



Circular Economy and Sustainable solutions  
for Agrifood in the Mediterranean

## Challenge C3

### CESAM SME linked to this challenge: GO ZERO WASTE



#### BACKGROUND:

The problem: Single-use plastics have become a major environmental issue, contributing to pollution and waste management problems worldwide. The food industry, especially takeaway food services, contributes significantly to this problem due to the extensive use of disposable packaging.

Our company: Go Zero Waste, based in Catalonia, it is a start-up developing technological solutions to facilitate a life without waste. The start-up has developed Paasiot (Packaging as a Service IoT), a reusable packaging service solution based on an IoT dispenser.

Paasiot's main goal is to promote reusable systems while guaranteeing convenience and safety to both final users and companies as a sustainable alternative for single-use items. The IoT smart dispenser is interconnected to an app that tracks the circulation of containers from delivery points to washing centers and back, and guarantees hygiene safety in the whole process. The container can

be placed in grocery stores, bulk shops, markets and malls to help businesses and consumers reduce their waste. Consumers can access clean containers through a simple log in using their phones or personal card and return the used containers after they have used them.

By implementing a system of reusable containers, we aim to reduce the environmental footprint and improve the quality of takeaway food services across different industries.

Our solution, an IoT devolution device interconnected with Go Zero Waste app and our partners, will allow users to use this system easily and quickly.

We are looking for a HoReCa company that wants to improve sustainability, reduce waste and offer an eco-friendly solution to their customers.

During the pilot Go Zero Waste will install a IoT devolution device in a visible spot inside the restaurant.

The restaurant and Go Zero Waste will collaborate during the whole pilot in order to have as many testers as possible and demonstrate that thanks to this service another kind of consumption is possible.

Phases:

First.- Analysis of waste generated: number of containers (tuppers, etc) used in take away or dog bags each day.

The selected SME (HoReCa) will report to GoZero Waste the number of containers used per day, the material that these containers are made of and the number of people who use their own containers.

Second.- Development of specific, measurable targets for KPIs related to waste reduction to better assess the project's environment and social impact.

Third.- Acquisition of 300 containers (5€/each) and preparation of the space where we will place the return PaaSiot box.

Fourth.- Communication actions will be delivered in order to explain the project to HoReCa clients (roll-ups, flyers, videos, etc).

The HoReCa and Go Zero Waste will co-design all these communication materials and will be given to customers. Example: Posters to explain the service, flyers to give away, video for social media, etc.

Fifth.- Support during the whole pilot. Personnel of the restaurant will be attracting users to the service, answering questions and contacting to Go Zero Waste in case of any tech problems that might occur during the pilot phase.

Also will be in charge of cleaning the containers that users return dirty.

Six.- Inform about the waste avoided and environmental impact will be done after the pilot.

The HoReCa and Go Zero Waste will create an inform about how many customers used the service, how many containers have been used, waste avoided and problems found during the pilot and solutions applied.

## CHALLENGE DESCRIPTION

<b>Challenge line</b>	<b>C3</b>
<b>Title of the challenge</b>	Zero Waste Horeca
<b>Objective(s) of the challenge</b>	Find a Horeca business where we could implement a pilot to test all developments and get feedback from users.
<b>Expected results of the challenge</b>	<p><b>Technical:</b></p> <ol style="list-style-type: none"> <li>1.-Connection between App and IoT device</li> <li>2.-Connection with reusable containers and IoT device and App</li> </ol> <p><b>Economic:</b></p> <ol style="list-style-type: none"> <li>1.- Cost of implementation (staff, electricity, washing, water) of the solution in a Horeca environment.</li> </ol> <p><b>Environmental:</b></p> <ol style="list-style-type: none"> <li>1.-Number of reusable containers used</li> <li>2.- Number of reusable containers returned</li> <li>3.- Number of single use plastics avoided.</li> </ol>
<b>Relevance of the challenge in the frame of CESAM project</b>	<p>Establish the use of reusable packaging as the new standard, eliminating disposable packaging waste and promoting environmental sustainability.</p> <p>One of the main objectives of CESAM project is to reduce waste generation and GHGs emissions so this challenge is strongly linked to CESAM goals.</p>
<b>Type(s) of SME(s) we are looking for</b>	A business of the HORECA sector (e.g large institutional or educational cafeteria) or a supermarket with a bulk products offer.
<b>Describe the work to be carried out by the SME</b>	<p>Testing an automated sustainable and circular IOT dispenser for groceries / food in general.</p> <p>Project includes providing the necessary space, installing the machines provided, train the staff in operating the machines, promote the solution, making an economic assessment at the end of the project.</p> <ul style="list-style-type: none"> <li>· Staff dedicated to monitoring and supporting the pilot on-site</li> <li>· Acquisition of around 300 units of returnable packaging (customized and individually identified) by our provider</li> <li>· Dissemination material expenses (roll-ups, flyers, etc.)</li> <li>· Logistics and transport for the installation of these mailboxes</li> <li>· Cleaning and sanitizing returnable containers"</li> </ul>
<b>Maximum amount granted for this challenge</b>	20.000€

<b>Funding rate</b>	100%
<b>Duration of the work and proposed starting period</b>	5. MONTHS starting from May 2025
<b>Effort for the SME</b>	<p>Personal cost: during the Pilot the HoReCa will have personal explaining the project and solving questions</p> <p>Water consumption: HoReCa will be in charge of cleaning the containers and restore them. During the pilot the water to clean the containers will be paid by the HoReCa.</p> <p>Electricity consumption: Washing machine will be used to clean the containers.</p> <p>Communication &amp; PR: Design and print all communication materials in order to explain the project.</p>
<b>Intellectual Property Rights dispositions</b>	Background of applicants will be included (if applicable) under the IPR rights they consider
<b>Other information</b> (if applicable)	