



LIFE FOSTER:

Training, education and communication to reduce food waste in the food service industry.



LAYMAN'S report

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The problem

FP7 project FUSIONS analysed food waste in EU. In its report “Estimates of European food waste levels”, the collection and analysis of data from across Europe generated an estimate of food waste in the EU-28 in 2012 of 88 million tons, which equates to 173 kilograms of food waste per person in the EU-28.

The food service industry produces 10.5 million tons of food waste each year. This means, that it contributes with 12% to the total food waste.

THIS IS THE PROBLEM DIMENSION IN THE PROJECT AREA:

Italy

The distribution and restaurant industry, according to the 2015 Waste Watcher Report, contribute to 203 million tons per year in waste, accounting for nearly a sixth of the total (about 13%) of food waste.

France

The food waste in the restaurant industry, estimated by a parliamentary initiative in 2014, reaches 1,080 Kilo tons, which represents 11% of total food waste in France.

Spain

Spain has the 7th highest level of food wastage of any EU country (7.7 million tons). According to a national study, approximately 14% of food loss and waste occurs in the restaurant industry and 5% occurs during distribution.

Malta

Sector specific food waste data for Malta is unavailable. Although figures are unavailable, the Maltese hospitality sector is a considerable generator of food waste if you consider that Malta has a population of 460,000, around 2 million inbound tourists per annum with an average stay of 7.6 days, and an additional 626,000 cruise ship tourists (most of which only visit for a few hours).

About LIFE FOSTER

Co-financed by the EU Commission LIFE Programme and led by the Italian network for VET, ENAIP NET, the LIFE FOSTER project aims at reducing waste in the restaurant industry.

The project focuses on these main fields:

- VOCATIONAL TRAINING,
- FOCUS ON PREVENTION
- COMMUNICATION

The interconnection between environmental, economic and social dynamics identifies vocational training as the key instrument to implement SDG n.12 - Responsible Consumption and Production - of the UN 2030 Agenda for Sustainable Development.

Within LIFE FOSTER, vocational training helps to reach target n.12.3, “By 2030, halve per capita global food waste at the retail and consumer levels”. This strategy also contributes to achieving SDG n.4 - Quality Education.

The project is implemented in France, Italy, Malta, and Spain.

LIFE FOSTER consists entirely of direct and indirect actions aimed at raising awareness about the food waste challenge as a complex system problem. More specifically, the project aims to raise awareness about this problem in companies of food service industry.

Details of the project



Università di Scienze
Gastronomiche di Pollenzo

Coordinating beneficiary:

ENAIP NET - Vocational Education and Training Provider (Italy) - www.enaip.net

Associated beneficiaries:

AFPA - AGENCE NATIONALE POUR LA FORMATION DES ADULTES (France) - VET provider - www.afpa.fr

CECE - CONFEDERACIÓN ESPAÑOLA DE CENTROS DE ENSEÑANZA (Spain) - VET provider - www.cece.es

FIC - FEDERAZIONE ITALIANA CUOCHI (Italy) - Restaurants and Chefs - www.fic.it

ITS - INSTITUTE OF TOURISM STUDIES (Malta) - VET provider - <https://its.edu.mt/>

MBB - MALTA BUSINESS BUREAU (Malta) - Restaurants and Chefs - <https://mbb.org.mt/>

UNISG - UNIVERSITÀ DI SCIENZE GASTRONOMICHE (Italy) - Scientific partner - www.unisg.it



Number: LIFE17 GIE/IT/000579
Location: Italy, Spain, France, Malta
Total Budget: 1,676,566 Euro
% EU Co-funding: 997,460 Euro
Duration: 01/09/2018 - 31/08/2022

The LIFE FOSTER project received funding from the European LIFE Programme. LIFE is the EU funding instrument supporting environmental and climate action projects throughout EU.

Objectives: all made with love by LIFE FOSTER

1

Raise awareness about food waste as a major problem in food service industry, and the possibility of preventing and reducing it through the application of more sustainable practices

2

Train trainers and students, as well as professionals (back and front of house), in food service industry to adopt more sustainable practices

3

Raise policy makers' awareness about the need for measures and instruments that favour food waste prevention and reduction, particularly in food service industry

The key point of the initiative is to activate food waste prevention thanks to the active involvement of VET trainers and students of VET courses for the preparation of food service professionals.

By first training a small group of trainers the project has created a ripple effect resulting training of approx. 400 trainers and the consequent training of nearly 7,000 students.

These students have had the chance to experience and apply what they have learnt at the VET centre in approx. 2,500 enterprises during their mandatory in-company training and apprenticeships. In this way, the project not only reached, but also infiltrated the kitchen systems of various food service companies.

In this project, awareness has also been induced by the communication activities and communication tools foreseen by the project.



Target groups

TRAINERS

LIFE FOSTER trained approx. 400 trainers from the restaurant industry, coming from dozens of different centres, about food waste reduction. This information will then be passed on to the students by the same trainers.

STUDENTS

Students following a chef programme in the training centres, in Italy, France, Spain and Malta, are important targets not only because they are tomorrow chefs, but also because they will pass down their knowledge in the restaurant industry.

BACK/FRONT OF HOUSE RESTAURANT STAFF

LIFE FOSTER aims at reducing waste in the restaurant industry and thus targets food service companies directly for this cause. Several chefs and restaurant owners have agreed to help the LIFE FOSTER program in organising the students' training and to participate and promote the project's initiatives.

Furthermore, back and front of house staff have been involved in the evaluation and monitoring of students' in-company training.

POLICY MAKERS

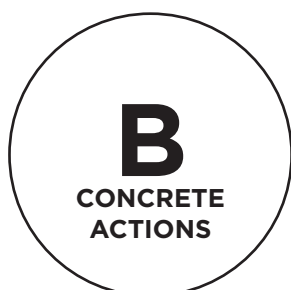
The LIFE FOSTER project has organized some dialogue meetings with policy makers in each partner country, to transfer recommendations on the development of policy measures favouring food waste prevention.

OTHER EUROPEAN TRAINING CENTRES

Several VET centres across Europe have been involved in the project, both directly, through the foreseen dissemination activities, and indirectly, through the involvement of VET EU umbrella associations which provided information and materials about the project to their member organisations.



FOSTER's main actions



B₁

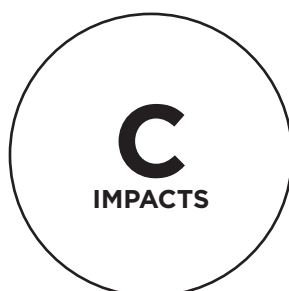
Training of students and trainers in food issues related to the prevention of food waste. The means for this action were ensured by the quality of the partnership members, training centres with long experience in school and vocational training for the catering sector.

B₂

Involvement of chefs and restaurant owners. Various types of activities, using different channels and means of communication, have raised awareness about the issue of food waste and the solutions to prevent it.

B₃

Involvement of policy makers at local to EU scale, by creating opportunities to propose the food waste prevention solutions implemented by LIFE FOSTER. The partnership has provided its expertise to policymakers in order to raise their awareness of the issue of food waste and the EU's Food waste platform activity.



C

Quantification of Project's impacts in environmental and economic terms (food waste reduction and related cost), as well as awareness-raising and social impacts.



D

Dissemination of project's results to other European training centres with the aim of encouraging the replicability of the initiative, to make communication material, and to create a network at European level.



Building LIFE FOSTER'S community

Creating solid relations with complimentary/synergic projects and initiatives taking place at national and EU level was always a high priority during the implementation of LIFE FOSTER. This resulted in:

NETWORKING INITIATIVES WITH PROJECTS



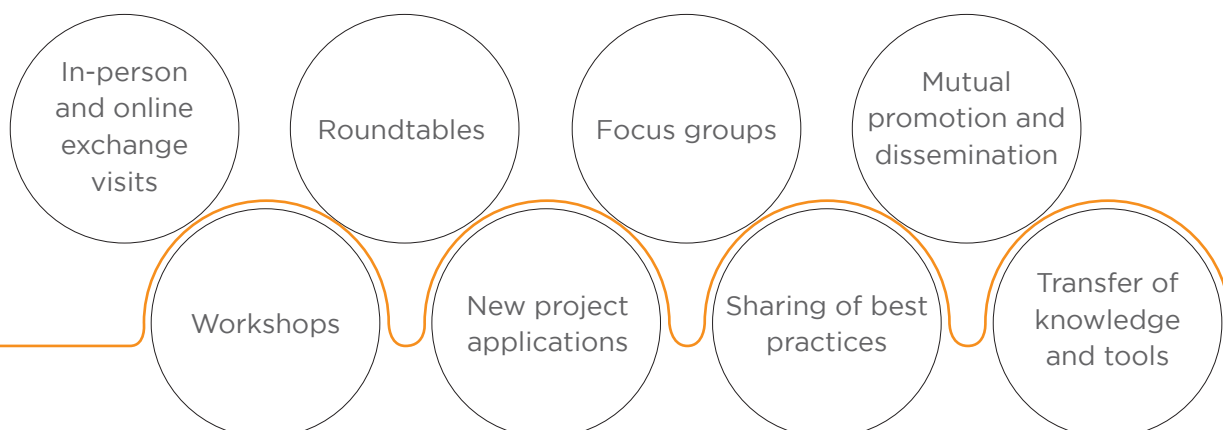
NETWORKING INITIATIVES WITH PLATFORMS



Results

MORE THAN 10 CONCRETE COLLABORATION OPPORTUNITIES CREATED
OVER 20 CONTACTS ESTABLISHED

HOW WE DID IT



LIFE FOSTER'S achievements

After 4 years of activities the project can rely on:

126.600 visitors on the website

710 followers on Facebook

340 followers on Instagram

6.500 students trained in presence

320 trainers trained in presence

4.000 students and trainers trained via e-learning

3 e-learning platforms developed

500 professionals attending webinars during pandemic

BEST PRACTICE FOR CIRCULAR ECONOMY IN ITALY – selected by ICESP

13 official project videos realised – available on Youtube Project channel

www.youtube.com/LifeFoster

480 Ambassadors of the project Manifesto for Food Waste Prevention

A project WEB APP developed: FOOD WASTE FLOW BALANCE

More than **50** events organised, both online and in presence

2.000 awareness questionnaires delivered to the public

More than **60** VET centres involved

15 training laboratories involved in the monitoring of food waste



Increasing awareness

All students involved in the LIFE FOSTER training were given an Awareness questionnaire before and after the training. Through a comparison of the pre- and post-training results carried out at mid 2021 we could see the effects and results of the FOSTER training!

From the analyses made, we can observe that all mean values increase in the POST training phase. This is a positive result as it confirms that surveyed students have improved their knowledge about food waste in several dimensions after the training.

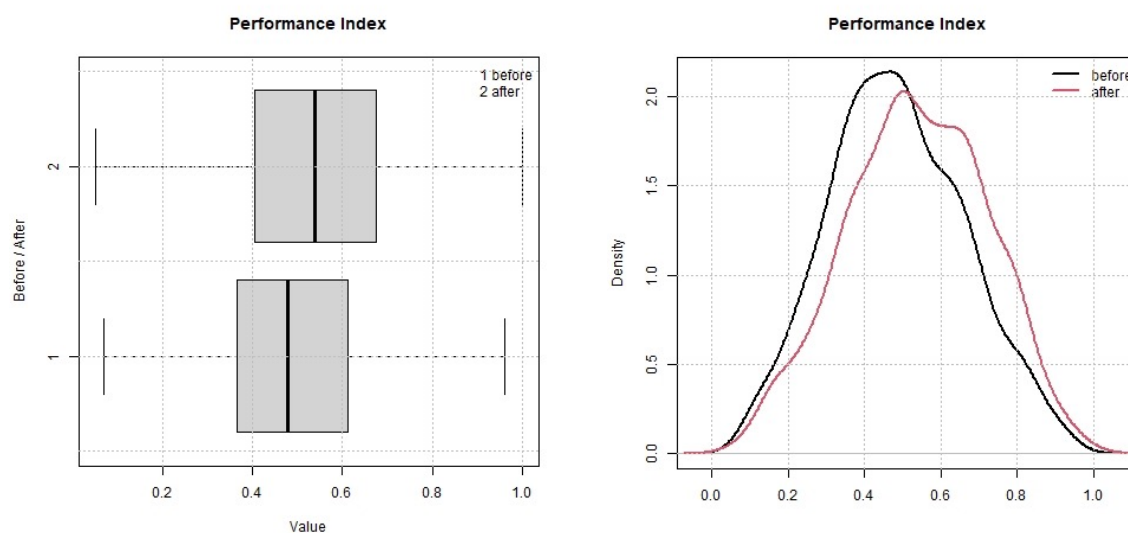


Figure 1. Boxplot of the overall score before and after the program (left) and distribution of the estimated density.



Food Waste Flow Balance App

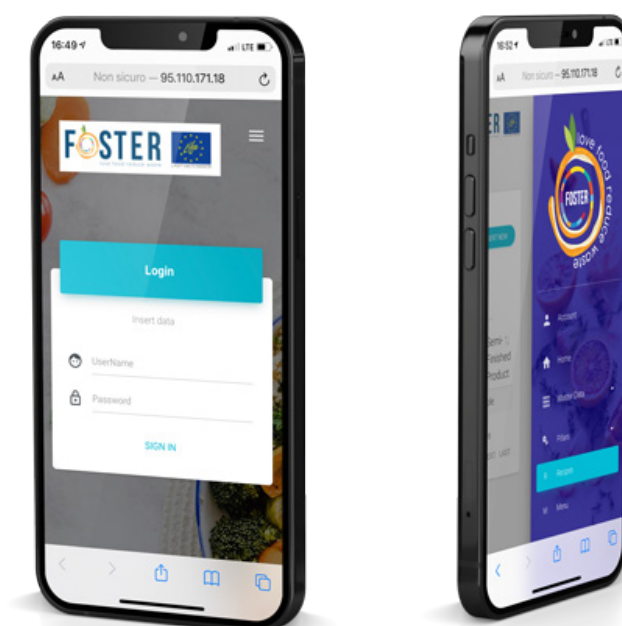
What is the purpose of FOOD WASTE FLOW BALANCE?

This innovative tool allows restaurant owners and VET trainers to quantify the food waste that is generated from their work, both for catering activities and restaurants. Thanks to the application, it is possible to create a personalized profile for tracking the entire work process, including preparation, from the storage of raw materials to the execution of the recipe and the final dish. The app also allows you to see the economic value of the waste generated and monitors its trend over time.

Main functions of the web application:

- Quantifying food waste and its value during all phases (receipt and storage of goods, food preparation, cooking and service);
- Classifying and quantifying food waste according to the category of the product;
- Measuring the proportions of edible and non-edible waste;
- Measuring energy and water consumption associated with the preparation;
- Comparing different menus/meals in terms of waste production;
- Measuring the recovery rate of the surplus product;
- Monitoring food waste trends over time.

In November 2020, 15 vocational training centers in the 4 countries involved in the LIFE FOSTER project started to use and experiment with the app in their workshops, involving trainers, tutors and students.



The e-learning platform

The LOVE FOOD REDUCE WASTE online training was created in addition to the in-person training, to increase the scope of the project's replicability.

The innovative multi-level education material has been delivered through the e-learning platform in France (MOOC) and in Italy (SchoolPlus). The project was able to produce

scientifically validated teaching materials with a strong focus on food consumption and food waste. Broader programmes often risk being unfocused and inaccurate. The LIFE FOSTER e-learning platform is narrowly targeted and realised for the specific target group it addresses.



Become a champion in food waste prevention with our flexible 4-module course.

It's free and open to food service professionals, trainers, students and... gourmets.

CLICK HERE

LIFE FOSTER E-Learning

Do you know how to reduce food waste?

LET'S TRAIN TOGETHER!

The LOVE FOOD REDUCE WASTE online training content takes stock on the train-the-trainer conducted by the University of Gastronomic Sciences - UNISG (IT) initially with adjustments for easier online use. The courses, which are accessible from the home page of the LIFE FOSTER website www.lifefoster.eu, are developed in French and in Italian, free of charge and aimed at food service professionals, trainers, educators and students, but can be useful to anyone

who wants to contribute to the reduction of food waste in their daily lives. LOVE FOOD REDUCE WASTE is flexible and can be freely navigated according to one's own interests and is divided into 4 modules:

- The challenges of combating waste
- How to prevent food waste in catering
- How to reduce food waste in catering
- How to use and valorise leftovers.


The Manifesto for food waste prevention

Food waste reduction is both a European and global priority.

There is an urgent need to raise individuals' awareness to reduce food waste. Therefore, LIFE FOSTER proposes commitments to become food waste prevention Ambassadors and have an active role in shaping a better future.

You can act now and declare your commitment. To become an Ambassador, subscribe the online Manifesto www.lifefoster.eu/manifesto

READ MORE




PROFESSIONISTA

FRANCESCO NUNZIATA

Francesco Nunziata "Il mio impegno per prevenire lo spreco alimentare è ottimizzare al meglio la preparazione in laboratorio ma soprattutto avendo parsimonia nell'utilizzare gli ingredienti che u..."


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CAROLA SILVA

carola silva "reducing food waste is essential because there are millions of people in the word who go hungry every day. i try to reduce food waste in a number of ways. i try to: - buy only ..."

READ MORE




PROFESSIONISTA

EMANUELE RICCHIUTI


Emanuele Ricchiuti "Il mio impegno sarà l'impegno di non sprecare la materia prima in cucina in più quello di abituare i mie commensali a ritirare e portare a casa ciò che non consumano al tavo..."

READ MORE



day. I try to reduce food waste in a number of ways. I try to: -buy on...

READ MORE




PROFESSIONISTA

ANTONINO LEVANTINO

Antonino Levantino "Il mio impegno giornaliero è quello di aiutare l'ambiente utilizzando materia prima del luogo e pensare quando elaboro i menù il massimo del suo utilizzo fino a ridurre lo spre..."

READ MORE



JOIN THE MANIFESTO!

480 People among students, teachers and professionals have already signed the Manifesto!

LIFE FOSTER's legacy: sharing what we learnt

The most relevant lessons that the LIFE FOSTER partnership learnt throughout the project journey constitute a valuable legacy to be passed onto students, trainers, professionals, policy makers, stakeholders, as well as the overall society.



Lessons for enterprises: *How to support their awareness-raising and stimulate them to undertake food waste prevention actions*

- I. promote awareness-raising campaigns on food waste prevention, highlighting the economic benefit for enterprises
- II. launch information campaigns in collaboration between public institutions and businesses to raise customers' awareness
- III. incentivise the use of food waste measurement tools and their accessibility to all companies through EU/national/local incentives
- IV. favour professional training (up- or re-skilling) of food service employees in food waste prevention
- V. create an "ecolabel" for businesses that reduce food waste



Lessons for VET: *How to activate behavioural change in the workplace and an overall mentality shift in environmental issues*

- I. include food waste prevention as a transversal competence in food service curricula
- II. encourage the certification of food waste prevention competences (e.g. micro-credentials) in food service curricula
- III. promote training of employed/unemployed youth and adults in food waste prevention for food service operators
- IV. include food waste as part of education to citizenship and healthy diets as well as nutrition programmes
- V. favour the introduction of food waste measurement tools in the professional preparation of food service operators
- VI. create an "ecolabel" for VET providers committed to food waste prevention



Lessons about measurement tools: *How to provide further evidence on the importance of quantifying and monitoring food waste*

- I. have a reliable baseline for the quantification of food waste achieved through context-specific measurement tools, to monitor progress of food waste reduction
- II. encourage and incentivise the adoption of food waste measurement methods and tools tailored to different contexts (e.g. business, VET, households, etc.)
- III. stimulate investment in research in and development of food waste measurement tools that can match environmental and economic assessment
- IV. include food waste measurement tools in national food waste prevention strategies
- V. foster the development of a measurement culture to help people appreciate the importance of adopting responsible and sustainable consumption behaviours

Foster(ing) Afterlife



LIFE FOSTER'S RESULTS WILL CONTINUE:

IN THE VET SYSTEM

Training on food waste prevention based on the LIFE FOSTER model will be incorporated into the professional curricula for the food service industry.

IN NEW PROJECTS

The experience of LIFE FOSTER has paved the way to new projects that are currently being implemented:

LIFE CLIMATE SMART CHEFS – A project financed by the LIFE Programme on the role of chefs in favouring climate smart diets and development of their green competences.

VETLOVESFOOD – A project financed by the ERASMUS+ Programme which is encompassed in the “Rethink, Reduce, Reuse mentality”, with the aim of developing green skills competencies regarding food waste, developing green sectorial skills strategies and methodologies, as well as future-oriented curricula that better meet labor and community needs.

Circular Bricks – Financed by the ERASMUS+ Programme, the project aims to develop innovative pedagogical material on circular bioeconomy related topics for the VET system, keeping a train-the-trainer approach.



FOR MORE INFORMATION

www.lifefoster.eu



LOVE FOOD REDUCE WASTE