



Project co-financed by the European Regional Development Fund

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PEFMED

Uptake of the Product Environmental Footprint across the MED agrifood regional productive systems to enhance innovation and market value



Countries:

France, Italy, Greece, Portugal, Slovenia, Spain

Target Groups:

Industrial product chains and clusters, SME, Agrifood companies, experts in environmental impacts, sectorial agencies, PEF experts, business analysts, Smart Specialisation Strategies (S3) managers, agrifood sector experts and national agrifood associations

Theme:

Food Systems

Keywords:

Product Environmental Footprint, agrifood sector, eco-innovation, socio-economic impacts

Starting and Ending Dates:

November 2016 - July 2019

PEFMED involved over 200 companies from nine Mediterranean regions to reduce the environmental footprint of six consumer goods: olive oil and bottled water (France), wine (Italy), livestock feed (Portugal), cured meats (Spain) and cheese (in Slovenia, Italy and Greece). Focusing on SMEs, **PEFMED** developed methods, tools and solutions and over 60 good practices for these sectors. **PEFMED**'s overall aim is to support agrifood companies in transitioning to models based on the Product Environmental Footprint (PEF), a EU methodology for assessing the environmental footprint of products in their life cycle, and to promote sustainable and competitive production.

The PEF method was tested together with a set of socio-economic and key performance indicators: **PEFMED**'s SE-KPIs tool.

These indicators include human rights, working conditions, health and safety, cultural heritage, governance and socio-economic territorial impacts. After assessing the environmental and socio-economic performances of the products, the most effective technological and management solutions were identified by a team of researchers, entrepreneurs and experts to improve the environmental and socio-economic footprint of the selected agrifood sectors throughout their supply chains. Thanks to the support of the project's territorial clusters and Smart Specialisation Strategies (S3) regional referents, solutions were analysed in relation to available economic policy tools. This led to the development of "sustainable business plans", including eco-innovation and marketing strategies for the companies involved.

PEFMED Pilot Studies



Challenges

The main challenges addressed by **PEFMED** are:

- Greening agrifood supply chains
- Reducing their socio-economic impacts

- Promoting the uptake of eco-innovative practices in these supply chains
- Enhancing the competitiveness of Mediterranean agrifood products

Zooming In

“ Feta is the main representative of Greek cheeses all over the world. It is a traditional protected destination of origin (PDO) product with a long history. Made from sheep and goat milk, it is a prominent staple of the Greek diet. During the pilot phase of the **PEFMED** project, we tested the PEF methodology for dairy products in Feta cheese production and developed recommendations for its improvement. We proposed that more qualitative environmental factors be taken under consideration for the calculation of the PEF and integrated to the methodology such as:

- Support for social cohesion support in rural areas
- Biodiversity
- Indigenous breed conservation
- Extensive and semi-extensive livestock farming

During the pilot phase of the **PEFMED** project, we tested the PEF methodology for dairy products in Feta cheese production and developed recommendations for its improvement. ”

Ioannis Vastardis
DELTA FOODS S.A.
(Greek pilot company)

Recommendations

PEFMED transferred its outputs, method and tools to nine new industrial associations, clusters and companies through training activities and “PEF-DAY” dissemination events and workshops in different MED locations. These processes yielded three main recommendations to encourage a wider application of the PEF method in the EU by:

- Increasing the availability of final PEF Category Rules and of specific datasets for the Mediterranean region

- Supporting measures for the application of PEF: i.e. “consultancy vouchers”, training for consultants and companies involved in agrifood supply chains and local helpdesks
- Developing simplified tools for applying PEF to SMEs

Moreover, the application of PEF could be expanded through a certification or labelling scheme (e.g. similar to the “Made Green in Italy” scheme), and if its use became mandatory or at least more regulated by EU member states.

Green Growth and the EU Green Deal

With the necessary support from agrifood federations and regional policymakers, **PEFMED**'s approach was able to lower the environmental and socio-economic impacts of 9 agrifood supply chains, improve companies' capacity to respond to consumers' needs and expand the market for green products. **PEFMED** thus contributed to the [EU Green Deal](#) and its [Farm to Fork Strategy](#) in several ways: By

helping agrifood companies and national agrifood associations to take stock of their environmental footprint throughout their supply chains, by clearing the way for the introduction of more eco-innovative and sustainable practices within the target sectors. The inclusion of socio-economic criteria using **PEFMED**'s SE-KPI method allowed the project to develop a holistic approach to greening the agrifood system.

Partners:



The InterregMED Green Growth Community

Green Growth is a thematic community that promotes sustainable development in the Mediterranean within the framework of the Interreg Med Programme. It supports the sound management of natural resources by enhancing cross-sectoral innovation practices through an integrated, territorially-based cooperation approach.

The community supports its projects in communicating and capitalising on their results to increase their impact at the policy level and ensure their potential transfer into other territories.

Visit our website:
green-growth.interreg-med.eu

Join the Green Growth Capitalisation Platform:
interregmedgreengrowth.eu

Further Information:

Interreg PEFMED website:
pefmed.interreg-med.eu

PEFMED wiki:
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PEFMED

Type of the result:

- Offline tools: 3 guides for users, leaflets, KPIs and PEF tools
- Template for the collection of best practices

Language(s) in which the result is developed:

General information about the project is available in Spanish, French, Greek, Italian, Slovenian and Portuguese

What is the most appropriate level for its use/ implementation?

Local, regional, international

DESCRIPTION OF THE RESULTS

Scheme to merge PEF with Social Footprint & Product Social Identity Indicators – ([SOCIAL and ECONOMIC KPIs TOOL](#))

The tool consists of a set of 14 Economic and Social Key Performance Indicators (KPIs) and 36 questions to test the applicability of the new EU Product Environmental Footprint method (PEF) for some specific product groups in 9 MED agrofood regional systems (clusters & supply chains), with the final aim of fostering targeted systemic Eco innovation interventions to green the agrofood sector, raise the market value of PEF-compliant productions and galvanise the Smart Specialisation Strategies (RIS3) goals related to innovation in agrofood & industrial production.

[Product Environmental Footprint tool](#) for 3 products: olive oil, packed water and wine

The tool allows a qualitative assessment and a quantitative assessment of each sector, from their production to their end of life and facilitate the elaboration of PEF studies in the olive oil, bottled water and wine sectors, all involved in PEFMED pilot phase, in compliance with the relevant PEF Category Rules (PEFCRs). This simplified tool helps assessing the product life cycle hotspots, e.g. in terms of most critical phases, processes, and impact categories, and improvement potentials.

Good practices Info sheets on technological and management models for improving the environmental footprint of agro-food value chains

Collection of 60 info sheets describing technological and management models to be used as a source of information and inspiration by companies (mainly SMEs) working in the agro-food sector, willing to improve their environmental and socio-economic profile. All PEFMED partners contributed their experiences and knowledge acquired through the project.



SE-KPIS TOOL IMPLEMENTATION AND EVALUATION BY END-USERS

The results of applying SE-KPIS tool reflect the company's progress in this field, and indicate the sustainability of its supply chain in socio-economic terms. Using this method on a yearly basis allows companies to track progress on specific KPIs, and identify areas for improvement. Users can choose to focus their resources on all KPIs, or select those that most interest them.

This tool was tested by 9 pilot companies within the agro-food sector across the Mediterranean region, as part of PEFMED project. Each company developed an action plan based on the results of the initial evaluation, and a summary report on the pilot phase was developed and is available on the project website report after the pilot phase was finished.

WHAT IS THE TRANSFER POTENTIAL?

The PEF and SE-KPIS tools will serve as a basis to know the existing level of data, practices and challenges on each SME supply chain from the environmental and socio-economic point of view. The results can enrich an improvement action plan for each product analysed, by selecting managing and technological actions and integrating them into the company's strategy.

The 60 technical info sheets have the potential to widely spread information about sustainable practices in the agro-food industry. All **PEFMED** partners are encouraged to distribute them during the events, especially during meetings with companies that may be interested in using them. The main expected impact is to make agro-food companies aware of the numerous ways to become more sustainable from an environmental and socio-economic standpoint.

WHAT IS THE PROJECT REPLICABILITY?

The PEFMED results permit companies to use the tools to have a very complete field of study on environmental and socio-economic aspects makes possible to identify if a gain of impact at one life cycle stage will degrade the environmental impact at other stages, or in the same stage but on another impact. It also allows to have a complete inventory of flows coming through the system or the organisation having indicators for each category of environmental impact and socio-economic aspects.

The info sheets inform companies about opportunities for becoming more sustainable. If desired, the number of best practices available could be extended to other sectors and organised in a database. The possibility of allowing the addition of new contributions into the collection by those interested in sharing their knowledge could create a constant flow of new models and solutions.

WHAT CHALLENGES MAY ARISE?

The need of knowledge of social "hot spots". The info sheets should be updated with new innovative best practices, technologies and tools that would make food supply chains more sustainable.