



Consortium

6 partners from 3 EU countries

2 Research Centres:

- **Aula Dei Foundation (Coordinator)** – Spanish Research Centre has been working on pre and postharvest technologies for more than 10 years.
- **AITIIP Technology Centre** – Spanish Research Centre for the development of projects in design and manufacturing of components plastic material industry and transformation processes

4 SME and Industrial Partners:

- **IMaR Technology Gateway** – Ireland's leading intelligent mechatronics and RFID industrial partner.
- **Kölla GmbH&Co.** – Germany's globally operating full-service provider from contract farming to quality assurance and logistics.
- **LAFUENTE TOMEY** – Spanish farmer keen on providing consumer with a product with the best organoleptic properties and maximum guaranteed quality and safety.
- **TRANSFER LBC** – TRANSFER has specialized in the promotion of environmental technology and renewable energies.

CONTACT INFORMATION



AITIIP Technology Centre

Berta Gonzalvo (R&D Director)

berta.gonzalvo@aitiip.com

Carolina Peñalva (R&D Project Manager)

carolina.penalva@aitiip.com

David Ponce (R&D Project Manager)

david.ponce@aitiip.com

Tel: +34 976 46 45 44

**Pol. Industrial Empresarium, Calle Romero, 12
50720, Zaragoza, (SPAIN)**



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LIFE Freshbox: a sustainable transport solution conserving quality of fresh produce, reducing waste & fuel consumption



<http://fresh-box.info.eu>

Objectives

The project aims to **improve the sustainability of the distribution of fresh produce** to create a **more competitive sector** that can **offer better products** to the final consumer.

Currently, the **time span of storage, transportation and distribution of fresh produce from wholesaler to final consumer is exceedingly large**. Storage/transportation is performed with standard containers that do not reproduce the ideal conditions of respiration rate of each type of fruit/vegetable, damaging the products' quality and shortening its shelf-life.

The **Freshbox container will be developed in order to reduce food waste, extend fresh produce shelf life and reduce fuel/energy consumption**.

Freshbox container characteristics:

- **Active/smart container** that stores/transportes each type of fresh produce in the ideal conditions of respiration rate
- Monitored with an innovative **Integrated Sensor Kit** to check the main environmental features in the container and allow traceability
- **Light-weight**, manufactured with a technology that saves energy and made of innovative recyclable material
- **Transports fresh produce harvested at a higher maturity stage**: consumers will be able to enjoy fruits and vegetables with better features

This project will not only develop a new container, but also improve the sustainability of the whole value chain of fresh produce distribution up to the final consumer. In this way, the innovative

Freshbox will demonstrate its ability to **reduce food waste due to extended shelf-life, save CO₂ emissions** due to lighter and more sustainable materials which lead to the **reduction of energy/fuel consumption**, and **improve the quality of fresh produce** offered to the final consumer.

Advantages for Industry

Specific aimed results for this project are:

- **30 % Increase of shelf life of the fresh produce** vs. fresh produce transported in conventional containers.
- **20% Reduction of food waste** compared to fresh produce transported in conventional containers.
- **Better physical, chemical and organoleptical features**, compared to fresh produce transported in conventional containers.
- Freshbox containers will be **produced using less energy and material consumption (minimum expected of 20%)**, compared to equivalent ones.

The LIFE+ Programme

The LIFE+ Environment Policy & Governance strand of LIFE+ supports pilot projects that contribute to the development of innovative policy ideas, technologies, methods and instruments. This strand is one of the three thematic components under the LIFE+ Programme. The other two components, LIFE+ Nature & Biodiversity and LIFE+ Information & Communication, focus respectively on improving the conservation status of endangered species and habitats, and on disseminating information and raising the profile of environmental issues, or providing training and awareness-raising



In 2013, the European Commission approved funding for **125 new environmental innovation projects in 22 countries**, financing a total of **€130.8 million** under the LIFE+ Environment Policy and Governance programme.

Fresh box integrating smart devices and active substances in a lighter container

