



# **CUESTIONARIO DE BÚSQUEDA DE SOCIOS**

SUBPROGRAMA	Medioambiente
ÁREA PRIORITARIA	Medioambiente y Uso eficiente de los recursos
PRIORIDAD TEMÁTICA	<ul> <li>Residuos</li> <li>Prioridad 2.2.2: Implementación de legislación sobre residuos</li> <li>Bioresiduos. Proyectos sobre residuos alimenticios en la cadena alimentaria</li> <li>(SOLTUB es miembro de la Plataforma Húngara de Residuos Alimentarios)</li> <li>Prioridad 2.2.4. Eficiencia en el uso de recursos</li> <li>Eficiencia en el uso de recursos, economía verde y circular. Proyectos en la cadena de valor, nuevos modelos de negocios en la eficiencia de recursos y proyectos de metodología de la huella ambiental.</li> <li>(SOLTUB asiste a la Comisión Europea en el desarrollo de una metodología para la huella ambiental de la cadena de valor)</li> <li>Prioridad 2.2.5. Calidad del aire y emisiones, incluyendo medioambiente urbano.</li> <li>Legislación sobre calidad del aire y la Directiva NEC. Proyctos para reducir las emisiones de amoniaco y PM de la agricultura</li> <li>(SOLTUB ha terminado un proyecto FP7 para la valoración de la emisión de amoniaco en agricultura</li> <li>Huella ambiental</li> </ul>
TEMA DEL PROYECTO	Reducción de la emisión de amoniaco Residuos alimentatios
SOCIOS NACIONALES O DE OTROS ESTADOS MIEMBROS	Socios nacionales
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# LIFE-PEF (product environmental footprint)

Proposal title: Improving resource efficiency in the food chain by assessing the environmental footprint of products

### **Problem description**

The European Commission proposed an EU-wide methods to measure the life cycle environmental performance of food products encouraging Member States to take them up. The EU suggested common methods were announced and published in the Communication "Building the Single Market for Green Products, Facilitating better information on the environmental performance of products and organisations COM(2013) 196 final". The tools to participate on the single market of green products are the Product Environmental Footprint (PEF) which use the Life Cycle Assessment (LCA) based method to calculate the environmental performance of a product. The Commission between 2013-2016 launched a food group PEF testing through an open call for volunteers. The objectives was to set up and validate the process of the development of product group-specific rules (Product Environmental Footprint Category Rules — PEFCRs), including the development of performance benchmarks and to test the different compliance and verification systems. Different business-to-business and business-to-consumer communication vehicles was developed in collaboration with stakeholders. The LIFEPEF proposal intend to assist EU Commission in the implementation of the relevant EU requirements.

#### Overall objective

The LIFEPEF proposal by implementing the EU recommendation on the common methods to measure the life cycle environmental performance of food products aims to enable LIFE partners to benefit from the advantages of applying the PEF potentials in order to increase their resource efficiency, to close the material and energy loops and to improve the environmental performance of seleted food products. The planned activities aims to provide relevant policy tools to effectively use PEF potentials to fulfil the EU single market of green products requirement (COM(2013) 196 final), furthermore to create awareness among stakeholders and the general public. The EU launched a three year testing period through an open call for volunteers which will be further extended by the LIFEPEF proposal. Three case studies are planed to be elaborated for selected food products to further improve the EU PEF 2013-2016 testing period focusing on the partners+ products+ regional needs and to assist DG ENV in the PEF transition phase which will start from January 2018 and will last till December 2020 and also to improve the new governance structure proposed by DG ENV in 2015.

# **Proposed actions**

- A. Preparatory actions
- B. Purchase / lease of land and / or compensation payments for use rights
- C. Implementation actions
- D. Monitoring of the impact of the project actions
- E. Communication and dissemination of results
- F. Project management

#### **Expected results**

The LIFEPEF proposal will assist participating partners to further improve the efficient use of their available resources, to close the material and energy loops at product and company level in order

to become more independent from external energy and material supply. Furthermore enforce partners in their efforts to diversify the sources of income from the agri -food sector and improve the participating organisations resource efficiency. Developing the environmental footprint of selected food products will allow policy makers to have a clearer picture of the potential environmental impacts related to certain food product groups and to set targets and environmental objectives based on such environmental footprint (EF) information. Furthermore the EU Member States who intend to introduce PEF incentives to link them to the environmental performance of a food product along its supply chain, also innovative companies can design better their products and services improving their environmental performance in the area where it delivers the best environmental advantages with marketing effects.

The results of the communication activities will be disseminated to stakeholders, large public, other interested parties via LIFE website, leaflets, newsletters, conferences and workshops.

#### **Legal background**

- 1. The EU recommendation on the common methods to measure the life cycle environmental performance of products and organisations COM (2013)179 final
  - 2. The resource-efficient Europe flagship initiative, COM(2011) 571 final
  - 3. Single Market for Green Products initiative COM(2013) 196 final
- 4. Circular economy action plan "Closing the loop An EU action plan for the Circular Economy COM(2015) 614 final

# **LIFE-FWM** (food waste management)

#### Proposal title: Innovative procedures in food waste management

# **Problem description**

Managing food waste is important to the global food security and preventing hazardous environmental problems as waste of energy, contribution to climate change, water pollution, availability of resources, also to avoid linked economic problems as increasing costs, consumption, waste and to mention the social impacts as health. Studies show that between 30%-50% of the world food production is not consumed, which leads to negative impacts throughout the food supply chain. Food waste prevention and reduction contribute to a resource efficient transition in Europe. The costs associated with food waste for EU-28 in 2012 are estimated at around 143 billion euros. Two-thirds of the costs are associated with food waste from households which have more edible food waste than any other sector including the costs associated with a tonne of food accumulating along the supply chain including processing, packaging and retail. The EU and Member States are committed to meeting the Sustainable Development Goal (SDG), adopted in September 2015, including the target to halve per capita food waste at the retail and consumer level by 2030, and reduce food losses along the food production and supply chains (SDG 12.3 target).

#### **Overall objectives**

The general objective of the LIFE FWM is to reduce the food losses in the selected food chains and to improve the resource efficiency of the agri -food sectors. In order to achieve the general objectives the proposal aims to develop a common methodology to assess the different food waste/losses inputs and outputs in the selected sectors and food groups in different European regions, to perform case studies/pilots for the testing the efficiency of the methodology, to benchmark the different food groups (similarities and differences concerning food waste and losses) under different processing methods, increase awareness/communication and dissemination of the results to stakeholders, identify the best practices in food waste prevention and management. The food value chain will be assessed from primary production, processing, wholesale - logistics and retail - markets, food service and households. Food waste management include also the reutilisation of the waste as animal feed or producing green energy in biogas plants.

#### **Proposed actions**

- A. Preparatory actions
- B. Purchase / lease of land and / or compensation payments for use rights
- C. Implementation actions
- D. Monitoring of the impact of the project actions
- E. Communication and dissemination of results
- F. Project management

# **Expected results**

Based on the developed common methodology enforced with the case studies/pilots of selected food groups in different European regions the guideline of best practices in food waste management will be issued for the participants in the food value chain as producers, processors, retailers, food services, households. The guideline deals also with food waste measurements, food redistribution, awarenes rising and needs in education, compilation of research and innovation

results.

Based on a large stakeholders consultation and project results the food waste accounting and reporting standard will be developed for agri-food companies containing the food waste upstream and dowstream processes having the role to perform the inventory of losses.

The project results and consultation with stakeholder allow to perform an applied methodology food waste prevention – reduction and management guideline to policy makers in order to improve companies resource efficiency including food waste and lossess environmental impact on GHG emission (carbon footprint) water demand, land use, fertilizer and pesticide use, landfill demand and the economic impact as benefit and cost ratio, cost of reduction, cost sawings from waste reduction on businesses including food waste monitoring.

The results of the communication activities will be disseminated to stakeholders, large public, other interested parties via LIFE website, leaflets, newsletters, conferences and workshops.

# **Legal background**

- 1. The resource-efficient Europe flagship initiative COM(2011) 571 final
- 2. Regulation (EU) 1169/2011 on the provision of food information to consumers Other documents from the EU Parlament, EU Court of Auditors, Nordic Council of Ministers, WRI, WRAP

# LIFE-MVC (manure value chain)

Proposal title: Manure value chain management to reduce the ammonia and PM emission

# **Problem description**

The livestock production systems currently occupy around 28% of the land surface in the EU. The livestock production systems affect GHG emissions, water, air and soil quality, biodiversity having impact on the nitrogen (N), phosphorus (P) and carbon (C) cycles. The agriculture is one of the major contributors to environmental impacts, approx. 12% on global warming and 59% for N water quality, but also other adverse effects as acidification, eutrophication. Manure management is a major concern regarding the environmental footprint of livestock, mostly in areas with a high animal density (e.g. The Netherlands, Flanders) having problems to respects the EU nitrate directive requirements. A few mitigation efforts taken as a result of this directive include transport and processing of manure. Still the most important GHG emission occur during manure storage. This means that improving the efficiency and safety of manure value chain can reduce the ammonia emissions. More than that turning manure into resources, closing the nutrient loops for example for green energy and organic sourced fertilizer can reduce significantly the GHG emission in the livestock sectors. The emissions of ammonia contribute to the formation of secondary particulate matter(PM) with impacts on air quality. Across Europe, ammonium in particles may account for 5-15% of total PM. To achive a significant progress in mitigating the livestok sector environmental impacts including ammonia and PM emissions in Europe will only be possible via a combination of technology measures reducing livestock emissions (feeding, manure management) with the changes in the consumers food choices and managing food waste.

# **Overall objective**

The main objective of the LIFE- MVC is to assess the ammonia and particulate mater (PM) emission main drivers in different livestock production systems as beef, dairy, pig and poltry, quantify the environmental impact and make recomandations for GHG emission reduction to policy drivers in the analysed livestock sectors. To have an overaching sustainability aspect the main aims are:

- to have a clear image on the different livestock production systems (closed and open air systems), with their contexts and drivers. Mapping environmental impacts of livestock production systems are often dominated by a reductionist view. There is a need to understand and distinguish between different livestock production systems or even food systems, to have information on the trade-offs in the optimum solutions.
- to develop new business models for sustainability and circular economy, where the transition to sustainable production systems needs to be translated into reality via governance models. There is a diversity of business models which needs to be improved from an environmental point.
- to develop case studies for different manure value chains in the beef and cattle, pig and poultry sector (including organic production) containing the environmental footprint of the manure management systems, and having a system approach for the sector sustainability,
- to reduce meat consumption environmental impact as there is a growing awareness that intensive, externally feed-based livestock systems are not sustainable. Going for sustainable livestock systems may require a reduction of the total availability of animal-based food. At the same time, consumer demand can be a driver for system change, as it is already evident with consumption trends in Europe.

#### **Proposed actions**

- A. Preparatory actions
- B. Purchase / lease of land and / or compensation payments for use rights
- C. Implementation actions
- D. Monitoring of the impact of the project actions
- E. Communication and dissemination of results
- F. Project management

### **Expected results**

The analysis of the state of the art and foreseeable technology developments will fill in the wide efficiency gap between actual livestock farming and the theoretical optimum for GHG reduction. Applying the principles of the environmental footprint assessment of the manure value chain by LCA analisys improve the assessment and recommendation systems. Moving towards more sustainable livestock systems the LIFE MVC will offer new business models with new decisionsupport tools including models and other digital applications. The LIFE-MVC proposal allows that the sustainability of the targeted livestock sectors will rely on good indicators and frameworks and will satisfy the diversity of needs of different stakeholders. The inter- and transdisciplinary system approach allow a general framework for a sustainable circular economy livestock systems and tackle the challenge of setting system boundaries and scale of analysis in a sustainable way. The results of the communication activities will be disseminated to stakeholders, large public,

other interested parties via LIFE website, leaflets, newsletters, conferences and workshops.

# Legal background

- 1. Nitrate directive 91/676 EEC
- 2. The resource-efficient Europe flagship initiative, COM(2011) 571 final
- 3. Circular economy action plan "Closing the loop An EU action plan for the Circular Economy COM(2015) 614 final