

ECOWASTE 4 FOOD

Interreg Europe



Supporting Eco-Innovation To Reduce Food Waste And Promote A Better Resource Efficiency Economy

Policy Brief on food waste, food security, eco-innovations & role of City/Regions authorities

March 2017



WOJEWÓDZTWO
WIELKOPOLSKIE



ETELÄ-POHJANMAAN LIITTO
REGIONAL COUNCIL OF SOUTH OSTROBOTHNIA



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ECOWASTE4FOOD is a project developed by CIHEAM-IAMM, Marshall Office of the Wielkopolska Region, City of Ferrara, Regional Development Fund on behalf of the Region of Western Macedonia, Regional Council of South Ostrobothnia, Region Provence-Alpes-Côte d'Azur, Devon County Council, Agencia de Residus de Catalonia, with the support of Interreg Europe

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1. Rationale

The [ECOWASTE4FOOD](#) project led by CIHEAM-IAMM brings together seven City and Regional Authorities from seven countries throughout Europe (Wielkopolska Region, City of Ferrara, Region of West Macedonia, Regional Council of South Ostrobothnia, Regional Council of PACA, Devon County Council, Waste Agency of Catalonia).

Its ambition is to address the crucial issue of food waste, not only to stop an unacceptable situation which causes the loss of up to 50% of the agricultural production that keeps not consumed or is consumed in a wrong way regarding health concerns, but also to demonstrate that food waste could be at source of a resource efficient and environmentally friendly economy for the territories.

Local and regional authorities project' partners have committed to work together, exchanging their experiences and learning from each other, to promote in their territories eco-innovations to reduce food waste, as a way to move forward a smart, sustainable and inclusive growth. These public authorities have committed themselves to improve their own policies during the four years duration of the project, in particular by influencing or even by raising existing European Regional Development Funds (ERDF) within their City or Regional operational programme 2014-2020 or equivalent.

More broadly, ECOWASTE4FOOD project is expected to provide valuable inputs for the debate on future priorities of ERDF beyond 2020, including governance, strategies and delivery mechanisms at City and Regional levels. About the topic, ECOWASTE4FOOD intends to focus the nexus between food security, resource efficiency, circular economy and territorial governance.

2. Challenges of food waste

« *Food waste: Fractions of “food and inedible parts of food removed from the food supply chain” to be recovered or disposed (including - composted, crops ploughed in/not harvested, anaerobic digestion, bioenergy production, co-generation, incineration, disposal to sewer, landfill or discarded to sea).* » (Stenmarck et al., FUSIONS, 2016).

Food waste is both a major **food security** and **resource efficiency** challenge in the world and in the EU. According to the most reliable data (Stenmarck and al., FUSIONS, 2016), 10% of the EU's population is affected by food insecurity; 88 million tons of food were wasted in the EU in 2012, or almost 173 kg per person. In that respect it's no wonder that preventing and reducing food waste is a top priority for the EU in the beginning 21st century.

Estimations of food waste in the EU in 2012 were as follows (FUSIONS, 2016): Households: 53%, Processing 19%, Food service: 12%, Production: 11%, Wholesale and retail: 5%.

Meanwhile there's no wonder that preventing food waste is a key issue for achieving food security and resource efficiency, the phenomena occurs through fourfold interactive dimensions (Stenmarck and al., FUSIONS, 2016 ; FAO-CIHEAM, 2016):

- i) environment depletion (energy, non-renewable natural resources);
- ii) economic losses (resource efficiency, price volatility, increasing costs, consumption, waste management, commodity markets);
- iii) economic and social impacts (health, equality);

iv) waste of knowledge and human resources

In other terms what productive system may accept that one third of its production can be wasted with, as a corollary, losses of incomes for farmers and agri-food industries, GHG emissions that could be avoided and natural resources saved? Doubtless food waste is the big concern of unsustainable food systems, like « *an elephant in a room* ».

Changing unsustainable food systems make necessary to change both sides of the same coin: on the one hand changing the food supply by creating production systems based on the use (and re-use) of renewable resources sources; on the other hand it requires a change from demand side, through consuming food products having a low environmental impact.

3. From food security towards resource efficiency and circular economy

Addressing food waste is therefore an environmental issue. It aims at reducing the environmental footprint and over-exploitation of non-renewable resources that “feed” the food systems. But there is another reason why food waste is a so important issue today: it reached so huge volumes in developed countries that waste became a new exploitable resource within a **circular economy**¹.

Food waste is a green deposit under-exploited that attracts actors from the private sector as well local and regional authorities that invest in the **bio-economy** sector (closing the loops, recycling and re-use technologies, climate friendly and renewable energies, energy-saving processes, clean technologies...).

What is called the bio-economy sector in the EU became a new nexus for a resource-efficient and sustainable economy. The goal is to move towards a more innovative and low-emissions economy, managing demands for food supplies as well as for feed, energy and green chemistry with a sustainable use of renewable biological resources for while ensuring biodiversity and environmental protection. To achieve this goal, the European Commission set up a bio-economy strategy focusing on: i) developing new technologies and processes for the bio-economy; ii) developing markets in bio-economy sectors; iii) pushing policymakers and stakeholders to work more closely together².

4. Scope of ECOWASTE4FOOD project: supporting eco-innovations

Given its Interreg Europe funding features ECOWASTE4FOOD will not focus on losses and waste at the production stage³, but will rather concentrate on downstream stages from processing stage to food consuming, where Project Partners will support **eco-innovations** in their territories.

Eco-innovations are innovations that help to improve the resource efficiency of processes and to lower the environmental impact of human activities. Eco-innovation helps to enable this move towards a circular economy through a mix of technological and non-technological changes that can fuel environmental friendly transition pathways in different sectors and territories⁴.

Those eco-innovations will refer to four axes on which each project partners will act as a referent:

- i) **limitation of waste production at source** in the food processing industry;

1 European Commission package on circular economy, 2015.

2 European Commission' strategy, Innovating for a sustainable growth: a bio-economy for Europe, 2012

3 Production stage for agricultural and fisheries products is covered by the Common Agricultural Policy (EAFRD and CMO) by the Common Fisheries Policy provisions.

4 OECD, Better policies to support eco-innovation, 2011

- ii) **conception and design of products** that help reducing the food waste by the end users ;
- iii) **use of products** today considered as unusable or unserviceable products ;
- iv) **services provided** that could help reducing food waste.

Obviously an innovation does succeed when it comes to the market and meet its users and consumers. Eco-innovations may generate lasting direct benefits that affect not only business sectors in food waste, but may generate second order impacts on society as a whole, thus influencing new social behaviors regarding food waste.

5. Eco-innovations vs food waste can help to reduce money waste

When food loss in the households constitutes at least 53% of the total food waste in the EU, a remarkable attention must be paid to the reasons for wasting the food that is already bought (or sometimes grown) by the individual consumers. In many European households natural resources are continuously wasted and thrown away instead of using them in the purpose they are bought for.

Food waste in the households means economical losses and a waste of money, while at the same time 10% of the EU's population is affected by food insecurity. Does that mean for those individual consumers wasting food, the financial loss is (or feels) too inconspicuous? Should there be more economical incentives for the individual consumers to reduce food waste?

Eco-innovations must be found to help the households to stop wasting natural and economical resources and find more clever ways of buying food and consuming it in a way that doesn't result as a food loss and a waste of money. Eco-innovations must also be found to help prevent food waste in different levels of the food system and at the same time raise the amount of citizens reaching adequate daily nutrition.

When living in a market economy, attention needs to be paid to those who would economically benefit the most when food waste is prevented and direct the incentives to those. To be able to change food waste to a source of a resource efficient and environmentally friendly economy for the territories, eco-innovations are needed to find ways to use all natural resources and the produced food efficiently and ecologically. While reducing food waste in some cases means also reducing the consuming of food, it is important for the food system actors to seek for products and services that provide added value by being more resource efficient and environmentally friendly.

6. Food waste as a policy challenge for the EU institutions

Over the last two years many reports and opinions from various European institutions have stressed the key role of governments in promoting prevention and reduction of food waste⁵. This is particularly the case since the adoption of the 2030 **Agenda for Sustainable Development**, adopted by the United Nations General Assembly on 25 September 2015. The SDG 12.3 states : « *By 2030, have per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.* »

While a lot has been written by EU institutions that MS « should » have targets by 2030 to prevent, take measures, and to reduce food waste, very little has been said about the role of City and Regional Authorities in addressing such challenge. Only the Committee of the Regions (CoR) has issued an opinion in 2016 which encourages local and regional authorities « *to take actions by putting in place*

5 Council conclusions of 28 June 2016 on food losses and food waste; opinion of the CoR of 15 June 2016 on food waste; draft report of the EP on resource efficiency: reducing food waste, improving food safety, 8 December 2016.

effective prevention and awareness programmes ». (CoR, 2016).

Whether the European Commission has issued a circular economy package and set up a platform on food losses and waste with various EU stakeholders, the European Court of Auditor has recently criticized its lack of ambition to better coordinate and align existing policies on food waste. On another side, while the ECA has stressed the loopholes of the EU farming and fisheries policies in addressing food waste, the EU cohesion policy has not been identified at all as a potential leverage at regional and city levels.

Such criticism is a challenge that European cities and regions have the capacity to meet. In addition to national laws, strategies and actions plans to cut food waste, City and Regional Authorities have an opportunity to drive and implement concrete solutions having clear demonstrating effects.

7. Improve regional/local governance of food systems by triggering ERDF on investment priorities that address food waste

The wide range of actions at city and regional levels falls into various categories, from awareness-raising actions till actions to promote the consumption of edible foodstuffs that could be wasted, through specific actions to reduce food waste at source at different food chain level (i.e. processing, packaging, marketing, etc.).

Above all, both sectoral and transversal actions need **collective** commitments are a leverage to maximize demonstrating effects and multiply the impact of actions to reduce food waste by putting them in place within **multi-actors approaches** and by taking advantage of the exchanges and the sharing of experiences that result from them to improve their efficiency.

ECOWASTE4FOOD project intends to support City and Regional Authorities in designing their own Action Plans by providing them with available knowledge, good practice and eco-innovative solutions that will be generated from its working plan. In addition, ECOWASTE4FOOD will analyze, capitalize, disseminate and valorize eco-innovations vs food waste in various policy, scientific and professional forums at EU level.

In implementing ECOWASTE4FOOD in their territory, all project partners recognize that City and Regional and Authorities may act as:

- 1) **'Knowledge brokers'** in stimulating participation of target groups (from SMEs to consumers) to identify, select eco-innovations and facilitating their uptake, up scaling and out scaling in other territories, through development of knowledge exchange and cooperation among partners and stakeholder groups;
- 2) **'Nimble' leaders** in implementing clear strategies and plans to prevent and/or reduce food waste at any stage of the food chain, with the active participation of local stakeholders (from SMEs to consumers), and with clear indicators, effective outputs and outcomes;
- 3) **Strategic operators** in promoting and governing integrated and sustainable food systems while enabling local actors (from SMEs to consumers) to reinforce their capacities and abilities to participate in such schemes.

Sources

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