.



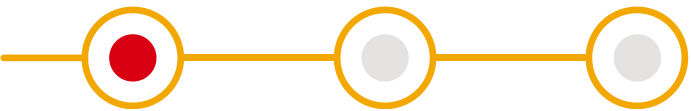
**Data development:** Currently, significant data gaps exist in Armenia due to a lack of regional data on processes occurring within the country. Many companies struggle to provide data to experts (often due to unclear upstream or downstream processes and inadequate systems for accumulating and monitoring operational data). Access to comprehensive data is crucial for conducting precise and efficient PEF studies. This enables companies to gain deeper insights into their environmental footprint, identify areas for improvement, and make informed decisions to enhance sustainability and minimize environmental impacts. Improving supply chain communication and transparency, along with implementing internal monitoring systems to track inputs and outputs, can enhance data quality. Collaborating with EU partners and other stakeholders can also provide valuable resources and expertise to help businesses establish procedures for specific data requirements for PEF studies. Unique challenges related to gathering region-specific data (such as variations in availability, quality, standardization, and privacy), should also be addressed. Additionally, stakeholders are encouraged to utilize specific Information Technology (IT) tools to support calculations and data analysis, such as SimaPro, Ecochain, and OpenLCA.

## AWARENESS RAISING

Conducting PEF studies requires expertise in supply chains and methodological choices, as well as collaboration with diverse experts to ensure reliable data. A successful rollout of PEF should establish a robust foundation and adhere to a practical timeline. Integrating PEF courses into relevant programmes in the region can further provide hands-on experience through industry partnerships. Moreover, enhancing training initiatives for experts, including guest lectures and workshops with PEF practitioners, will further develop knowledge and capacity. Increasing awareness and engagement among stakeholders in Eastern Europe/ the Caucasus Region will expand PEF capabilities, facilitating larger-scale studies and amplifying the impact of sustainable initiatives in the region.

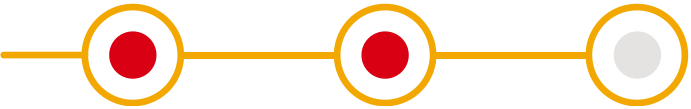
# FUTURE OUTLOOK

Based on the recommendations presented above, the proposed stages for SMGP readiness outline potential development scenarios for Armenia to establish an ecosystem for successfully entering the EU SMGP. The stages below can be achieved through coordinated actions and effective collaborations between stakeholders. This way, Armenia can initiate the first stage while concurrently preparing for subsequent facilitation and consolidation stages.



## INITIATING STAGE

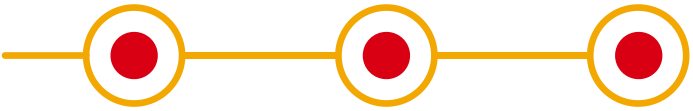
This stage involves a think-tank-empowered ecosystem, aimed to increase the effectiveness of awareness-raising and capacity-building initiatives. Here, PEF aspects are integrated into a broad spectrum of public policy and strategy documents, albeit specific plans for dedicated regulations are yet to be formulated. The designated national body focuses on gaining international recognition and enhancing internal capacities. NGOs and think tanks play crucial roles in preparing the country for PEF practices, while the private sector demonstrates awareness and initial interest in adopting the initiative.



## FACILITATING STAGE

The facilitation stage represents a synergetic ecosystem that fosters an enabling environment for the application of PEF methodology in Armenia. PEF aspects are explicitly integrated into public policy and strategy documents, supported by dedicated regulations. The designated national body gains international recognition, and the Government assumes a coordinating role by leading state-level support programmes, ensuring financial incentives, and promoting the use of IT tools for data collection and analysis.

NGOs and other think tanks serve as experts, and private sector showcases successful business cases in implementing PEF practices, thereby enhancing Armenia's presence in export markets.



## CONSOLIDATING STAGE

This stage represents a mature level where Armenia's PEF system evolves into a comprehensive and well-functioning ecosystem with robust quality infrastructure supporting the scheme for implementing PEF. This involves a nationwide application of the PEF methodology, ensuring adherence to environmental standards. The designated national body attains international recognition, and the local certification bodies comply with EU eco-labelling protocols, not only to certify Armenian companies, but also to engage with clients worldwide. The Government closely collaborates with NGOs and partners, aligning policies and development priorities with PEF practices. The private sector demonstrates a strong commitment to sustainability by establishing a robust PEF practice, gaining 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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