



D5.5 Climate Commitment Booklet - 2026 – Compiled English version

Dissemination Level: Public



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D5.5 Climate Commitment Booklet - Finland 2026 - English version

Dissemination Level: Public



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Document Information

Issued by	Petra Koskinen and Sampo Räsänen
Issue Date	05/05/2026

Document History

Version	Date	Modifications made by
01	05/05/2026	Petra Koskinen and Sampo Räsänen
02	26 May 2026	Initiative Développement – Margaux Bonneau

Authors

Version	Date	Full Name (Organisation)
01	05/06/2026	Petra Koskinen and Sampo Räsänen

Reviewers

Version	Date	Full Name (Organisation)
01	26 May 2026	Initiative Développement – Margaux Bonneau

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Introduction

We were part of the Teamit+ programme, through which we took part in the 24H event held in France. At the event, we decided, together with other participants, to investigate food waste in Europe.

Food waste refers to food that was originally fit for consumption but ends up as waste. Food waste occurs at every stage of the food supply chain, but a significant proportion of it is generated in households. In Finland, reducing food waste is an important part of sustainable development goals, as it is linked to both environmental impacts and economic losses.

Finnish households generate over 100 million kilograms of food waste every year. On average, each Finn throws away around 20–25 kilograms of food per year. This equates to food worth around one hundred euros per person.

Although awareness of food waste has grown in recent years, a great deal of it is still generated. Food waste is often caused by everyday consumption habits, such as buying too much, poor food storage or having leftovers from meals.

Research questions

- ⊕ How much food waste is generated in Finnish households?
- ⊕ What are the most common causes of food waste at home?
- ⊕ Which foods are most commonly thrown away in households, and why?
- ⊕ How well do consumers understand food use-by dates?
- ⊕ What practical measures can households take to reduce food waste?

24H event

The TEAMIT+ programme brought together students from various European countries on 4–5 December for the '24 Hours of Innovation' event in Bidart. Over the course of 24 hours, participants had to identify a key climate challenge and develop a solution for it. The tight schedule forced them to collaborate, brainstorm and make decisions quickly. Discussions with students from different countries highlighted that climate issues are often reflected in the unnoticed practices of everyday life. We chose food waste as our topic of investigation.

Why food waste?

Around 58 million tonnes of food waste are generated in the EU every year, which equates to approximately 130 kilograms per person. A significant proportion of this is generated in food service settings, such as school and university canteens. As this problem affected us all, we wanted to focus on it.

Food waste is not caused solely by individuals, but by the system as a whole. Food production consumes vast amounts of resources, such as water, energy and labour, and waste means these resources are used in vain. Furthermore, the decomposition of biowaste increases greenhouse gas emissions.

Reducing food waste is therefore an effective way of tackling climate change.



The environmental impact of food waste

When food is thrown away, all the resources used to produce it are also wasted. Food production requires, amongst other things, water, energy, agricultural land and transport. Food waste therefore unnecessarily increases the burden on the environment.

The climate impacts of food waste are significant. In Finland, the carbon footprint of household food waste is estimated to be equivalent to the annual greenhouse gas emissions of around 139,000 passenger cars.

Furthermore, food waste increases the volume of waste and generates methane emissions from biowaste, which accelerate climate change. Reducing food waste is therefore one of the most effective ways of minimising the environmental impact of food consumption.

The role of households in food waste

Households are the single largest source of food waste in Finland. According to estimates, households generate around 107–137 million kilograms of food waste annually.

Food waste often arises from small, everyday situations. The most common reasons for throwing food away are:

- ⊕ food going off before it is used
- ⊕ misinterpreting use-by dates
- ⊕ preparing portions that are too large
- ⊕ food being left in the fridge

not making use of leftovers

The size of the household also affects the amount of waste. Studies show that single-person households often generate more food waste per person than larger households.

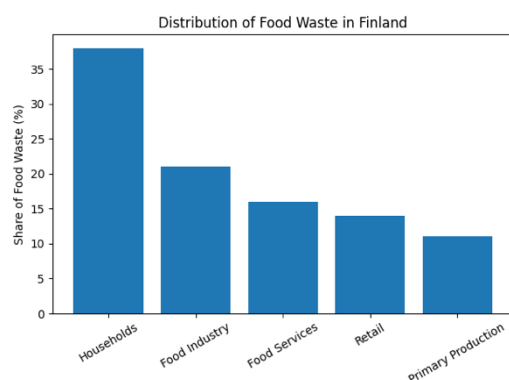
However, households also have a great opportunity to reduce food waste. Planning shopping trips, storing food correctly and making use of leftovers can significantly reduce waste.

The amount of food waste in Finland

In Finland, approximately 360 million kilograms of food waste is generated annually across the entire food supply chain.

Food waste is distributed across the different stages of the food chain as follows:

- ⊕ Households: around 38% (155 million kg)
- ⊕ Food industry: around 21%
- ⊕ Catering services: around 16%
- ⊕ Retail: around 14%
- ⊕ Primary production: approximately 11%



Households therefore account for the largest single share of food waste in Finland. This makes households a key focus in reducing food waste.

The most common sources of food waste

According to studies, the following food groups account for the most waste:

- ⊕ vegetables and root vegetables
- ⊕ fruit and berries

- ⊕ bread and cereal products
- ⊕ ready meals and leftovers

Fresh produce, in particular, spoils easily if too much is bought or if it is stored incorrectly.

Food waste in an international comparison

Food waste is a global problem. In the European Union, an average of around 131 kilograms of food waste is generated per person per year, taking the entire food chain into account. In Finland, food waste from households averages around 20–25 kilograms per person per year, which is slightly less than in many other European countries. Nevertheless, reducing food waste is an important part of sustainable development goals.

Ways to reduce food waste in households

Food waste can be reduced through many simple yet effective everyday measures. Even small changes to your own habits can significantly reduce waste.

- ⊕ Planning your shopping in advance:

Drawing up a weekly meal plan and a shopping list helps ensure you buy only the amount of food you need. This helps avoid impulse purchases and prevents excess food from going off.

- ⊕ Checking the contents of the fridge and cupboards:

Before heading to the shop, it's a good idea to check what you already have at home. This prevents you from buying the same item again and helps you use up older items first.

- ⊕ Storing food correctly:

The correct storage temperatures and methods extend the shelf life of food. For example, vegetables, dairy products and meat keep better when stored in suitable conditions.

- ⊕ Making the most of leftovers:

Leftover food can be used as ingredients in new meals, such as soups, casseroles or bakes. This way, you don't have to throw food away.

- ⊕ Understanding date labels:

It is important to distinguish between 'best before' and 'use by'. '*Best before*' means that the quality of the product (e.g. taste or texture) may deteriorate after the date, but the product is often still safe to eat. '*Use by*', on the other hand, relates to safety, and the product is not recommended for consumption after the date.

Furthermore, food waste can be reduced, for example, by freezing surplus food, portioning food correctly and keeping the fridge organised so that older items are used first.

Data collection and expert interviews

To provide background for our work, we also familiarised ourselves with the topic by discussing it with experts who study food waste. We were in contact with a few researchers from the Natural Resources Institute Finland who have studied the causes of food waste in Finland. We put our research questions to them and discussed them. During these discussions, we gained more detailed information, particularly on the amount of food waste generated by households, the underlying causes, and ways to reduce waste in everyday life.

According to the experts, food waste often stems from small, everyday choices, but it has a significant overall impact on the environment and the economy. They particularly emphasised the role of consumers in reducing food waste and the fact that awareness of, for example, use-by dates and the correct storage of food is key to minimising waste. The expert discussions supported the information obtained from the literature and helped us to understand the topic from a practical perspective as well.

We did not learn much that was new, as the answers to our questions were already readily available online.



Sources

- ⊕ <https://www.saasyoda.fi/ruokahavikki-suomessa>
- ⊕ <https://www.luke.fi/fi/ajankohtaista/teemat-ja-kampanjat/ruokahavikki>
- ⊕ <https://yle.fi/a/74-20113259>
- ⊕ <https://www.sttinfo.fi/tiedote/71468914/kotitalouksien-ruokahavikki-suomessa-on-vuodessa-yli-100-miljoona-kiloa-picadelin-huipputeknologia-vahentaa-havikkia-kotona-ja-kaupoissa>



TEAMIT+: TEAMPRENEUR MULTICULTURAL IMPACT INNOVATION CO-OPERATIVES



About the TEAMIT+ project

TEAMIT+ aims to develop an innovative educational programme applying a pedagogical methodology based on the 'learning by creating' approach. This specific pedagogical methodology will be applied to vocational training students, higher education students, as well as young immigrants, refugees and the unemployed from a range of academic disciplines. The aim is to enable them to become future teampreneurs who will influence society by understanding the importance of the transition to a greener economy, based on green, digital and climate resilience skills.



Co-funded by
the European Union

Funded by the European Union (Grant Agreement No 101111560). The views and opinions expressed are, however, those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



D5.5 Climate Commitment Booklet - France 2026 - English version

Dissemination Level: Public



Tiimiakatemia
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Document Information

Issued by	Laowen Piaugeard, Lorea Saint-Val, Ranya Ali.M
Date of Issue	5 May 2026

Document History

Version	Date	Changes made by
01	5 May 2026	Laowen Piaugeard, Lorea Saint-Val, Ranya Ali.M
02	26 May 2026	Initiative Développement – Margaux Bonneau

Authors

Version	Date	Full Name (Organisation)
01	5 May 2026	Laowen Piaugeard, Lorea Saint-Val, Ranya Ali.M

Reviewers

Version	Date	Full Name (Organisation)
01	26 May 2026	Initiative Développement – Margaux Bonneau

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FROM THE PLATE TO THE PLANET Towards a more sustainable and socially responsible catering sector

Introduction: A collective realisation

Committing to action: a meeting, 24 hours, a realisation

From 4 to 5 December, the TEAMIT+ programme brought together students from several European countries as part of the '24 Hours of Innovation' event, held at ESTIA in Biarritz. Among them were two French students who had not met before this event. One was from Biarritz, the other from Bordeaux. Two different backgrounds, united by a shared commitment to the environment.

For twenty-four continuous hours, from Thursday to Friday, the aim was to identify a priority climate issue and propose a concrete solution. Time was short, decisions had to be made quickly and cooperation was immediate. They had to learn to work together in just a few hours, exchange ideas and build a solid, coherent project.

Discussions with delegations from Spain, Greece and Finland provided an opportunity to compare different national realities. Despite the diversity of contexts, one observation kept recurring: climate challenges often manifest themselves in everyday actions that we no longer question.

It was against this backdrop that a simple moment marked a turning point.

At the end of a meal organised during the event, a large dish of paella, almost untouched, was thrown away. Other uneaten food followed. The scene unfolded quickly, without any particular reaction. It seemed ordinary.

Yet it created a sense of dissonance.

In a space dedicated to innovation and the ecological transition, seeing a significant amount of food being thrown away brought a concrete contradiction into sharp relief. Food waste was no longer an abstract concept. It became an immediate reality.

This situation struck a particularly strong chord as the participants are students, who face financial constraints in their daily lives. The contrast between food being thrown away and their own lived experiences made it impossible to ignore the issue of food waste. The topic therefore became a natural focus.

Food waste: a global issue

Why does food waste occur?

The waste observed during the 24-hour innovation event is not an isolated case. It is part of a much broader European reality.

Every year, around 58 million tonnes of food are wasted within the European Union, equivalent to nearly 130 kilograms per person. The catering and food services sector, which includes canteens in particular, accounts for a significant proportion of these losses.

These figures reflect a structural problem. Food waste is not limited to individual behaviour. It occurs at various stages of the supply chain, from production to distribution, including institutional catering.

Every item of food that is thrown away consumes considerable resources. It requires agricultural land, water, energy, transport and human labour. When it is wasted, all these resources are wasted too. Furthermore, the decomposition of food waste contributes to greenhouse gas emissions, particularly in the form of methane.

Reducing food waste is therefore a concrete way to tackle climate change. It is an area where organisational changes can produce measurable and rapid results.

In this context, institutional catering emerges as a strategic area. Unlike domestic habits, it is based on institutional decisions and regulatory frameworks. This means it can be transformed through political, organisational and educational choices.

Beyond the environmental dimension, institutional catering also raises the issue of setting an example. Public institutions and institutional catering facilities play a formative role in society. The practices they adopt influence behaviour, shape habits and contribute to the development of a shared culture. Taking action in these settings means addressing both environmental impact and raising awareness among future generations. It is on the basis of this analysis that attention has gradually turned to a specific and familiar area



Focusing on collective catering

Canteens and communal restaurants: a lever for action

French university canteens play a central role in student life. Every day, thousands of meals are prepared and served there. These facilities fulfil an essential role: ensuring that all students have access to a balanced and affordable diet.

However, behind this indispensable social function, a reality persists. A proportion of the food prepared goes uneaten.

The food waste observed in university catering is not the result of a lack of concern for environmental issues. It is part of a structured system. Portion sizes are often standardised. Menus are set in advance to meet logistical and budgetary constraints. Health and safety regulations limit the possibilities for redistributing surplus food.

These mechanisms ensure the smooth running of the service but can lead to food losses that have become almost invisible. Uneaten food is collected and disposed of without the actual volumes always being reported or measured publicly. The environmental impact of these losses is far from negligible. Every item of food wasted represents resources mobilised upstream: agricultural land, water, energy and transport. Reducing these losses means indirectly reducing the carbon footprint associated with the entire food chain. But the issue is not limited to the climate.

In a context where food insecurity remains a reality in France, the coexistence of food waste and difficulties in accessing sufficient food highlights a contradiction that is hard to ignore. Collective catering organisations thus find themselves at the crossroads of several responsibilities: environmental, social and educational. It is precisely this strategic position that makes them a relevant lever for action. As public or semi-public bodies, these organisations have the capacity for organisational adaptation. Changes to portion sizes, waste measurement or user consultation can

yield tangible results. Taking action in these settings is not merely a matter of logistical optimisation. It is about placing the ecological transition at the heart of everyday practices.

Our campaign: an awareness-raising video

Why choose the video format:

The choice of video format was an obvious one. Food waste largely affects a young audience, who are accustomed to consuming information in visual and digital form. A video allows a message to be conveyed in an accessible, direct and emotional way. Unlike a written report, a video shows things. It brings to life what is often overlooked. It captures attention, provokes a reaction and encourages reflection. In this context, this format also offers the potential for rapid dissemination, particularly via social media and student platforms. The campaign therefore took the form of a video lasting around three minutes, based on a structured and well-argued script. This short format requires a rigorous selection of messages and reinforces the impact of the content.

The campaign has three main objectives:

- ⊕ To highlight a phenomenon that is often taken for granted. Food waste is a daily occurrence, yet it is rarely questioned.
- ⊕ To link food waste to climate issues. Every piece of food thrown away represents resources used unnecessarily and avoidable emissions.
- ⊕ To encourage dialogue. The video does not seek to point the finger at anyone, but to open up a space for shared reflection amongst consumers, professionals and decision-makers.

Target audience

The campaign is primarily aimed at members of the public, who are directly affected by institutional catering. It aims to raise awareness and encourage active participation in the discussion.

It is also aimed at canteen managers and institutional administrators. The aim is to demonstrate that organisational changes are possible.

Finally, the video may appeal to public decision-makers by highlighting that institutional catering is a lever for action in climate and social policies.

Key message and positioning

The campaign's central message is simple: food waste in institutional catering is not inevitable.

It is not an individual problem, but a collective mechanism that can be transformed. By addressing service organisation, portion management and raising awareness, it is possible to significantly reduce waste.

The video takes a constructive approach. It does not seek to make people feel guilty, but to encourage them to take responsibility. It invites viewers to rethink existing practices and consider practical solutions.

A local advocacy initiative

Beyond raising awareness, this campaign is part of a wider advocacy strategy. It aims to demonstrate that the ecological transition also requires changes in everyday settings.

By choosing to focus on institutional catering in France, the project links local action with European challenges. Reducing food waste in these settings contributes to broader climate objectives and helps bring about a gradual transformation of collective practices.

Stakeholders interviewed: perspectives from the field and institutional realities

Stakeholders identified and consulted

In order to compare theoretical analysis with realities on the ground, several categories of stakeholders involved in collective catering were identified and approached.

The survey initially focused on stakeholders directly involved in the day-to-day running of canteens, notably catering staff in schools and universities. This approach enabled the collection of concrete observations on instances of waste, users' behaviour and practices already in place.

Particular attention was also paid to institutional stakeholders operating at the local authority level. In this regard, discussions were held with the Circular Economy and Waste Prevention Officer for the Saintes Urban Community, whose role in the collection and monitoring of bio-waste provides a more comprehensive view of the issue.

Finally, the urban area's catering service was also consulted to supplement the analysis with an organisational and strategic assessment of waste reduction practices.

Stakeholders actually interviewed

These discussions enabled us to cross-reference several complementary perspectives.

In the university catering sector, feedback was obtained from a university canteen, providing valuable information on portion sizing, end-of-service management and digital tools for monitoring waste.

In the context of school canteens, feedback was gathered from stakeholders involved in the running of primary schools. These responses highlighted practices such as regular weighing, work on portion sizes, and the importance of supporting children during mealtimes.

Finally, a discussion with Ms Fanny Lammin, Project Officer for the Circular Economy and Waste Prevention, enabled us to incorporate a broader regional perspective. Her feedback provided a particularly significant figure: 27,640 kg of bio-waste collected over five months from 40 primary school canteens, amounting to nearly 700 kg per canteen.



Methodology and questions asked

The field survey was structured around a semi-structured questionnaire, enabling the collection of both concrete data and more qualitative feedback. The questions were organised around several key areas: measuring food waste, identified causes, organisational constraints, measures already in place, and areas for improvement deemed realistic by the stakeholders.

This methodology enabled a comparison of practices across different types of collective catering organisations, by cross-referencing observations from school canteens, the university restaurant and local services responsible for bio-waste collection. The aim was not only to quantify waste, but also to understand the mechanisms that generate it and the scope for action available.

Key findings from the discussions

Discussions with the various stakeholders revealed several converging findings.

The first concerns the importance of portion control. Whether in school canteens or university canteens, serving quantities that are ill-suited to demand appears to be one of the main causes of waste. Conversely, establishments offering adjustable portions or half-portions seem to be more effective at minimising waste.

A second key finding relates to the timing of service. In most of the establishments surveyed, waste is concentrated mainly at the end of service, when certain dishes have not been fully consumed or when there is a high number of trays returned.

Stakeholders also highlight the impact of diners' behaviour. In university settings, some students choose foods out of curiosity without finishing them. In school canteens, flavour pairing and the presentation of dishes play a decisive role in the acceptance of meals.

Finally, several interesting measures have been identified: regular weighing, digital scanning of trays, work on portion sizes, bread waste meters, taste schools and awareness-raising campaigns. These initiatives show that reducing waste is possible when the approach combines data monitoring, service organisation and user awareness.

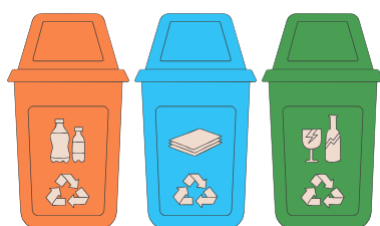
Institutional constraints and identified limitations

Beyond the initiatives already in place, the discussions also highlighted several structural constraints that hinder the reduction of food waste.

The first limitation concerns the lack of detailed and standardised data. Whilst some organisations carry out regular weighings or have monitoring tools in place, the results are sometimes difficult to utilise, either because they are not reported accurately or because they are only collected on an ad hoc basis.

Those interviewed also highlighted several organisational constraints, particularly at the end of service. Time management, logistics and forecasting quantities remain major challenges. Budget is another significant constraint. Certain measures for improvement, such as purchasing additional scales, developing monitoring tools or providing enhanced training for staff, require financial resources that are sometimes difficult to secure.

Finally, the testimonies show that reducing food waste cannot rely solely on catering staff. It requires broader coordination between teams, institutions, families and service users.



Reception and perception of the campaign



Discussions on the ground confirmed the relevance of the message conveyed by the video campaign. The stakeholders interviewed agreed that food waste is not solely a matter of production or service, but also relates to service users' behaviour and levels of awareness. The feedback received is directly in line with the campaign's focus: raising awareness, encouraging better portion control and sustaining awareness over the long term.

In schools, several stakeholders emphasised the need for ongoing educational work, involving the entire educational community as well as families. In university catering, the need to raise awareness amongst students also appears to be a lever that has not yet been fully utilised.

This feedback confirms that the video forms part of a realistic approach that complements the actions already being carried out on the ground. It serves as a bridge between institutions, catering staff and users, by bringing to light a problem that is often trivialised.

Turning findings into action: our recommendations

Recommendations for universities, canteens and CROUS

Based on the findings from the field survey, several practical recommendations can be made to achieve a sustainable reduction in food waste in institutional catering.

- ⊕ Make adjustable portions and half-portions the norm, as these have already been identified as effective in several establishments.

This simple adjustment makes it possible to better meet users' actual needs and minimise leftovers on plates.

- ⊕ Adjust menus based on observed waste. Some balanced but unpopular dishes result in significant losses.

Some balanced but unpopular dishes result in significant wastage. Striking a balance between nutritional requirements and users' preferences is therefore essential.

- ⊕ Paying attention to the presentation of dishes and the organisation of service.

Feedback from the field shows that better-presented dishes, bread served on request, or improved management at the end of service can significantly reduce waste.

- ⊕ Roll out measurement and monitoring tools, such as regular weighing, tray scans or annual reviews, in order to objectively assess trends and steer actions.

Recommendations for raising awareness and providing support

Discussions with the stakeholders interviewed also showed that reducing waste cannot rely solely on the organisation of the service.

- ⊕ Ongoing awareness-raising amongst users appears essential. Guidance on taste preferences, understanding the climate impacts and promoting good practices must be a long-term endeavour.

The video campaign produced as part of the project could serve as an initial awareness-raising tool, to be shown in university canteens, on student social media platforms or in the institutions' communal areas.

- ⊕ Introduce regular surveys on food preferences, in order to involve users in improving menus and to better anticipate the choices most likely to generate waste.
- ⊕ Encourage the sharing of best practices between institutions, so that the most successful organisations can share their methods of organisation, service delivery and awareness-raising.

This awareness-raising initiative is a direct follow-up to the video campaign developed as part of the project.

Creation of a regional solidarity hub

At the level of towns and local authorities, this approach could be extended to a regional solidarity hub for the redistribution of food surpluses.

In a town such as Saintes, this scheme could link school canteens, university restaurants, care homes and other collective catering facilities to pool surplus food that is still fit for consumption.

These products could be redistributed to charities, people in precarious circumstances or channelled through community collection points. In line with the principles of the circular economy and local mutual aid, beneficiaries or partner organisations could, on a voluntary basis, take part in activities to raise awareness, sort waste, compost or recover bio-waste.

This recommendation links climate action, social justice and local solidarity, giving the fight against food waste a human and collective dimension.

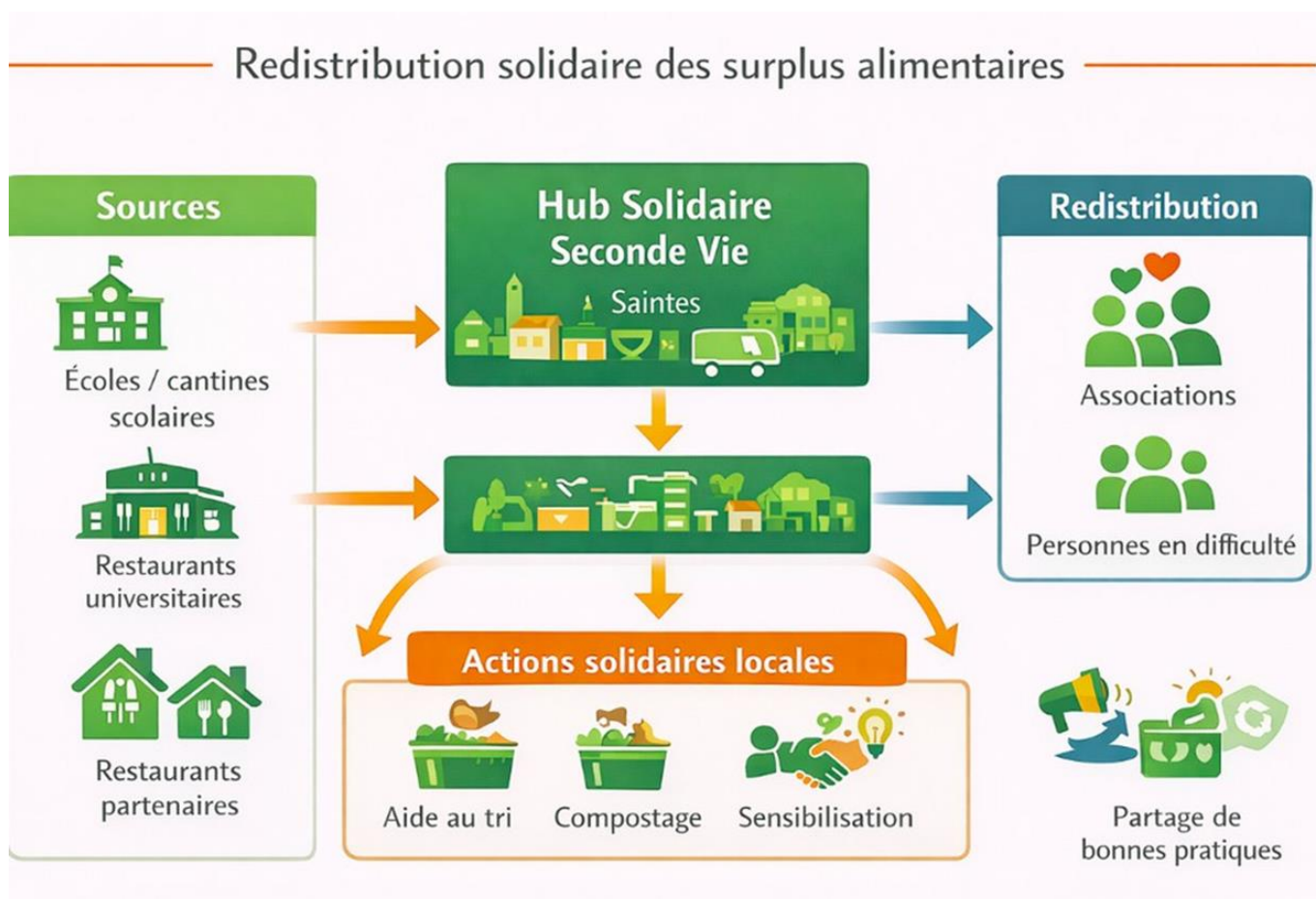
Create a student anti-waste hub

Within university canteens, a particularly innovative recommendation is to create a student anti-waste hub at the end of service.

This scheme would take the form of a collection point dedicated to surplus food that is still fit for consumption: dishes not served, untouched bread, and fruit or desserts that are still of a suitable

standard. Students could come and collect these items at the end of service, ideally using their own containers, under a simple and supervised system.

This hub would help transform surplus food into a resource, whilst raising students' awareness of the value of food and collective responsibility.



Conclusion: acting locally for a sustainable impact

Summary of the issues

This project has shed light on a reality that is often taken for granted: food waste in institutional catering remains an environmental, social and organisational issue.

Discussions with the various stakeholders involved confirmed that this phenomenon does not stem from a single cause. It results from a combination of inappropriate portion sizes, service organisation, user preferences, budgetary constraints and a lack of long-term awareness.

The field survey, carried out in a university canteen, in school canteens in Saintes and with local authority catering services, enabled the analysis to be grounded in concrete and measurable realities.

Collective catering as a strategic lever

Beyond this observation, collective catering emerges as a particularly strategic lever for action. Every day, these settings handle significant food flows, involve repeated practices and cater for a diverse range of users. They are therefore ideal venues for trialling practical solutions, measuring their impact and promoting new habits.

The feedback received shows that simple measures, such as adjustable portion sizes, waste monitoring, menu planning and ongoing awareness-raising, can already yield positive results. The recommendations set out in this booklet – and in particular the creation of redistribution hubs at student and local authority level – pave the way for a more integrated approach, linking ecological transition, social innovation and local solidarity.

Towards a transformation of collective practices

Beyond simply reducing waste, this project calls for a rethinking of our collective relationship with food. Every meal served, consumed or wasted reflects organisational, educational and cultural choices. Taking action on these everyday practices means taking concrete action on the ecological transition.

The challenge, therefore, is not merely to throw away less, but to build systems that are smarter, more inclusive and better suited to the real needs of local communities and users. Through this project, the fight against food waste emerges as an opportunity for sustainable transformation, capable of uniting schools, university canteens, local authorities and citizens around a shared drive for action.

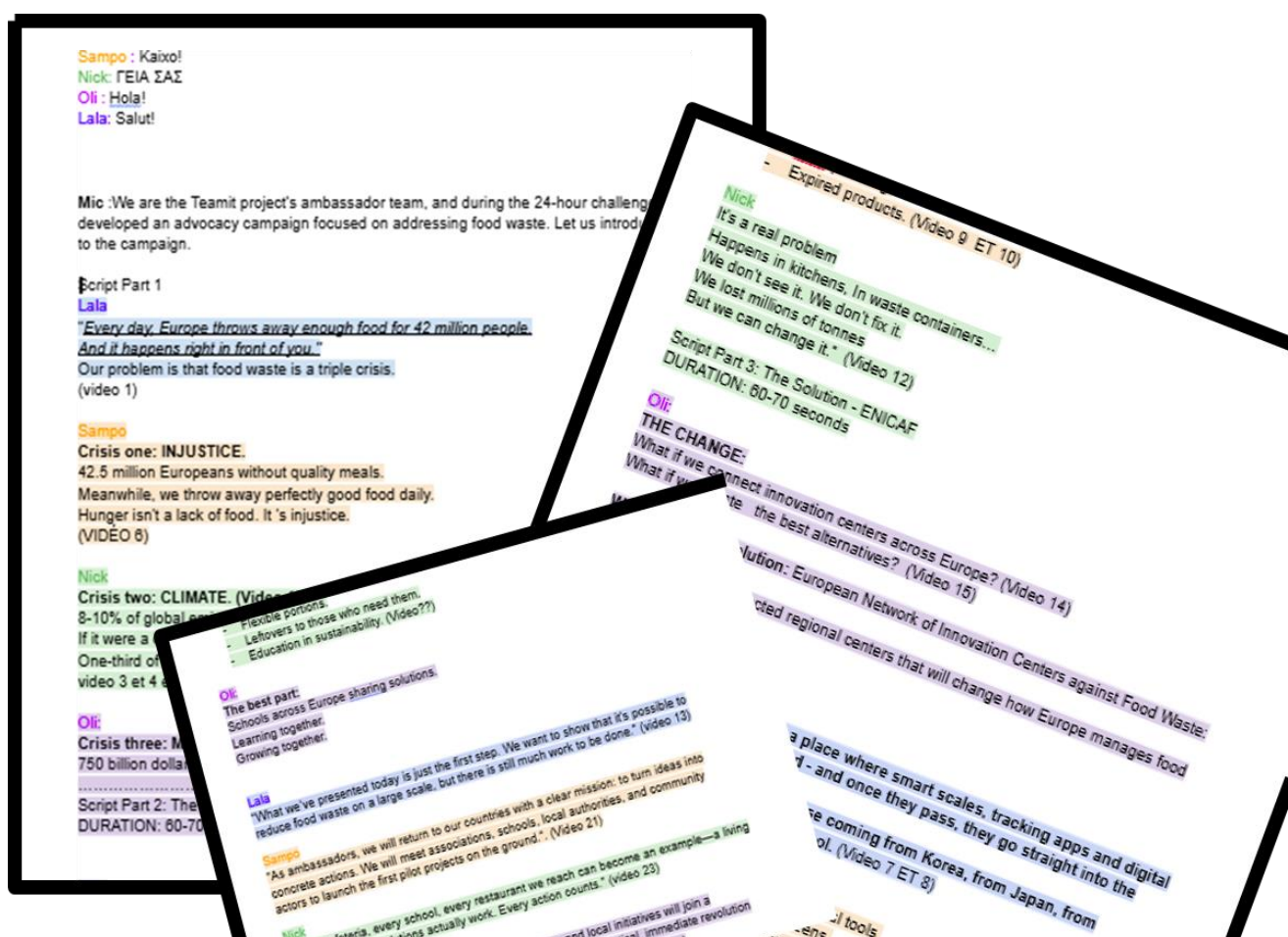
Appendices

Video script

This appendix contains the full script for the awareness-raising video produced as part of the project.

The content of this video follows a logical progression, moving from an overview of food waste at European level to a more local perspective, focusing on institutional catering. Particular attention is paid to university and school canteens, which have been identified as key areas for action.

The video aims to highlight a phenomenon that is often underestimated, by drawing attention to the environmental, social and organisational impacts of food waste. It also offers an accessible and educational approach, with a view to raising awareness amongst users and encouraging behavioural change.



Lala, Sampo, Nick, Oli

Script Part 1: The Global Crisis

DURATION: 50-60 seconds

Sampo : Kaixo!

Nick: ΓΕΙΑ ΣΑΣ

Oli : Hola!

Lala: Salut!

Mic :We are the Teamit project's ambassador team, and during the 24-hour challenge we developed an advocacy campaign focused on addressing food waste. Let us introduce you to the campaign.

Script Part 1

Lala

"Every day, Europe throws away enough food for 42 million people.

And it happens right in front of you."

Our problem is that food waste is a triple crisis.

(video 1)

Sampo

Crisis one: INJUSTICE.

42.5 million Europeans without quality meals.

Meanwhile, we throw away perfectly good food daily.

Hunger isn't a lack of food. It 's injustice.

(VIDEO 6)

Nick

Crisis two: CLIMATE. (Video 18)

8-10% of global emissions come from uneaten food.

If it were a country, it'd be the third-largest polluter in the world.

One-third of farmland grows food that goes to trash.

video 3 et 4 et 5

Oli:

Crisis three: MONEY.

750 billion dollars. Lost. Every year. (Video 11)

Script Part 2: The Hidden Culprit

DURATION: 60-70 seconds

Lala

We will focus on the waste generated by restaurants and food services, for example in schools.

(vidéo 2)

Sampo

IN SCHOOLS up to 25% of food served goes to trash.

Where is it lost?

- Portions too large.
- Food children reject.
- Poor planning.
- Expired products. (Video 9 ET 10)

Nick

It's a real problem

Happens in kitchens, In waste containers...

We don't see it. We don't fix it.

We lost millions of tonnes

But we can change it." (Video 12)

Script Part 3: The Solution - ENICAF

DURATION: 60-70 seconds

Oli:

THE CHANGE:

What if we connect innovation centers across Europe? (Video 14)

What if we create the best alternatives? (Video 15)

We bring a new solution: European Network of Innovation Centers against Food Waste:
(Video 16)

A network of interconnected regional centers that will change how Europe manages food waste. (Video 19)

Lala

Here is what it brings.

A technology hub: let's imagine a place where smart scales, tracking apps and digital tools are tested, validated, certified - and once they pass, they go straight into the field.

And then, knowledge transfer: expertise coming from Korea, from Japan, from France... brought directly into your school. (Video 7 ET 8)

Sampo

- **Training:** Chefs, managers, students. Real tools.
- **Real laboratory:** We test in real canteens.
- **European database:** Best practices. Success stories. All shared. (Video 17)

Nick

One of the Immediate pilots:

ZERO WASTE CANTEENS: European certification that rewards schools for taking action.

Imagine your canteen with:

- A Software predicting exact needs.
- Reservation system for zero waste.
- Flexible portions.
- Leftovers to those who need them.
- Education in sustainability. (Video??)

Oli:

The best part:

Schools across Europe sharing solutions.

Learning together.

Growing together.

Lala

"What we've presented today is just the first step. We want to show that it's possible to reduce food waste on a large scale, but there is still much work to be done." (video 13)

Sampo

"As ambassadors, we will return to our countries with a clear mission: to turn ideas into concrete actions. We will meet associations, schools, local authorities, and community actors to launch the first pilot projects on the ground." (Video 21)

Nick

"Every cafeteria, every school, every restaurant we reach can become an example—a living laboratory where solutions actually work. Every action counts." (video 23)

Oli:

"And you can be part of it. Your engagement, ideas, and local initiatives will join a European-wide movement. This isn't just a concept: it's a practical, immediate revolution against food waste. Together, we can make a difference. Join us." (Video)

Field data and sources

This appendix brings together the main findings from the field survey conducted as part of the project.

The data collected comes from various types of stakeholders in the collective catering sector, enabling a cross-analysis at several levels: operational, organisational and regional.

Among the key findings, discussions with the Saintes Urban Community's services revealed that 27,640 kg of bio-waste was collected over five months from 40 school canteens, amounting to nearly 700 kg per canteen. This figure illustrates the scale of the issue at a local level.

This appendix also includes:

- ⊕ Feedback from a university canteen
- ⊕ Weighing procedures carried out in school canteens
- ⊕ Observations relating to the monitoring of trays and returns at the end of service
- ⊕ The main areas for action identified
- ⊕ The organisational and institutional constraints encountered

1. Avez-vous une estimation de la quantité de déchets alimentaires collectés dans les cantines scolaires du territoire ?

Dans une perspective d'exemplarité, l'Agglomération Saintes Grandes Rives a mis en place à l'automne 2024 une campagne de démarchage des cantines scolaires des écoles primaires (qui sont sous sa compétence) pour qu'elles passent au tri à la source des biodéchets (épluchures, gaspillage alimentaire, déchets de poisson, serviettes papier). C'est moi qui ai géré ce lien avec les personnels des cantines scolaires. J'ai expérimenté une collecte des biodéchets des acteurs économiques (restaurants, cantines...) par l'entreprise Moulinot, entreprise d'insertion spécialisée sur cette thématique en méthanisation. Une plateforme de suivi Moulinot nous permet de suivre les quantités collectées et de les intégrer à la structure. Pour les cantines scolaires de l'agglomération, j'ai calculé qu'on a collecté 27 640 kg de biodéchets en octobre 2025 dans les 40 cantines primaires du territoire soit près de 700 kg par canteen.

2. Observez-vous des différences importantes de gaspillage entre les différents types de cantines (maternelles, primaires, collèges, etc.) ?

Nous ne gérons que les écoles élémentaires et primaires. Oui, il y a des différences entre les cantines. A noter, certaines produisent les repas, d'autres ne font que servir les repas acheminés sur place. Les raisons sont à creuser avec le service Restauration Collective.

3. Selon votre expérience, quelles sont les principales causes du gaspillage alimentaire dans les cantines scolaires ?

mauvaise adaptation des portions / pain systématiquement mis en début de chaîne
plats mal présentés
menu « équilibré mais peu apprécié » par les enfants
Mais ça n'est que mon avis pas suffisamment étayé, il vaudrait mieux avoir l'avis de la Restauration Collective.

4. Avez-vous constaté une évolution du volume de déchets alimentaires ces dernières années ?

Restauration collective

5. Des initiatives ont-elles déjà été mises en place pour réduire le gaspillage alimentaire dans les cantines ?

Oui, le service Restauration Collective organise des pesées régulières. Ils animent des écoles du goût en maternelle. Ils travaillent sur des gachimètres à pain. Par ailleurs, dans le cadre du Programme Alimentaire Territorial et de la Stratégie de Prévention Déchets, nous avons mené sur 2 années scolaires un important projet de sensibilisation des scolaires au gaspillage alimentaire, avec des assos environnementales, des artistes mais aussi les personnels des cantines, des centres de loisirs.

6. Selon vous, quelles actions seraient les plus efficaces pour réduire le gaspillage alimentaire dans les cantines scolaires ?

Ce qu'il ressort des bilans de l'action de sensibilisation au gaspillage alimentaire que je suis cette année, est qu'il faut sensibiliser les enfants sur la durée au sujet, en coopération avec l'ensemble de la communauté éducative et les familles.
En parallèle, cela n'évite pas de poursuivre, au sein du service Restauration Collective, des actions pour retravailler les menus, en fonction du gaspillage constaté, former les équipes à bien présenter les plats et à ajuster le service aux besoins des enfants... permettre l'échange entre cantine qui gaspille peu et cantines qui ont de moins bons chiffres pour partager les bonnes pratiques.

1. Les quantités de gaspillage alimentaire sont-elles régulièrement mesurées dans les cantines scolaires ? Si oui, sous quelle forme (pesées, estimations, suivi annuel...) ?

pesées par an (une au minimum)

2. Observez-vous des différences importantes de gaspillage entre les établissements produisant leurs repas et ceux recevant des repas livrés ?

non, aucune différence

3. Quels sont, selon votre expérience, les principaux facteurs organisationnels influençant le gaspillage alimentaire (menus, portions, logistique, temps de service...) ?

portions, accompagnement des enfants pour goûter

4. Quelles actions concrètes ont été mises en place ces dernières années pour réduire le gaspillage alimentaire dans les cantines scolaires ?

formation interclasse sur l'importance de faire goûter, travail sur les grammages

5. Avez-vous constaté des résultats mesurables suite à ces actions ?

difficile à mesurer

6. Selon vous, quelles pistes d'amélioration seraient les plus réalistes à court terme pour réduire durablement le gaspillage alimentaire dans les cantines ?

l'accompagnement renforcé

Réponses aux questions

1. Les aliments sont triés au niveau de la plonge. Les portions de services sont adaptées, avec des demi-portions proposées afin de répondre au mieux aux besoins des usagers. De plus l'ensemble de la nourriture n'est pas systématiquement mis en service, ce qui permet de limiter le gaspillage
2. Le gaspillage alimentaire est contrôlé environ deux fois par semaines par une entreprise externe. Toutefois aucune estimation précise n'est communiquée et il n'y a pas de retour détaillé de la part de cette entreprise
3. Il est constaté à la fin de service
4. Le gaspillage alimentaire chez les étudiants s'explique principalement par le fait qu'ils ne terminent pas leurs assiettes. De plus, certains choisissent des aliments par curiosité afin de découvrir de nouvelles saveurs, sans forcément les consommer ensuite en totalité
5. Les portions sont modulables afin de s'adapter aux besoins des usagers. Par ailleurs, des assiettes témoins sont réalisées pour garantir la quantité et le respect des quantités servies
6. Les équipes ne mettent pas en service l'intégralité des plats préparés, elles conservent une partie des productions afin d'éviter le gaspillage. De plus, un système numérique est utilisé pour scanner les plateaux en plonge et analyser les retours, ce qui permet de mieux évaluer et suivre le gaspillage
7. Aucune action spécifique n'a encore été mise en place
8. On constate néanmoins une amélioration progressive
9. L'organisation de fin de service, l'achat de balance (budget)
10. Proposition des pains tranchés ; faire de la sensibilisation avec les étudiants

1. Avez-vous une estimation de la quantité de déchets alimentaires collectés dans les cantines scolaires du territoire ?

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Une plateforme de suivi Moulinot nous permet de suivre les quantités collectées chaque semaine dans chaque structure. Pour les cantines scolaires de l'agglomération, j'ai calculé qu'on a collecté 27 640 kg depuis le 1er octobre 2025 dans les 40 cantines primaires du territoire soit près de 700 kg par cantines en 5 mois.

2. Observez-vous des différences importantes de gaspillage entre les différents types d'établissements (maternelles, primaires, collèges, etc.) ?

Nous ne gérons que les écoles élémentaires et primaires. Oui, il y a des différences de gaspillage entre les cantines. A noter, certaines produisent les repas, d'autres ne font que servir les repas préparés par d'autres et acheminés sur place. Les raisons sont à creuser avec le service Restauration Collective.

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8. On constate néanmoins une amélioration progressive
9. L'organisation de fin de service, l'achat de balance (budget)
10. Proposition des pains tranchés ; faire de la sensibilisation avec les étudiants

Je me permets de vous contacter sur recommandation de Madame Fanny Lammin, dans le cadre d'un projet étudiant mené au sein du programme européen TEAMIT+, coordonné par l'ONG Initiative Développement.

Avec une autre étudiante, nous réalisons actuellement un booklet consacré au gaspillage alimentaire dans la restauration collective. Après une première prise de contact avec Madame Lammin, qui nous a apporté des éléments très utiles sur la collecte des biodéchets, il nous a été conseillé de nous rapprocher de votre service afin d'obtenir une vision plus complète sur le fonctionnement des cantines scolaires.

Dans ce cadre, nous souhaiterions recueillir votre expertise sur les pratiques de gestion du gaspillage alimentaire au sein du service Restauration Collective de l'Agglomération.

Si vous en avez la possibilité, accepteriez-vous de répondre à quelques questions ci-dessous ? Même des réponses synthétiques nous seraient très précieuses pour enrichir notre étude.

1. Les quantités de gaspillage alimentaire sont-elles régulièrement mesurées dans les cantines scolaires ? Si oui, sous quelle forme (pesées, estimations, suivi annuel...) ? **oui nous réalisons 2 pesées par an (une au minimum)**
2. Observez-vous des différences importantes de gaspillage entre les établissements produisant leurs repas et ceux recevant des repas livrés ? **non, aucune différence**
3. Quels sont, selon votre expérience, les principaux facteurs organisationnels influençant le gaspillage alimentaire (menus, portions, logistique, temps de service...) ? **portions, accompagnement des enfants pour goûter**
4. Quelles actions concrètes ont été mises en place ces dernières années pour réduire le gaspillage alimentaire dans les cantines scolaires ? **formation interclasse sur l'importance de faire goûter, travail sur les grammages**
5. Avez-vous constaté des résultats mesurables suite à ces actions ? **difficile à mesurer**
6. Selon vous, quelles pistes d'amélioration seraient les plus réalistes à court terme pour réduire durablement le gaspillage alimentaire dans les cantines ? **l'accompagnement renforcé**

Causes principales du gaspillage :

Catégorie	Causes identifiées
Organisation du service	Mauvaise gestion de fin de service, plats non consommés
Portions	Portions trop importantes ou mal adaptées
Comportement des usagers	Non-consommation complète, curiosité alimentaire
Présentation des plats	Mets peu attractifs visuellement
Menus	Plats équilibrés mais peu appréciés
Pain	Distribution systématique ou en début de chaîne

Impact local du gaspillage :

Indicateur	Valeur
Nombre de cantines étudiées	40
Biodéchets collectés (5 mois)	27 640 kg
Moyenne par cantine	~700 kg
Fréquence de suivi (RU)	2 fois/semaine
Fréquence de pesée (écoles)	2 fois/an

Leviers d'amélioration :

Axe d'amélioration	Action recommandée
Portions	Généraliser les demi-portions
Sensibilisation	Campagnes + actions sur la durée
Menus	Adapter selon préférences et gaspillage
Organisation	Améliorer gestion de fin de service
Données	Généraliser les outils de suivi
Collaboration	Partage des bonnes pratiques

Examples of questions asked:

This appendix presents the semi-structured questionnaire used to structure discussions with the various stakeholders interviewed.

The questions were designed to gather both factual information and feedback, focusing on several key themes:

- ⊕ Measuring and monitoring food waste
- ⊕ The main causes identified
- ⊕ Practices and actions already in place
- ⊕ Challenges faced by organisations
- ⊕ Proposed areas for improvement

This guide helped to ensure consistency across the interviews, whilst allowing scope for open-ended responses and qualitative observations.

1. Comprendre la situation actuelle

- 1.1 Estimez-vous qu'il existe un problème de gaspillage alimentaire dans votre cantine ?
- 1.2 Mesurez-vous la quantité de nourriture jetée quotidiennement ou hebdomadairement ?
- 1.3 À quel moment du service le gaspillage est-il le plus important ?

2. Identifier les causes

- 2.1 Selon vous, quelles sont les principales raisons du gaspillage alimentaire ?
- 2.2 Les portions sont-elles modulables ou standardisées ?
- 2.3 Les préférences des étudiants/élèves sont-elles prises en compte dans la conception des menus ?

3. Contraintes et limites

- 3.1 Quelles contraintes réglementaires ou sanitaires limitent la redistribution des excédents ?
- 3.2 Les contraintes budgétaires influencent-elles la gestion des quantités produites ?
- 3.3 Disposez-vous des moyens humains et matériels nécessaires pour mettre en place des actions de réduction du gaspillage ?

4. Solutions et initiatives existantes

- 4.1 Des mesures ont-elles déjà été mises en place pour réduire le gaspillage alimentaire ?
- 4.2 Avez-vous observé des résultats concrets suite à ces actions ?
- 4.3 Seriez-vous favorable à l'introduction de portions modulables ou de systèmes de récupération des excédents ?

5. Réaction à votre campagne

- 5.1 Que pensez-vous de l'idée de sensibiliser les étudiants via une vidéo sur le gaspillage alimentaire ?
- 5.2 Pensez-vous que la sensibilisation peut réellement influencer les comportements des étudiants ?
- 5.3 Selon vous, quelles actions seraient les plus réalistes et efficaces à court terme ?

Visual elements of the campaign and recommendations

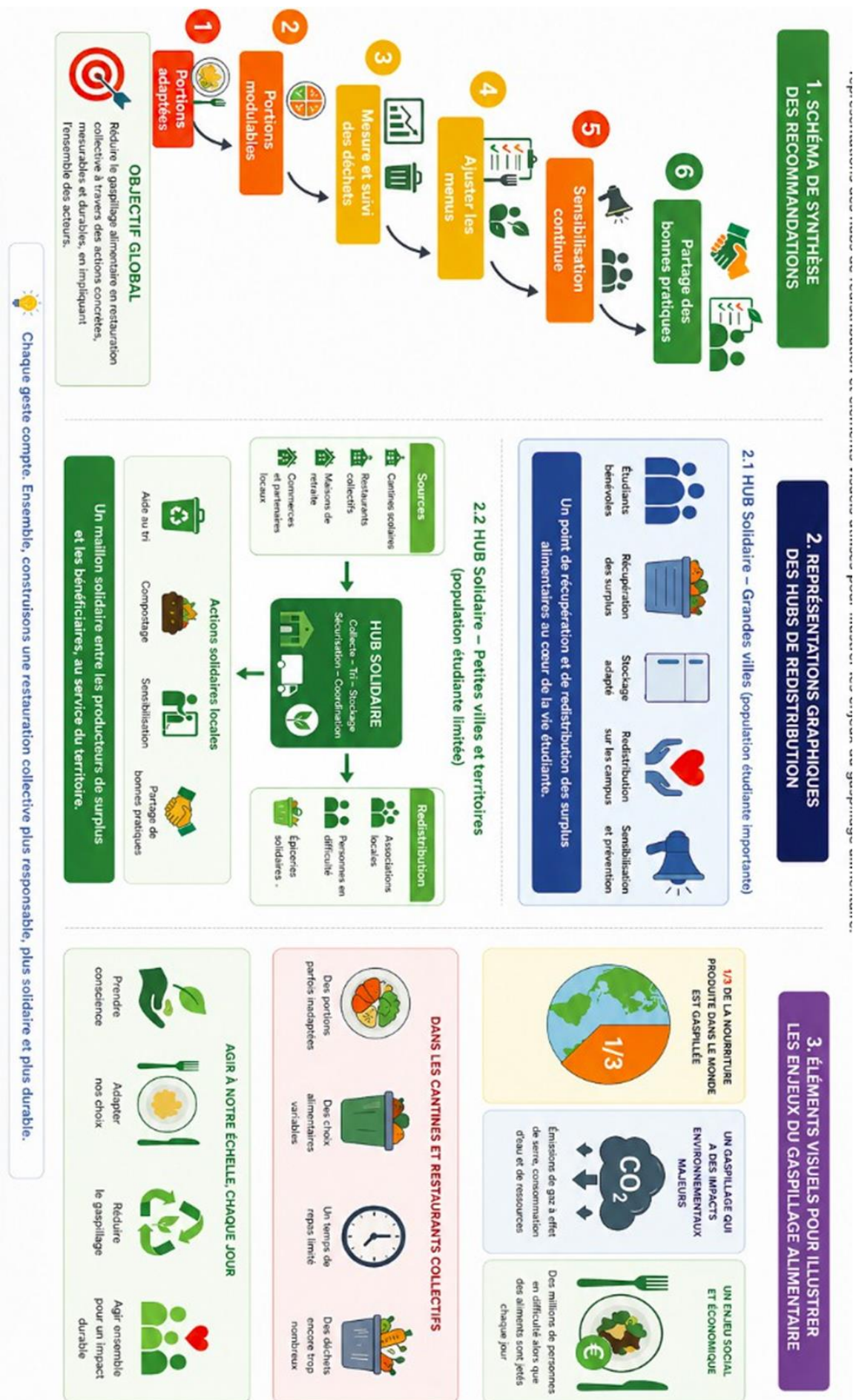
This appendix brings together all the visual materials produced as part of the project. It includes, in particular:

- Excerpts or screenshots from the awareness-raising video
- The summary diagram of the recommendations
- Graphic representations of the solidarity hubs (student and local)
- Visual elements used to illustrate the issues surrounding food waste

These materials help to highlight the overall coherence of the project, linking the analysis, the awareness-raising approach and the concrete proposals put forward.







Closing remarks from the France team

This project was much more than just an academic exercise. It was a human, collective and deeply enriching experience.

The French team, comprising Laowen Piaugeard and Lorea Saint-Val, would like to extend their sincere thanks to the entire TEAMIT+ programme. Taking part in this project was a unique opportunity to make a tangible contribution to current issues and to give meaning to our work. We would also like to extend our warmest thanks to our peers from other countries. Despite cultural and linguistic differences, a genuine spirit of collaboration developed. The language barrier was never an obstacle, but rather an asset, making this experience all the more memorable and inspiring.

We would also like to thank all those we met during our field research, who agreed to answer our questions and share their experiences. Their feedback was essential in grounding our reflections in concrete realities.

We would like to extend a special thank you to the NGO Initiative Développement, which trained us in awareness-raising issues and thanks to which we were fortunate enough to be selected to take part in this project. We are particularly grateful to Margaux Bonneau and Morgane Bouger for their support, their willingness to listen and their commitment throughout this experience.

Finally, we would like to thank the organisers of the 24 Hours of Innovation, who made it possible for this reflection and this collective effort to come to fruition within a stimulating and committed environment.

This experience will remain a defining moment, both personally and collectively, and represents a first step in a broader reflection on our role in addressing today's environmental and social challenges.



TEAMIT+: TEAMPRENEUR MULTICULTURAL IMPACT INNOVATION CO-OPERATIVES



About the TEAMIT+ project

TEAMIT+ aims to develop an innovative educational programme applying a pedagogical methodology based on the 'learning by creating' approach. This specific pedagogical methodology will be applied to vocational training students, higher education students, as well as young immigrants, refugees and the unemployed from a range of academic disciplines. The aim is to enable them to become future teampreneurs who will influence society by understanding the importance of the transition to a greener economy, based on green, digital and climate resilience skills.



Co-funded by
the European Union

Funded by the European Union (Grant Agreement No 101111560). The views and opinions expressed are, however, those of the author(s) alone and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



D5.5 Climate Commitment Booklet

Greece 2026 – English version

Dissemination Level: Public



Tiimiakatemia
by jamk



Amplo Kaya

id Initiative
Développement

Document Information

Issued by	Alexandros Loizou, Christina Dilma, Nikolaos Liolios
Date of Issue	31 May 2026

Document History

Version	Date	Modifications made by
01	5 May 2026	Alexandros Loizou, Christina Dilma, Nikolaos Liolios
02	26 May 2026	Initiative Développement – Margaux Bonneau

Authors

Version	Date	Full Name (Organisation)
01	05/05/2026	Alexandros Loizou, Christina Dilma, Nikolaos Liolios

Reviewers

Version	Date	Full Name
01	26 May 2026	Initiative Développement – Margaux Bonneau

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Introduction

TEAMIT+ is an educational programme that applies an innovative pedagogical methodology based on team entrepreneurship (Teampreneurship). It is based on the 'learning by creating' approach and aims to help future entrepreneurs develop resilience, as well as digital and sustainable skills.

The organising institutions include the Public University of Navarre and the University of Monragón, from which I also come, representing the Basque Country in this group of ambassadors. In addition, the University of Western Macedonia (Greece), Tiimiakatemia (Finland) and ESTIA (France) are also taking part. Each university has at least one representative on the group of ambassadors.

On 4 December 2025, we met at ESTIA in Bidart, together with the participants of the second event and all the organising bodies. Over the course of 24 hours, we worked together to propose innovative and practical solutions, taking into account the principles of sustainability and what we had learnt from Module 1. In this module, through interactive workshops and role-play activities, we explored the complexity of global environmental challenges, the importance of collective action, and strategies for transitioning to a more sustainable future.

Unlike the participants, the team of ambassadors faced an additional challenge, as we were not given a predefined problem. However, we also had a strategic advantage, as we had a clearly defined objective regarding the final outcome: to develop a promotional campaign.

The campaign: Over the course of 24 hours Campaign objectives

The first objective is to clearly demonstrate, through data, that food waste is a real and widespread problem affecting the whole of Europe. At the same time, the aim is to raise awareness of a phenomenon that is often taken for granted.

Food waste in university and school canteens occurs on a daily basis, but is rarely questioned. For this reason, the aim is to highlight a specific and tangible reality.

The second aim is to link food waste to the climate crisis.

Every piece of food that is thrown away represents resources used needlessly and emissions that could have been avoided. However, this link is not always fully understood, which reinforces the need to make it clearer and more easily comprehensible.



Finally, the third objective is to present our proposal and explain its significance, encouraging various stakeholders to participate in the solution. Promoting collective innovation, rather than individual efforts, is of critical importance: many communities face the same challenge and, by sharing solutions, it is possible to optimise the resources devoted to research and implementation, reducing both costs and time.

The narrative follows a logical progression: first, it outlines the extent of food waste at European level; then it focuses on the collective context, specifically university and school canteens; and, finally, it opens up the discussion to possible ways of improvement through our proposal for an innovation hub.



Target groups, users and participation in the campaign hub

The campaign is aimed at various organisations and user profiles that could become users of the hub. This is not a fully pre-defined approach; rather, the aim is for the key elements of the proposal to create synergy and encourage participation.

For example, citizen participation is considered a possible dimension. Furthermore, the involvement of universities and research centres will be sought, particularly those interested in collaborating on joint projects and optimising their resources compared to individual initiatives. It is also essential to involve communities that have first-hand knowledge of the problem and experience it in their daily lives, as they can provide data, support the validation of solutions and contribute to the creation of practical outcomes.

Finally, the hub requires a strong base of entrepreneurs: individuals capable of translating the knowledge generated by research into the market, developing sustainable business models across three key dimensions: social, economic and environmental.

Key message and positioning

The campaign's central message is clear: we are facing a shared and significant problem, and by working together to find solutions, we can achieve more effective results.

The campaign adopts a constructive and solution-oriented approach. It does not aim to instil guilt, but rather to promote shared responsibility. It invites the public to re-examine existing practices and to participate actively in the project.

A local approach

Beyond raising awareness, this campaign forms part of a promotional approach. Its aim is to show that the ecological transition also requires changes in our everyday environment.

By addressing specific issues in various European countries, the project links local action to a broader European challenge. Reducing food waste in this context contributes to climate targets and supports a gradual transformation of collective practices.



The result

After 24 hours of work, we presented the video we had created to all participants in Model 2.

The process

The 24 hours were a very demanding experience. It was difficult to work together as a team, to compromise on each other's ideas and to communicate smoothly and effectively. The breaks and various activities helped us to unwind, and we gradually began to work more cohesively as a team, which made the process feel more natural.

We got very little sleep and, in the end, the whole team went together to visit Mindar. At first, it seemed as though we wouldn't manage to reach an agreement, but, as the methodology of team-based entrepreneurship suggests, it is essential to trust the process. In the end, we were all satisfied with the final result.

The research we are planning focuses on the issue of food waste in Greece, approaching it through the lens of climate change.

Food waste is not merely a social or economic problem, but is directly linked to serious environmental consequences, a fact that makes it particularly important for a climate advocacy campaign.

Globally, a large proportion of the food produced is never consumed and ends up as waste, contributing significantly to greenhouse gas emissions. When food decomposes in landfill sites, it produces methane, a gas far more harmful to the climate than carbon dioxide.

We chose this particular topic because it directly affects people's daily lives and is a problem that can be tackled through changes in behaviour and mindset. In Greece, food waste is evident at all levels: from households to the catering and tourism sectors. At the same time, our country faces challenges related to climate change, such as rising temperatures, droughts and pressure on natural resources. Reducing food waste can make a significant contribution to alleviating these pressures by saving valuable resources such as water and energy.

Through this campaign, our aim is to highlight the link between food waste and climate change and to encourage citizens to adopt more responsible and sustainable practices in their daily lives.

We believe that even small changes can have a significant impact when adopted collectively, thereby contributing to a more sustainable future



Food waste in Greece and its link to climate change

This is an issue with profound social, economic and environmental dimensions which, despite its seriousness, is often underestimated or goes unnoticed in people's daily lives. We chose this particular topic mainly because food waste is a growing problem in our country.

Large quantities of food end up in the bin every day, from households as well as catering businesses, supermarkets and hotels. This is particularly worrying when one considers that, at the same time, there are social groups facing food insecurity and struggling to meet their basic nutritional needs.

This contradiction highlights the need for better resource management and greater social awareness.

Furthermore, food waste is directly linked to environmental impacts.

Food production requires significant natural resources, such as water, energy and land. When food is thrown away, all these resources are wasted unnecessarily, whilst at the same time greenhouse gas emissions increase due to the decomposition of organic waste.

At a time when climate change is one of the greatest global challenges, reducing food waste is an essential step towards a more sustainable society.

Another reason we chose this topic is that it is directly linked to people's everyday behaviour and, as such, can be changed through information and awareness-raising. Small changes, such as planning shopping trips properly, making use of leftovers and understanding the difference between 'use by' and 'best before' dates, can have a significant impact. This makes the topic ideal for an awareness campaign, as it allows for the active participation of the public and the immediate implementation of practical solutions.

Finally, we believe that Greece, as a country with a strong culinary tradition and a culture centred on food, has the potential to set an example of best practice.

Through our campaign, we aim not only to highlight the problem, but also to promote a new culture of responsibility and respect for food.

Overall, we chose food waste because it is a multifaceted issue that affects society, the environment and the economy, whilst at the same time offering many opportunities for meaningful intervention and positive change through awareness-raising and action.

It is easy to capture people's attention and encourage the public to reflect and take action. Through dynamic imagery and a short duration, the message becomes more immediate and accessible, particularly for younger audiences.



Overall, the choice of video as the main medium for our campaign is linked to the need for an immediate, emotional and effective communication.

The experience of the competition at Mindar contributed to the rapid yet substantial development of our idea, leading to a result that aims not only to inform but also to mobilise the public against the problem of food waste.

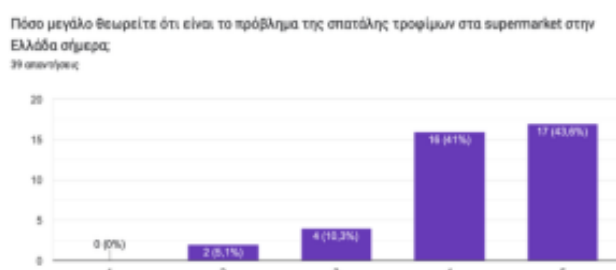
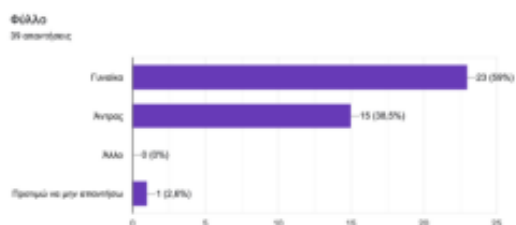


Research methodology and stakeholder analysis regarding food waste

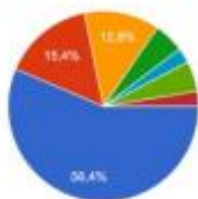
As part of our research, with the aim of understanding the public's level of knowledge and awareness regarding the issue of food waste, we initially designed and distributed a questionnaire, which is presented below. Through this, we sought to investigate what people know about food waste, how much of a concern it is to them, and to what extent they put practices in place to reduce it in their daily lives.

The results of this questionnaire formed the basis for the subsequent stages of our research, as they helped us to identify gaps in public awareness and to understand the general attitude of the public.

We then proceeded to identify the key stakeholders directly involved in food production and distribution. Specifically, we divided these organisations into three categories: restaurants, fast-food outlets and catering services. For each category, we formulated targeted questions tailored to the specific characteristics and operating methods of each business. The following sections of this paper first present the questionnaire and its key findings, followed by an analysis of the responses we collected from professionals in the catering sector.

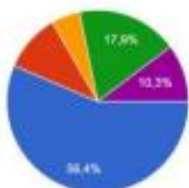


Επάγγελμα / Ιδιότητα
39 απαντήσεις



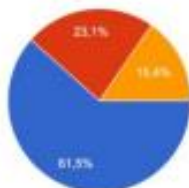
- Φοιτητής / Σπουδαστής
- Ιδιωτικός Υπάλληλος
- Δημόσιος Υπάλληλος
- Ελεύθερος Επαγγελματίας / Επιχειρηματίας
- Απασχολούμενος στον κλάδο της Εστ...
- Αντρώος
- Συνταξιούχος
- Οικιακά
- Μαθητής

Ηλικιακή ομάδα
39 απαντήσεις



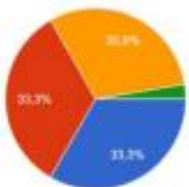
- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 - 64
- 65+

Ποια προϊόντα πιστεύετε ότι πετιούνται συχνότερα;
39 απαντήσεις



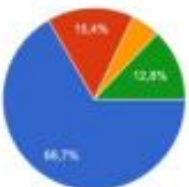
- Φρέσκα φρούτα και λαχανικά
- Προϊόντα αρτοποιίας (ψωμί κ.λπ.)
- Γαλακτοκομικά προϊόντα
- Συσκευασμένα τρόφιμα (κονιόρβες κ.λπ.)

Ποια πρακτική λύση θα βοηθούσε άμεσα στη μείωση της σπατάλης στα supermarket;
39 απαντήσεις



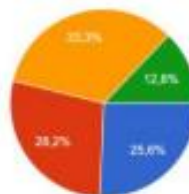
- Μεγάλες εκπτώσεις σε προϊόντα κοντά στη λήξη
- Δωρεά όλων των περισσευούμενων τροφίμων
- Καλύτερη διαχείριση αποβλήτων
- Ενημέρωση των καταναλωτών ενός που καταστήματος

Ποιος είναι ο κυριότερος λόγος που τα νοικοκυριά πετούν τρόφιμα;
39 απαντήσεις



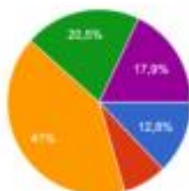
- Κακή οργάνωση αγορών (ψωνίζουμε περισσότερο από όσα χρειαζόμαστε)
- Ανεπάρκεια κατανόηση των ημερομηνιών λήξης
- Μεγάλες συσκευασίες στα supermarket
- Έλλειψη ενημέρωσης για τη σωστή αποθήκευση

Ποιο είναι το μεγαλύτερο εμπόδιο για τις δωρεές τροφίμων από επιχειρήσεις;
39 απαντήσεις



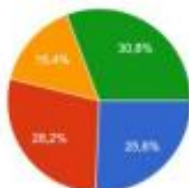
- Νόμοις υπόχρεωται σχετικά με την ασφάλεια των τροφίμων
- Κόστος μεταφοράς και αποθήκευσης των δωρεών
- Έλλειψη κινήτρων από το κράτος
- Δύσκολη επικοινωνία με κοινωνικούς φορείς

Σε ποιο στάδιο της εφοδιαστικής αλυσίδας πιστεύετε ότι δημιουργείται το μεγαλύτερο ποσοστό σπατάλης;
39 απαντήσεις



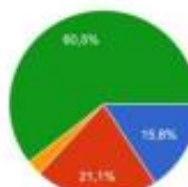
- Επεξεργασία και μεταποίηση τροφίμων
- Πρωτογενής παραγωγή
- Επίσκλη (υπερψύξη, ξηάνισι)
- Λιανικό εμπόριο και διανομή
- Νοικοκυριά

Ποιο μέσο τεχνολογίας θα χρησιμοποιούσατε για να μειώσετε τη δική σας σπατάλη;
39 απαντήσεις



- Εφαρμογή (App) που οδηγεί για τη Μόλι των προϊόντων στο ψυγείο
- Online πλατφόρμες με εκπαιδευτικές "παρασκευασμένες" φαγητό αποβλήτων
- Εξέλιξη συσκευών κουζίνας
- Καρίνα, ηρωισμό την παραδοσιακή οργάνωση

Τι θα σας παρακινούσε περισσότερο να μειώσετε τη σπατάλη τροφίμων;
38 απαντήσεις



- Η εξοικονόμηση χρημάτων (Οικονομικό)
- Η βοήθεια προς ανθρώπους που έχουν ανάγκη (Κοινωνικό)
- Η προστασία του περιβάλλοντος και του κλίματος (Περιβαλλοντικό)
- Όλα τα παραπάνω εξίσου



Analysis and interpretation of the results regarding food waste

Analysis of the 39 responses to the questionnaire reveals that the majority of participants are young people aged 18–24, mainly students. This suggests that the sample consists of a young population with heightened awareness and daily exposure to consumer habits.

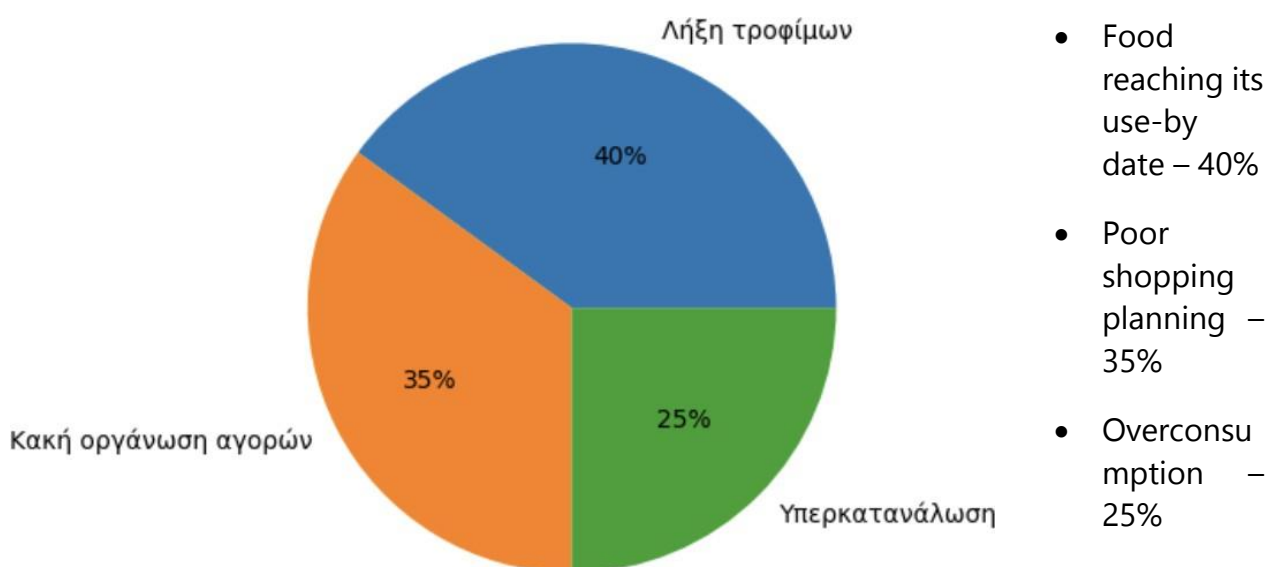
With regard to food waste, most participants consider it a serious problem both in Cyprus and internationally, with high percentages rating the issue as quite to very important. At the same time, it is recognised that waste originates mainly from households and supermarkets, particularly at the consumption stage and due to the over-purchasing of products.

The main causes cited are food expiry, poor shopping organisation and overconsumption. The proposed solutions include better food management at home, raising consumer awareness and price reductions for products nearing their expiry date.

Furthermore, a significant proportion believe that businesses do donate food to social organisations, but not to a satisfactory extent, suggesting that there is room for improvement in linking businesses with social contribution.

Overall, the results indicate a high level of awareness regarding the problem of food waste, as well as the need for more organised prevention practices at both household and business levels.

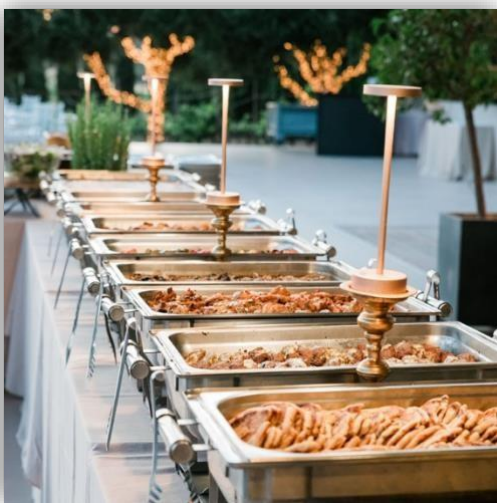
The chart below shows the main causes of food waste.



Following the general survey we conducted on food waste and the analysis of the questionnaire, we proceeded to a more targeted study of three specific categories. Specifically, we focused on the fast-food sector, supermarkets and the catering sector.

The aim of this approach was to gain a deeper understanding of the practices and issues relating to food waste in each category separately. It is worth noting that each survey was conducted anonymously, based on the willingness and consent of each business.

The questions posed in each sector, as well as the responses we received, are presented in detail below, in order to draw more specific conclusions.



Catering

Food waste is a particularly acute problem in the catering sector, especially in catering services that cater for events. At universities, where events, conferences and social activities are frequently held, the production of large quantities of food within a short period of time increases the likelihood of leftovers. As part of this research, we visited our university's catering service to understand the practices in place for managing food waste and to investigate the level of awareness surrounding the issue.

During our visit, we asked a series of questions regarding the operation and management of food before, during and after events. One key question concerned the proportion of total production that ends up as waste. Although we did not receive specific quantitative data, it is estimated that a significant proportion of uneaten food is ultimately discarded, mainly due to food safety-related restrictions.

The main causes of waste appear to be linked to uncertainty regarding the number of participants, last-minute cancellations and a tendency to over-produce in order to avoid shortages. At high-profile events, organisers prefer to have a surplus of food rather than a shortage, which often leads to increased leftovers.

One of the most significant issues concerns the management of food that is left over and has not been served. In some cases, this can be stored temporarily under suitable conditions; however, it is often discarded due to strict hygiene regulations. The possibility of donating such food is a crucial area of research. We asked whether there was any collaboration with organisations such as 'Boroume' or other social service providers; however, no clear answer emerged as to whether such collaborations are active or systematic.

Significant barriers to food donation include legal liabilities in the event of food spoilage, bureaucratic procedures, and a lack of suitable infrastructure for the transport and storage of food. These factors often deter businesses from making donations, even when they have the intention to do so.

Another issue concerned the use of technology to forecast the necessary quantities. The use of management software can contribute significantly to reducing waste by enabling more accurate estimates based on past data. However, it is unclear to what extent such systems are used in this particular catering service.

Staff training is also a crucial factor. Proper management of raw materials, making use of leftovers and avoiding mistakes during preparation can significantly reduce waste. We asked whether there is any structured training on these issues, and whether practices such as the reuse of ingredients (where permitted) are implemented.

In addition, we looked into the management of organic waste, such as peelings and food scraps. Composting is a sustainable solution; however, it requires infrastructure



and cooperation with local authorities. It was not clear whether such a practice is in place, suggesting a potential area for improvement.

Finally, we examined the extent to which customers are interested in the sustainability of their events. The concept of 'zero-waste' events is gaining ground internationally, and customer awareness can act as an incentive for businesses to adopt more responsible practices. In the same vein, we added further questions, such as whether smaller portion sizes are offered or whether organisers are given the option to adapt the menu with the aim of reducing leftovers.

Another important question concerns the impact of waste on financial costs. Food waste results in a loss of resources and an increase in operating costs, which may be passed on to customers. Therefore, reducing waste could also help to lower the cost of services.



The questions asked and the answers provided by the manager are set out in detail below:

What percentage of total production ends up as waste?

We do not always keep precise statistics, but we estimate that approximately 10%–20% of total production may go uneaten, depending on the event.

What are the main causes of waste?

The main reasons are miscalculating the number of participants, last-minute cancellations and over-production as a precaution, to ensure there are no shortages.

How should food leftovers be managed?

Food that has not been served and is kept under suitable conditions can be stored temporarily; however, in most cases, it is not reused for subsequent events due to food safety regulations.

Collaboration with NGOs or food banks?

There is interest and discussion regarding partnerships; however, there is not yet a stable or fully organised system for regular donations.

Barriers to food donation?

The main ones are legal liability, strict health and safety regulations, and the lack of an organised infrastructure for the immediate transport and delivery of food.

What percentage of total production ends up as waste?

There is interest and discussion regarding potential partnerships, but there is not yet a stable or fully organised system for regular donations.

Is demand forecasting software used?

Basic order management tools and empirical data are used, but not always specialised artificial intelligence forecasting systems.

Staff training?

In-house training is provided on the proper management of raw materials, portion control and best practices for waste prevention, mainly through experience and guidance.



Supermarkets

Food waste is one of the most critical issues of our time, with significant implications for both the environment and society. Food production requires resources such as water, energy and human labour. When this food ends up in the bin, these resources are wasted needlessly. At the same time, food waste is directly linked to the problem of hunger and the unequal distribution of food.

As part of this study, we contacted a large supermarket in Greece to gain a better understanding of the practices in place regarding the management of unsold food. However, we received no response — a fact that limits our ability to draw specific conclusions, whilst at the same time highlighting the need for greater transparency in the sector.

The questions posed covered the key aspects of the problem. Firstly, we investigated which product categories exhibit the highest levels of waste. It is generally accepted that fresh produce, such as fruit and vegetables, as well as dairy products with a short shelf life, are more vulnerable due to their perishable nature.

Furthermore, products with damaged packaging are often withdrawn, even if their contents remain safe to consume.

Another important issue concerns the effectiveness of price reductions on products approaching their use-by date. Discounts of around 30% or 50% can encourage consumers to buy such items, thereby reducing waste. However, the success of this measure depends on raising sufficient consumer awareness and applying the discounts in good time.

Furthermore, consideration was given to whether there is a process for distributing products that have not been sold but are still safe for consumption. In many cases internationally, these products are either distributed to staff or donated to charitable organisations. In Greece, organisations such as 'Boroume' and the 'Food Bank' make a significant contribution to food rescue; however, cooperation with businesses is not always systematic.

A crucial question concerns the criteria used to determine a product's fate. Factors such as the use-by date, the condition of the packaging and hygiene regulations play a decisive role. However, products that could still be put to good use often end up in the bin due to strict regulations or fear of legal consequences.

Furthermore, significant barriers to food donation include red tape, a lack of transport and storage infrastructure, and concerns about liability in the event of food safety issues. At the same time, the use of digital stock management systems could provide substantial assistance, enabling the early identification of unsold products and the taking of action before they reach their use-by date.



Finally, a particular issue is the management of fruit and vegetables that do not meet aesthetic criteria. Although they are perfectly safe, they are often discarded. In some cases, they could be used to make ready meals or other products, thereby reducing waste.

In conclusion, food waste in supermarkets is a multifaceted problem that requires coordinated action. Increasing transparency, improving management procedures and collaborating with social organisations can make a significant contribution to reducing it. At the same time, raising consumer awareness and training staff are key factors in achieving a more sustainable approach to food management.

The questions asked are set out in detail below:

- Which product categories have the highest rates of waste (e.g. fresh produce, dairy products nearing their use-by date or damaged packaging)?
- How effective is the use of special labelling and reduced prices (e.g. -30% or -50%) for products approaching their use-by date? Is there a formal procedure for products intended for withdrawal (but which are still safe) so that they can be made available free of charge or at a nominal price to the company's employees?
- Does the shop work with NGOs (such as 'Boroume' or the 'Food Bank') to donate products to people in need? If so, how often does this happen? What strict criteria are used to decide whether a product will be donated, given to staff or ultimately discarded?
- What are the main obstacles you face when it comes to donating food (e.g. complex legal liabilities in the event of problems, a lack of transport resources from the organisations, red tape)?
- Do you use a digital stock monitoring system that provides timely alerts for slow-moving products to prevent them from going off?
- What happens to fruit and vegetables that are edible but 'unattractive' in appearance? Do they end up as waste or are they reused (e.g. for making ready meals or salads in the supermarket)?
- Is there training for warehouse and shelf staff on the correct handling of produce, so as to minimise damage and spoilage?
- Do you believe that reducing food waste and donating to vulnerable groups improves the company's image in the eyes of consumers?



Fast food

Food waste is not limited to supermarkets; it is also a significant issue in the catering sector, particularly in fast-food outlets. These outlets are characterised by fast production rates, standardised products and high demand — factors that often lead to overproduction of food and, consequently, increased levels of waste. The need to serve customers immediately often leads to products being prepared without any guarantee that they will be consumed.

As part of our investigation into this phenomenon, we visited a fast-food outlet to gather information on the practices used to manage food waste. The outlet's managers asked us to send our questions by email; however, we never received a reply. This fact highlights, once again, the lack of transparency that is often observed surrounding this issue.

The questions submitted were intended to help us understand the internal procedures followed within the shop. Initially, a question was raised regarding the policy for handling products that have already been prepared but have not been sold within a specific time frame, such as chips or burgers. In many cases, these products are discarded for quality and safety reasons, as they no longer meet the standards set by the business, even if they remain theoretically safe for consumption.

Another important issue concerns stock control. Regular inspection of raw materials is crucial for preventing products from expiring and reducing waste. In well-organised fast-food businesses, these checks are carried out frequently and are based on specific protocols; however, it is unclear to what extent this is implemented across all outlets.

The use of automated systems that link orders to production is a modern practice that can significantly reduce surpluses. Through such systems, production is adjusted in real time based on demand, reducing the need to prepare large quantities in advance.

The management of frying oil is also of particular interest. If used oil is not disposed of properly, it can cause serious environmental impacts. In some cases, it is collected and converted into biodiesel, thereby contributing to the circular economy. However, the implementation of such practices depends on collaboration with specialist companies and the availability of the relevant infrastructure.

Another issue concerned the possibility for customers to take home any food they had not consumed (leftovers). Although this is a simple and effective way of reducing waste, it is not always encouraged or organised in all outlets. At the same time, ordering errors — such as preparing the wrong item — often lead to ready-made food being discarded, as it cannot be served to another customer for hygiene reasons.

Staff behaviour and training also play a crucial role. Providing incentives or rewards to staff who help reduce waste could encourage more responsible food management. However, it is unclear to what extent such practices are widely implemented.



Significant challenges are also identified in the management of organic waste. The lack of dedicated bins provided by local authorities or the absence of organised composting schemes hinders proper waste management. , a large quantity of organic waste ends up in landfill sites, placing a further burden on the environment.

Furthermore, the possibility of offering smaller portions at a lower price was examined as a measure to reduce food waste. This practice could better meet consumers' needs and reduce the amount of food discarded after consumption.

Finally, the importance of 'eco-friendly' branding was raised. Adopting practices that reduce food waste can significantly improve a company's image in the eyes of consumers, who are showing increasing sensitivity to environmental issues. Promoting a responsible and sustainable profile can serve as a competitive advantage in the market.



The questions asked are set out in detail below:

- What is your policy regarding products that have been prepared but not sold within a specific time frame (e.g. chips, burgers)?
- How often are stock checks carried out in storage areas to prevent raw materials from expiring?
- Do you use automated systems that link orders directly to production in order to minimise surpluses?
- What is the procedure for disposing of used frying oil (e.g. converting it into biodiesel)?
- Do you offer customers the option of taking home any food they haven't consumed in the shop?
- How do you handle ordering errors that result in ready-made meals being discarded?
- Does the company offer any rewards or recognition to employees who manage to reduce food waste below average levels?
- What is the main challenge you face in managing organic waste (e.g. a lack of specialised bins provided by the local council)?
- Have you considered offering smaller portions at a lower price to reduce food waste from plates?
- How important do you consider your business's 'green' image to be in terms of reducing food waste?

In conclusion, food waste in the fast-food sector is a complex issue linked both to the nature of how outlets operate and to the management decisions that are implemented. Despite the lack of a response from the company we contacted, it is clear that there is significant room for improvement. Increasing transparency, utilising technology and adopting sustainable practices can make a substantial contribution to reducing waste and creating a more responsible way of operating

Conclusions and prospects for tackling food waste

In conclusion, food waste is an extremely complex and widespread issue that occurs across many sectors of the food market, such as fast food, supermarkets and the catering sector, with each sector presenting its own unique characteristics and challenges. However, it is worth noting that, within the scope of our research, only the catering sector responded and provided substantive information, which enabled us to gain a deeper understanding of the actual conditions and practices in this sector.

More specifically, in the catering sector, it was found that food waste is directly linked to the uncertainty inherent in events, as it is difficult to predict consumption accurately. The need to prepare large quantities of food in advance often leads to surpluses that are not always easy to utilise. The responses from industry professionals highlighted the efforts being made to minimise this problem, such as better organisation, adjusting quantities and exploring potential partnerships for food donations where feasible.

Conversely, the lack of response from fast-food outlets and supermarkets limits the ability to draw direct conclusions from the primary data for these specific sectors. However, the general analysis suggests that, in these sectors too, food waste is linked to business practices, consumer habits and shortcomings in the management of stock and surpluses.

Overall, it is clear that tackling food waste requires a coordinated approach, which includes improving management processes, utilising technology, enhancing transparency and collaborating with social partners. At the same time, training industry professionals and raising consumer awareness are key elements in the transition to a more sustainable and responsible food management system. For this reason, through the research we have conducted, we are ready to seize every opportunity for a better future.

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TEAMIT+: TEAMPRENEUR MULTICULTURAL IMPACT INNOVATION CO-OPERATIVES



About the TEAMIT+ project

TEAMIT+ aims to develop an innovative educational programme applying a pedagogical methodology based on the 'learning by creating' approach. This specific pedagogical methodology will be applied to vocational training students, higher education students, as well as young immigrants, refugees and the unemployed across various academic disciplines. The aim is to enable them to become future teampreneurs who will influence society by understanding the importance of the transition to a greener economy, based on green, digital and climate resilience skills.



Co-funded by
the European Union

Funded by the European Union (Grant Agreement No 101111560). The views and opinions expressed are, however, those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.



D5.5 Climate Commitment Booklet - Spain 2026 - English version

Dissemination Level: Public



Tiimiakatemia
by jamk



Document Information

Issued by	Luana Shatila Valle Arias, Olatz Martija
Issue Date	5 May 2026

Document History

Version	Date	Modifications made by
01	5 May 2026	Luana Shatila Valle Arias, Olatz Martija
02	26 May 2026	Initiative Développement – Margaux Bonneau

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Version	Date	Full Name (Organisation)
01	5 May 2026	Luana Shatila Valle Arias, Olatz Martija

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Version	Date	Full Name (Organisation)
01	26 May 2026	Initiative Développement – Margaux Bonneau

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Introduction to the TEAMIT+ Project Advocacy

Campaign

TEAMIT+ is a training programme that applies an innovative pedagogical methodology based on Teampreneurship. It is grounded in the 'learning by creating' approach and aims to help future entrepreneurs develop resilience, as well as digital and sustainable skills.

The organising institutions include the Public University of Navarre and the University of Mondragón, from which the two of us come, representing the Basque Country within this team of ambassadors. Also participating are the University of Western Macedonia (Greece), Tiimiakatemia (Finland) and ESTIA (France). Each university has at least one representative on the team of ambassadors.

On 4 December 2025, we met at ESTIA in Bidart, together with the participants from the second edition and all the organising institutions. Over the course of 24 hours, we worked together to propose innovative and practical solutions, taking into account the principles of sustainability and the lessons learnt in Module 1. In this module, through interactive workshops and role-play exercises, we explored the complexity of global environmental challenges, the importance of collective action and strategies for moving towards a sustainable future.

Unlike the participants, the team of ambassadors faced an additional challenge in that we did not have a pre-defined problem to tackle. However, we also had a certain strategic advantage, as we had a clearly defined objective regarding the final outcome: the development of an advocacy campaign.

About Us and Our Issue

Who are we?

My name is Luana Valle, I am 20 years old and I am studying for a degree in Economics at the Public University of Navarra. I am an ambassador for the Spain team in the TEAMIT+ programme and I joined it because of my interest in sustainability and the environment, and the opportunity to contribute to a project with social impact.

I was also drawn to the programme's international dimension, as I believe that a diversity of perspectives and cultures enriches both the process and the results. I find this awareness campaign on food waste particularly relevant, as I consider it to be a pressing issue close to home that requires both public awareness and structural changes.

I am Olatz Martija, an entrepreneur from Bilbao with a passion for project management and team leadership. I try to make the most of every experience, always keen to make a positive impact and never stop growing.

In 2025, I completed my LEINN (Leadership, Entrepreneurship and Innovation) degree at Mondragon Unibertsitatea. During my time on the course, I founded Duara, a sustainable innovation agency aimed at harnessing people's potential to create circular and collaborative models.

I took part in all the modules of the first edition of the TEAMIT+ programme and decided to get involved as an ambassador because of the value it could bring to my learning in European project management. The topic we have chosen – food waste – is particularly relevant to me, as it is an issue we face in our daily lives. Food waste in canteens in the Basque Country and Navarre

As part of the awareness-raising campaign and Module 2 – which consisted of the 24 Hours of Innovation – the entire group of ambassadors, comprising participants from Spain, Greece, France and Finland, selected the topic to be addressed and carried out a general analysis at European Union level.

Building on this joint work, we decided to focus our booklet on the problem of food waste in school canteens. In particular, we chose to analyse this issue in the context of the Basque Country and Navarre, as this is a familiar and local environment.

This choice allows us to tackle the problem from a specific perspective, facilitating direct observation and the proposal of solutions tailored to our local context.

Building on this approach, in the following sections we will first analyse the issue of food waste at a general level across Europe and, subsequently, its specific situation within the context under study.

Why food waste?

The research on food waste, carried out during the 24 Hours of Innovation, is not an isolated case and reflects a much

wider phenomenon across Europe. Every year, around 58 million tonnes of food are wasted in the European Union, which amounts to approximately 130 kilograms per person, according to Eurostat.

These figures reveal a structural problem, as food waste cannot be attributed solely to individual behaviour and occurs at various stages of the supply chain, from production to distribution, including the catering sector.

Every piece of food that is wasted involves the use of considerable resources: agricultural land, water, energy, transport and human labour. When food is lost, all these resources are also wasted.

Furthermore, the decomposition of food waste, particularly under anaerobic (oxygen-free) conditions, contributes to greenhouse gas emissions, some of which are produced in the form of methane – a gas more potent than carbon dioxide and which exacerbates climate change, according to the UN. Within the EU, food waste accounts for 16 per cent of the food system's total greenhouse gas emissions, according to the Council of the European Union.

Reducing food waste is therefore a concrete tool for climate action. It is an area where organisational changes can yield measurable and rapid results. In this context, although households account for the largest share of food waste – specifically 53 per cent, equivalent to 69 kg per capita, according to Eurostat data – the catering sector, which includes canteens, remains a key area for action, accounting for 11 per cent of food waste, equivalent to around 14 kg per capita.

Beyond the environmental perspective, collective restoration also raises the issue of setting an example. Public and university institutions play a fundamental role in society. The practices they adopt influence behaviour, shape habits and help to build a shared culture. Taking action in these areas involves addressing not only the ecological impact, but also raising awareness amongst future generations.

It is on the basis of this analysis that we turn our attention to a specific and local context.

The situation in the Basque Country and Navarre

If we focus our analysis on our own territory, the situation does not improve significantly. Food waste across the whole of Euskal Herria (the Basque Country and Navarre) reflects a problem of considerable scale, both in terms of volume and structural inefficiencies in the food supply chain. Although the figures vary depending on the methodology used, it is estimated that the total volume exceeds 300,000 tonnes per year, which is equivalent to approximately more than 100 kg per person per year. Furthermore, around 40%–45% of the waste is generated in households, which shows that final consumption remains the main critical issue, followed by industry and the catering sector.

In both regions, consumption habits and the handling of fresh food account for a substantial part of the problem. A lack of planning when shopping, improper storage, or confusion between ‘use by’ and ‘best before’ dates lead to avoidable losses. Added to this is a highly developed gastronomic culture which, whilst a distinctive asset, also increases the volume of food prepared and, consequently, the risk of generating surpluses.

If we narrow our focus to collective catering facilities (schools, universities, hospitals or businesses), food waste takes on a particularly strategic dimension. These facilities manage large volumes of daily production under relatively standardised models, making them ideal environments for implementing scalable solutions. In this context, various studies suggest that between 10% and 20% of the food prepared in collective canteens may end up being wasted. The main sources of loss are concentrated in three critical areas: overproduction resulting from inaccurate demand forecasting, the rejection of certain dishes by diners, and wastage generated in the kitchen during the preparation phase.

Alongside this, it is important to note that there are already numerous initiatives underway in the Basque Country and Navarre aimed at reducing food waste, particularly in the context of communal canteens. At an institutional level, the Basque Government is promoting various projects which we will analyse in more detail later. Furthermore, there is a commitment to investing in start-ups tackling this issue, whilst numerous independent initiatives are emerging from various centres and organisations.

Against this backdrop, a key strategic question arises: what impact could we achieve if all this knowledge and learning were shared and applied in a coordinated manner, rather than operating in a fragmented way with multiple models and parallel lines of work?

The Campaign: 24 Hours

Campaign Objectives

The first objective is to clearly demonstrate, through data, that food waste is a real and widespread problem affecting the whole of Europe. It also seeks to highlight a phenomenon that is often taken for granted. Food waste in university and school canteens occurs on a daily basis, yet is rarely questioned. The aim is therefore to shine a spotlight on a concrete and tangible reality.

The second objective is to link food waste to the climate crisis. Every piece of food thrown away represents resources that have been unnecessarily used and emissions that could have been avoided. However, this connection is not always fully understood, which reinforces the need to make it more explicit and comprehensible.

Finally, the third objective is to present our proposal and explain its relevance, encouraging the various stakeholders to join in the solution. Promoting collective innovation rather than isolated efforts is key: many communities face the same challenge and, by sharing solutions, the resources allocated to research and implementation can be optimised, reducing both costs and time.

The narrative follows a logical progression: first, it sets out the scale of food waste at European level; it then focuses on institutional catering and university and school canteens; and finally, it opens up the discussion to possible avenues for improvement through our proposal for an innovation hub.

Target audience

The campaign is aimed at various organisations and individuals who could be users of the hub. This is not a strictly defined approach; the intention is for the key elements of the proposal to generate interest and encourage participation.

For example, a component of public participation is envisaged. Furthermore, we will seek the involvement of universities and research centres wishing to collaborate on joint projects, thereby optimising resources compared to individual initiatives. It is equally essential to engage communities that have first-hand knowledge of the issue and experience it in their daily lives, providing data, facilitating the validation of solutions and contributing to the generation of applicable results.

Finally, the hub requires a solid base of entrepreneurs: individuals capable of transferring the knowledge generated by research to the market, developing sustainable business models across the three key areas: social, financial and environmental.

Key message and positioning

The campaign's central message is clear: we face a major shared problem, and if we tackle the process of finding solutions together, we will achieve results more effectively.

The campaign adopts a constructive, solution-oriented approach. It does not seek to assign blame, but rather to promote shared responsibility. It invites the audience to rethink current practices and to join the project.

A local approach

Beyond raising awareness, this campaign forms part of an advocacy approach. Its aim is to demonstrate that the green transition also requires adjustments in everyday settings.

By addressing specific issues in different European countries, the project links local action to a broader European challenge. Reducing food waste in these settings contributes to climate targets and fosters a gradual transformation of collective practices.

Communication format and strategy

The campaign is designed around a brief, structured narrative lasting approximately three minutes, designed to maximise clarity and impact. This format requires careful selection of key messages and enhances the overall effectiveness of the communication.

Its audiovisual nature allows the message to be conveyed in an accessible, direct and engaging way. It brings to light what often goes unnoticed, captures attention, encourages reflection and facilitates its dissemination, particularly through digital channels and social media within a university setting.

The result

After 24 hours of work, we presented the video we had created to all those attending Module 2.

The process

The 24 hours were quite a demanding experience. We found it very difficult to coordinate as a team, to compromise on the ideas each of us had and to communicate smoothly. The breaks and the various activities helped us to switch off and, little by little, we began to gel as a team, which allowed the work to progress more naturally.

We didn't get much sleep and, in the end, the whole team went off together to visit Bidart. At first it seemed as though we weren't going to reach an agreement, but, as the entrepreneurship methodology suggests, you have to trust the process. In the end, we were all satisfied with the result.

Stakeholders in the Basque Country and Navarre

Introduction

The Basque Country offers a particularly favourable environment for the development of a European food waste research hub. It is a region with a strong tradition of cooperation, where the model of collaboration between stakeholders

—driven largely by the cooperative movement— has proven its ability to generate shared value and long-term sustainable solutions.

Within this ecosystem, there is a clear willingness to join forces and optimise resources collectively, based on the premise that complex challenges require collective responses. Tackling food waste therefore requires the formation of multidisciplinary teams comprising a diverse range of profiles: from the academic and scientific spheres to the business community, public administrations and the communities directly affected. This diversity enables not only a better understanding of the problem, but also the design of more effective, practical and scalable solutions.

At the same time, the region already has numerous initiatives underway that tackle food waste from different angles and at various levels of intervention. This variety highlights that there is no single correct answer, but rather a set of complementary solutions that can reinforce one another. Within this framework, the creation of a hub is seen as an opportunity to connect these efforts, maximise synergies and accelerate the transition towards more sustainable models at European level.

The interviews

As part of our awareness-raising campaign, interviews were conducted with various stakeholders, who have been categorised into two groups: on the one hand, businesses or schools that are implementing solutions to reduce food waste

and, on the other, organisations working in the food sector (such as canteens), able to provide first-hand accounts of this issue.

Denis Ugalde-Oreka

Date of interview: 26 February 2026

According to Denis Ugalde, CEO of Oreka, the project aims to reduce food waste by collecting surplus food from businesses and kitchens and distributing it to charitable organisations. Businesses register the food available and Oreka handles the collection, transport and delivery in accordance with safety protocols. The main challenge is logistics, as the food has a short shelf life and must be transported quickly in suitable packaging.

Interview:



How did you get started?

Oreka was founded after we realised that food in good condition was being wasted in many canteens and large kitchens. The aim was to create a system that would collect this surplus food and redistribute it to charitable organisations to give it a second life.

How does the model work?

Companies with surplus food register what is available on the platform. Oreka organises the collection, transport and delivery to charities or social organisations that can make use of this food.

Where do you source the food from and how do you make use of it?

The food comes mainly from hospitals, schools, businesses and catering services that generate surplus food. When the food is in good condition, it is collected and redistributed so that it can be consumed by other people.

How do they transport it and how do they ensure it is in good condition?

Transport is carried out in accordance with food safety protocols, with temperatures and times closely monitored. The entire process is recorded to ensure the food arrives in suitable condition.

What packaging is used for transport?

Approved food-grade containers are used, such as catering trays and other suitable packaging to ensure food safety during transport.

What are the weaknesses of the business model?

The main challenge is logistics, as prepared food has a limited shelf life. It is also necessary to coordinate donor companies and recipient organisations efficiently.

How do they manage the timing to ensure the food does not go off?

Priority is given to speed in collection and delivery – often on the same day or the following day – to ensure the food is consumed before it loses its quality.

What negative experiences have you had?

At the start, a delivery rider hired by Oreka – who hadn't been given clear instructions on how to transport the food – went to collect a huge surplus from a BEC event, but arrived on a motorbike rather than in a car, so he was barely able to take anything away due to a lack of transport capacity.

Conclusion

In conclusion, the interview highlights how Oreka tackles food waste through a practical approach that delivers real impact, efficiently connecting businesses with surplus food to social organisations that can make use of it. Its unique selling point lies in managing the entire operation, guaranteeing safety and traceability throughout the process. However, the main challenge remains logistics, as working with prepared food requires speed and very precise coordination. Over time, they have refined their model and learnt from experience, which has enabled them to strengthen their operations and move towards an increasingly robust and efficient system.

Egoitz Bikandi – Atxuri School

Date of interview: 5 March 2026

According to Egoitz Bikandi, a teacher at Atxuri School, the canteen project involves making use of food left over after meals so that it is not wasted. This food is distributed to families who have previously signed up to a list and is handed out in plastic Tupperware containers so that they can take it home and eat it there. The aim is to reduce food waste and make use of food that is still in good condition. In the interview

, it is explained that the system relies on planning for surplus food and coordination with families, with the aim of making the best possible use of the food.

Interview:

How did you get started?

At Atxuri School, they began by making use of the food left over from the school's own canteen.

How does the scheme work?

The model is based on collecting food that is left over in the school canteen but is still in good condition. This food is packed into Tupperware containers and handed out to families on the list so they can take it home and make the most of it.

Where do you get the food from and how do you make use of it?

The food comes exclusively from the school canteen, when there are leftovers after meals have been served.

How do you transport it? How do you make sure it hasn't gone off?

The food is kept in suitable conditions from the moment it is collected from the canteen. It is distributed in sealed Tupperware containers and checked to ensure it is in good condition before delivery, with delivery times strictly adhered to in order to guarantee its quality.

What kind of packaging do you use to transport it?

Food-grade plastic Tupperware containers are used. Families take them home. In fact, there was an initial plan for each family to bring their own Tupperware containers to reduce plastic waste, but for health and safety reasons relating to the prevention of cross-contamination, this is not possible.

What are the weaknesses of the business model?

One of the weaknesses is that it depends on the amount of leftover food in the canteen; if there is no surplus, there is no food to distribute. It is also important to coordinate the list of families effectively to ensure efficient distribution.

How do they manage the timing to ensure the food does not go off?

The food is distributed shortly after the canteen service ends, to minimise storage time. Furthermore, we check that it is in good condition before packing it into the Tupperware containers.

Can you tell us about a negative experience?

On one occasion, there was more food than expected and not enough families had signed up to collect it, so some of the surplus could not be used. This highlighted the importance of improving planning and communication with families.

Conclusion

In short, the Atxuri School canteen's initiative shows that with simple organisation, food waste can be significantly reduced and, furthermore, local families can be directly helped. The system is practical and easy to implement, as it makes use of the canteen's own surplus and distributes it quickly. Even so, it depends heavily on how much food is left over each day and on good coordination with families to ensure nothing goes to waste. Their experiences make it clear that better planning and communication can make all the difference in ensuring the model works increasingly well.

Mónica Aguirre – Beriain State School.

Date of interview: 22 March 2026

Mónica Aguirre has been a school canteen supervisor for 21 years. She currently works at Beriain State School, a regional school located in a town in the Pamplona region, which caters for pupils from Year 1 of Infant School to Year 6 of Primary School. Her account offers a first-hand insight into the organisation of the school canteen service and the management of food waste in this context.

Interview:

How does the canteen menu work?

On the one hand, it is the Government of Navarre that sets the guidelines and standards. Behind each menu (basic, gluten-free, meat-free, dairy-free, etc.) is a team of nutritionists responsible for drawing up a balanced, menu based on real food and locally sourced produce. They have moved away from the old menus aimed at children, which were high in carbohydrates and fried foods, etc., and

instead promote mindful eating habits, focused on health and an appreciation of the true flavours of food, without masking textures.

Until a few years ago, the food arrived pre-cooked in thermos flasks from central kitchens, but the school now has its own on-site kitchen. This means that every day, a designated member of staff prepares and cooks all the meals in accordance with the guidelines set by the Government of Navarre.

How many pupils eat in the canteen?

There are currently around 90 pupils using the canteen and, depending on the day of the week, between 5 and 6 teachers also eat there.

Many of the pupils come from nearby villages and are transported to the school, which acts as the regional hub. This enables and ensures the continuation of the canteen service, as this type of school (regional) is subject to specific conditions and coordinated by the Government of Navarre, the main body responsible for managing both transport and canteen services for these pupils who travel from other towns. This makes it possible and viable to maintain the canteen service, in many cases in smaller schools.

How much food is wasted each day (approximately in kg)?



There is no fixed amount of waste, as it depends largely on the menu. Some meals are more popular than others, but approximately between 2.5 and 3 kg are wasted daily.

Does your organisation have any methods for managing food waste? At present, there is no specific protocol in place for managing food waste. However, we are aware that there is a pilot project at a school in Pamplona, supported by the Government of Navarre. Furthermore, the company is keen to find out more and, if appropriate, to join this initiative.

Conclusion

In summary, the interview shows that Beriain State School is well organised and regulated by the Government of Navarre, with balanced menus based on high-quality produce. However, food waste continues to occur, to a greater or lesser extent, depending on how well the various menus are received. Although there is currently no specific protocol in place to manage it, there is an interest in joining existing initiatives. The school has a good structure, but there is still room for improvement in the management of food waste.

Conclusions

Several key ideas can be drawn quite clearly from the interviews.

Firstly, food waste is a problem present at various points in the system, from large commercial kitchens and businesses to school canteens. This confirms that it cannot be tackled with a single solution, but rather requires approaches tailored to each context.

It is also evident that there are already initiatives in place that are working and making an impact, particularly in the redistribution of surplus food. However, they all face similar challenges, such as logistics, time management and coordination between the various stakeholders involved.

Furthermore, many of these models depend on variable factors, such as the amount of leftover food or the availability of people to collect it, which hinders their efficiency and scalability.

In the case of school canteens, there appears to be greater awareness of the problem, but there is still a need to better structure processes and establish clear protocols for managing food waste.

Overall, the interviews reinforce the idea that knowledge and action are already in place, but there is also a clear opportunity to link initiatives, improve coordination and develop more efficient and replicable solutions.

Recommendations

To tackle food waste in communal canteens, it is necessary to adopt a strategy that combines various measures, including improvements in management, education and coordination amongst the organisations and individuals involved.

Firstly, it is essential to improve demand forecasting, aligning the quantities produced with actual consumption patterns. This would help reduce overproduction, one of the main causes of waste. In this regard, it is also important to implement standardised measurement systems that enable waste to be quantified and facilitate data-driven decision-making.

Secondly, mechanisms for redistributing surpluses must be strengthened. Initiatives such as Oreka demonstrate how surplus food from businesses, hospitals

canteens can be collected and redistributed to charitable organisations, fostering collaboration and improving outcomes. In this model, logistics and speed are critical factors in ensuring food safety during transport, given that food has a very limited shelf life.

At school level, models such as that of Atxuri School demonstrate that the internal reuse of surplus food, by distributing it to families, can be an effective solution. This system could be replicated in other schools, such as Beriain School, by improving planning with families to prevent food from going to waste.

Furthermore, raising awareness amongst users plays a key role. School canteens should also be seen as educational spaces, where responsible eating habits are promoted and feedback on menus is gathered to help reduce aversion to certain foods.

Finally, it is necessary to improve coordination between the various existing initiatives in the Basque Country and Navarre, ensuring they do not operate in isolation. Greater collaboration between centres, organisations and public authorities would enable the sharing of best practice, increase their impact and develop more effective solutions through policies, funding and institutional support. In this regard, alongside the initiatives already mentioned, recent innovative initiatives such as the one in Navarre – based on vending machines for ready-made meals – are also worth highlighting. These demonstrate the potential of new models for utilising surplus food in a safe and accessible way, and could serve as a model for implementation in other regions.

Bibliography

- TEAMIT+ – Learning by Creating. (n.d.). <https://teamit.plus/>
- EITB. (29 September 2025). The Basque Country loses 115 kilos of food per person per year due to food waste, totalling 244,000 tonnes. EITB. <https://orain.eus/es/actualidad/sociedad/2025/09/29/euskadi-pierde-115-kilos-comida->

[persona-ano-el-desperdicio-alimentario-un-total-244000-toneladas/?utm_source=chatgpt.com](https://www.navarra.es/es/-/nota-prensa/el-gobierno-de-navarra-ha-aprobado-la-agenda-para-reducir-el-desperdicio-alimentario-2022-2027?utm_source=chatgpt.com)

- navarra.es. (2 November 2022). The Government of Navarre has approved the 2022–2027 agenda to reduce food waste. https://www.navarra.es/es/-/nota-prensa/el-gobierno-de-navarra-ha-aprobado-la-agenda-para-reducir-el-desperdicio-alimentario-2022-2027?utm_source=chatgpt.com
- Vasco, E. J.-G. (8 September 2022). Erika quantifies food waste in the Basque Country. Basque Administration Web Portal: https://www.euskadi.eus/gobierno-vasco/-/noticia/2022/elika-pone-numeros-al-desperdicio-alimentario-en-euskadi/?utm_source=chatgpt.com
- European Council. (2025, 19 February). Food Waste. <https://www.consilium.europa.eu/es/policies/food-waste/#0>
- Eurostat. (2025, 16 October). 130 kg of food wasted per person annually in the EU.
- Eurostat: <https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/ddn-20251016-2>
- United Nations. (n.d.). Food and climate change: A healthier diet for a healthier planet | United Nations. <https://www.un.org/es/climatechange/science/climate-issues/food>
- Food waste: the urgent challenge marking Zero Waste Day. (30 March 2026). UN News. <https://news.un.org/es/story/2026/03/1541302>

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Funded by the European Union (grant agreement No 101111560). However, the opinions and views expressed are solely those of the authors and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor the EACEA can be held responsible for them.

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