



Introduction of the Product Environmental Footprint (PEF) methodology in Ukraine

Pilot Project: snEco



Life cycle thinking according to PEF

The Product Environmental Footprint (PEF) methodology is designed to assist companies **measure the environmental performance of their products** and position **themselves in the market of sustainable products**. The PEF method entails a multi-criteria measurement of the environmental performance of a good or service throughout its life cycle. It **considers the entire resource cycle** and environmental factors in product manufacturing across all stages and **provides concrete rules** that reduce freedom of interpretation and promote stringent data quality and verification requirements. Implementation of a PEF assessment establishes 16 environmental impact categories and includes representative product profiles, which serve as benchmarks within their product categories.

snEco

Sector | Dairy

Location | Prime Snack LLC, Mukachevo, Zakarpattia Region, Ukraine

Key products | Dried foamed Gouda cheese snack

Employees | 14

Main markets | Ukraine, EU

Exportation quota | 10%

Founding year | 2015

Certifications/management systems | ISO 14024 - Environmental certificate (Ukrainian Ecolabel «Green Crane»), ISO 22000, HACCP



The company is represented in Poland, the Czech Republic, Slovakia, and Switzerland, and has further ambitious expansion plans. In 2023, the company received a Certificate of Recognition from the Ministry of Ecology for sustainable business practices, EU4Business "Business Recognition Awards - 2023" winner.

Motivation for introducing the PEF methodology

Sustainable business leadership | Being one of the first Ukrainian companies to implement modern EU PEF practices is a strategic investment, positioning us as a local leader and a responsible, forward-thinking business prepared to navigate the highly competitive global market, where the role of sustainability is continuously growing.

Process optimization | The PEF study highlights processes with significant environmental impact uncovering improvement opportunities throughout the entire product life cycle.

Export booster | Adoption of eco-friendly production strategies and sustainable practices is a crucial step towards conquering the EU market.

Action implemented by:



Key findings of the PEF study

The **most relevant impact categories** for the product are (1) Climate change (32.41 %), (2) Particulate matter - 15.77 %, (3) Acidification (12.58%), and (4) Ecotoxicity, freshwater (7.72 %). The **most relevant life cycle stages** for this product are (1) LCS1 Raw materials acquisition and pre-processing (Raw milk production 71,71 %), (2) LCS4 - Packaging materials production (9,18%). The **most relevant processes** for this product are (1) Cow milk production and (2) Landfill of municipal solid waste.



Climate change impact category:

57.02%

Raw materials acquisition and pre-processing

19.94%

Waste disposal

2.92%

Transportation

Acidification impact category:

90.85%

Raw materials acquisition and pre-processing

Recommendations

Sustainable raw material sourcing | Climate change (32.41%) is identified as the most important impact category. It associates with dairy farms contribute to climate change primarily through methane emissions from livestock digestion and nitrous oxide from manure management. Milk production is a significant contributor across a wide range of environmental impact categories, including particulate matter, acidification, and freshwater ecotoxicity. Therefore, it remains essential to prioritize milk suppliers that adhere to the best available sustainable practices when making procurement decisions.

Packaging and shipping waste reduction | Optimizing packaging design, improving shipping efficiency, and partnerships with recycling facilities or third-party organizations to facilitate the recycling of packaging materials can be considered.

Environmentally-friendly shipping practices | To minimize the climate impact of raw material transportation following aspects can be considered: 1) prioritization of eco-friendly transport methods, 2) optimization of logistics networks by sourcing local suppliers, and 3) implementation of bulk shipping strategies.

“By sharing our PEF study experience and findings, we want to play a role in raising awareness about product environmental impacts, promote sustainable production and consumption practices, build loyalty among eco-conscious consumers, and differentiate company in a sustainability-focused market”.

Phillip Grishin and Vadim Grishin, Co-owners

The Product Environmental Footprint (PEF) methodology was introduced by the European Commission in 2013, under the 2013 Single Market for Green Products (SMGP) initiative. 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. For more details, visit: www.eu4environment.org

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



Resource Efficient and Cleaner Production Centre 10G
Starokyivska Str.
Kyiv, 04116, Ukraine
Tel: +380 44 227 83 78
E-mail: info@recpc.org