waste2worth
creating circular communities

LEARNER WORKBOOK

As part of Waste2Worth **Open Educational Resources (OERs)** to empower you with the knowledge, tools & confidence to turn local waste challenges into circular opportunities.

Co-funded by the European Union

2025
Learner Workbook

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01 | INTRODUCTION

WASTE2WORTH Learner's Handbook

PLEASE USE THIS WORKBOOK TO CAPTURE THE KEY LEARNINGS FROM OUR COMPREHENSIVE COURSE (OPEN EDUCATIONAL RESOURCES – OERs)

OUR FREE CONTENT CAN BE DOWNLOADED FROM
https://waste2worth.eu/modules/

This Learner Workbook follows the **12 modules of the Waste 2 Worth course** in sequence.

This course aims to **empower food SMEs** with the knowledge and skills to understand the relevance of food waste streams in the fight against climate change and aid in the development of circular and bio-economies across our countries and Europe. We will bring you our learners/SMEs on a pathway to potential innovation and circular / bio-economy development opportunities, as well as developing awareness on how to reduce waste and turn it into a valuable resource, thus boosting their business's competitiveness and contribution to a healthier society.

Ready to get started?

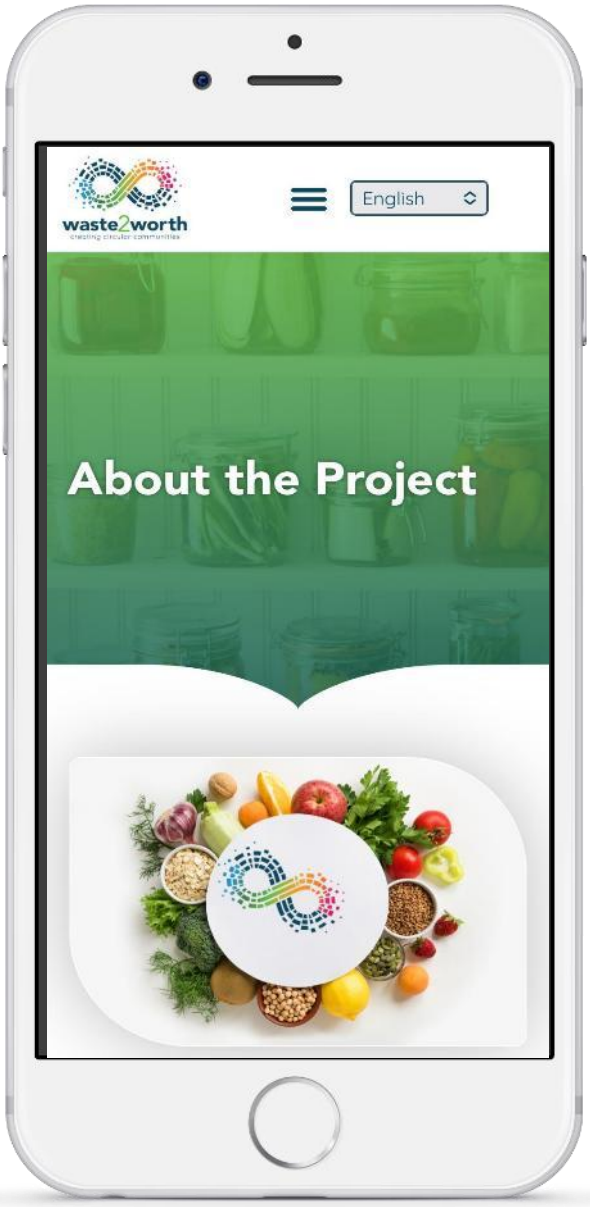
Join our online social media community of SMEs, VET, interested stakeholders, as well as policy makers.

Follow Our Journey

02 | THE PROJECT

Waste 2 Worth is a forward-thinking European initiative that addresses one of the most pressing environmental and economic issues of our time: food waste. At its core, the project aims to empower vocational educators and small to medium-sized enterprises (SMEs) in the food production sector with the tools, knowledge, and confidence to drive change toward a more circular, sustainable economy.

Turning Food Waste into a Resource for Learning & Change



A Mission Rooted in Action

The mission of Waste 2 Worth is clear: to build the capacity of educators and agri-food SMEs **to manage food waste, valorise waste streams, and implement circular practices** that unlock both environmental and economic value. By equipping people like you, (those closest to food production) with innovative, accessible, and practical resources, the project supports a vital shift in how we view and handle waste.

This transformation is not only technical but also educational. By changing mindsets, fostering collaboration, and providing practical solutions, Waste 2 Worth helps turn waste into worth—economically, socially, and environmentally.

Vision for Sustainable, Inclusive Change

Waste 2 Worth envisions a food system where waste is no longer seen as an inevitable by-product but as a valuable resource. The project supports long-term sustainable development by advancing key EU priorities: environmental protection, digitalisation, and inclusion. Through a focus on vocational education and training (VET), it promotes responsible consumption, climate resilience, and innovation in bioeconomy practices.

Aligned with the United Nations Sustainable Development Goal 12 (Responsible Consumption & Production) and the EU's Farm to Fork Strategy, the project delivers real solutions to systemic challenges—bridging the gap between policy and practice, and between the classroom and the field.

02 | THE PROJECT

From Research to Ready-to-Use Resources

At the heart of Waste 2 Worth is a comprehensive set of Open Education Resources (OERs) tailored to the needs of educators & food SMEs. These include:

- A curriculum of **12 modular topics**, covering everything from resource efficiency and innovation to marketing and compliance.
- An **educator's guide** and **learner workbook**, designed for flexible use across digital, hybrid, in-person, or self-directed learning environments.
- A **compendium of good practices**, **regional waste-stream maps**, and **design-thinking tools** to support place-based, learner-driven innovation.

Each element has been developed in response to real gaps identified by stakeholders, chief among them, the lack of quality educational materials on food circularity.

Building Skills for a Circular Future

Food waste is not just a loss of food—it is a loss of water, energy, labour, and biodiversity. Across the EU, approximately **88 million tonnes** of food are wasted annually, with SMEs contributing to 42% of that figure. **Yet the vast majority of this waste is avoidable**.

Waste 2 Worth takes a strengths-based approach, helping communities and businesses recognise waste streams as opportunities for innovation, entrepreneurship, and local resilience.

Through a structured learning journey, it is hoped that learners will explore how to design out waste, extend resource life, and implement circular business models with real impact.

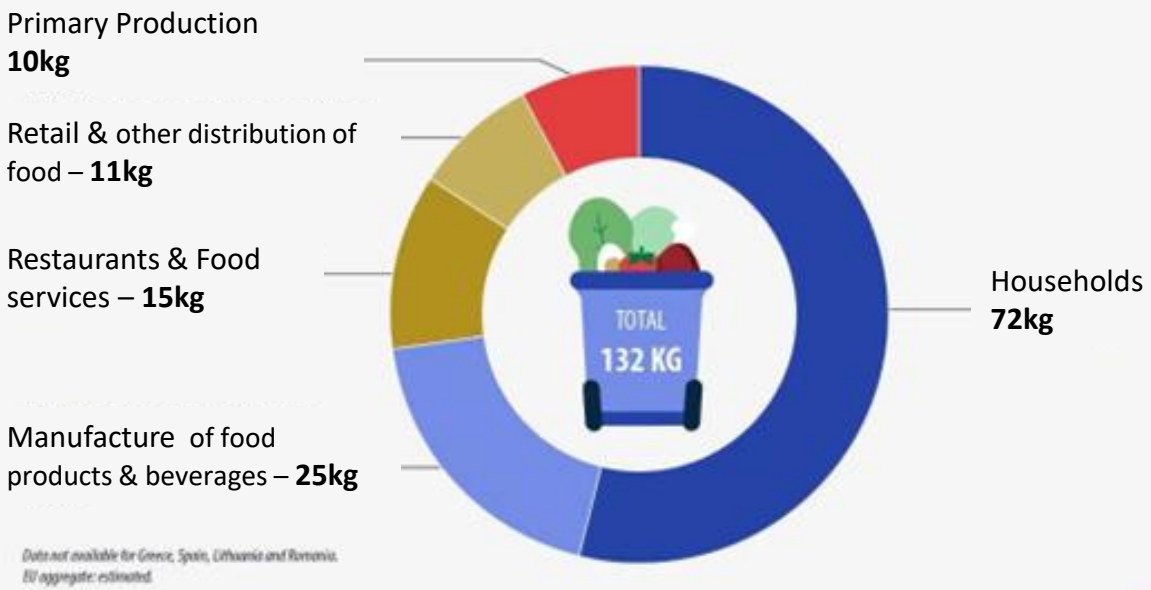
WHY CHANGE IS NEEDED?

In the EU, over 59 million tonnes of food waste (132 kg/inhabitant) are generated annually (Eurostat, 2024), with an associated market value estimated at 132 billion euro (SWD (2023)421).

Globally, **approximately a third of all food produced for human consumption is lost or wasted** (FAO, 2011). FAO's Food Loss Index (FLI) estimates that globally, around 14% of all food produced is lost from the post-harvest stage up to, but excluding, the retail stage (FAO, 2019).

Yet while this food goes to waste, millions still face food insecurity…we need to rethink how we produce, consume & value food—because reducing food waste isn't just good for the planet, it's essential for a fairer, more sustainable future

Food waste in the EU by main economic sectors, 2022
(kg per inhabitant)



03 | MEET OUR PARTNERS

The choice of participant countries was not accidental: spanning Ireland to Finland, Spain, and Italy, we are inclusive of Nordic, Mediterranean, and Western European food cultures. By working together, we are developing resources that better reflect **a European approach to food waste management and innovation through ethical and sustainable approaches**. We have the powerful opportunity to bring together the best of innovative teaching approaches, food valorisation innovation, and sustainability practices as the basis to create wholly new and innovative content and pedagogies that will stimulate learning and teaching practices in the food sector to tackle societal challenges.

Our partnership is motivated by the fact that all target group's participation in this project is good for the planet: By meeting needs & investing in skills training for these target groups & adding climate action leadership we will consequently **elevate the visibility, leadership & collective impact of educators, primary producers and Food SMEs**, leading to a more sustainable future for EUROPE.

By sharing our unique perspectives and strengths, the Waste 2 Worth resources will be more responsive and effective in diverse scenarios, rather than being narrow and prescriptive.

03 | MEET OUR PARTNERS

01

BIA Innovator Campus (Ireland)

Contribution:

- Ireland's leading centre for supporting start-up and small food businesses with state-of-the-art facilities (innovation kitchens, food-grade units, training spaces).
- Actively leads & participates in multiple EU-funded projects with a strong sustainability & innovation focus in the agri-food sector.

What expertise do they bring?

BIA brings deep sectoral insight, real-world food production knowledge, and EU project coordination experience. Their infrastructure and innovation-focused ecosystem ensure that W2W OERs are grounded in practical, entrepreneurial agri-food realities.

02

Momentum (Ireland)

Contribution:

- Specialises in curriculum design, content creation, & platform development for adult and further education in sustainability & digital skills.
- Leads the W2W branding, website development, communication, and dissemination strategies.

What expertise do they bring?

Momentum ensures that the OERs are pedagogically strong, visually compelling, accessible, and widely disseminated. Their expertise in adult education guarantees that resources are relevant and user-focused.

03

Savonia University of Applied Sciences (Finland)

Contribution:

- Brings expertise in food industries, bio & circular economy, and innovation-led education for SMEs.
- Offers research-based approaches to green transition, food business development, and sustainability.

What expertise do they bring?

Savonia ensures scientific credibility, strong methodology, and alignment with circular economy principles. Their experience developing tools for SMEs supports the OERs' practical, business-relevant orientation.

03 | MEET THE PARTNERS

04

CDEA (Spain – Basque Country)

Contribution:

- Longstanding VET provider in hospitality, tourism, and health, deeply embedded in local business ecosystems.
- Promotes sustainability and food waste awareness among future workers and SME leaders.

What expertise do they bring?

CDEA bridges vocational training with real-world skills needs. Their hands-on experience and pedagogical adaptability ensure the OERs are practical, accessible, and impactful at a community level..

05

Fondazione Luigi Clerici (Italy)

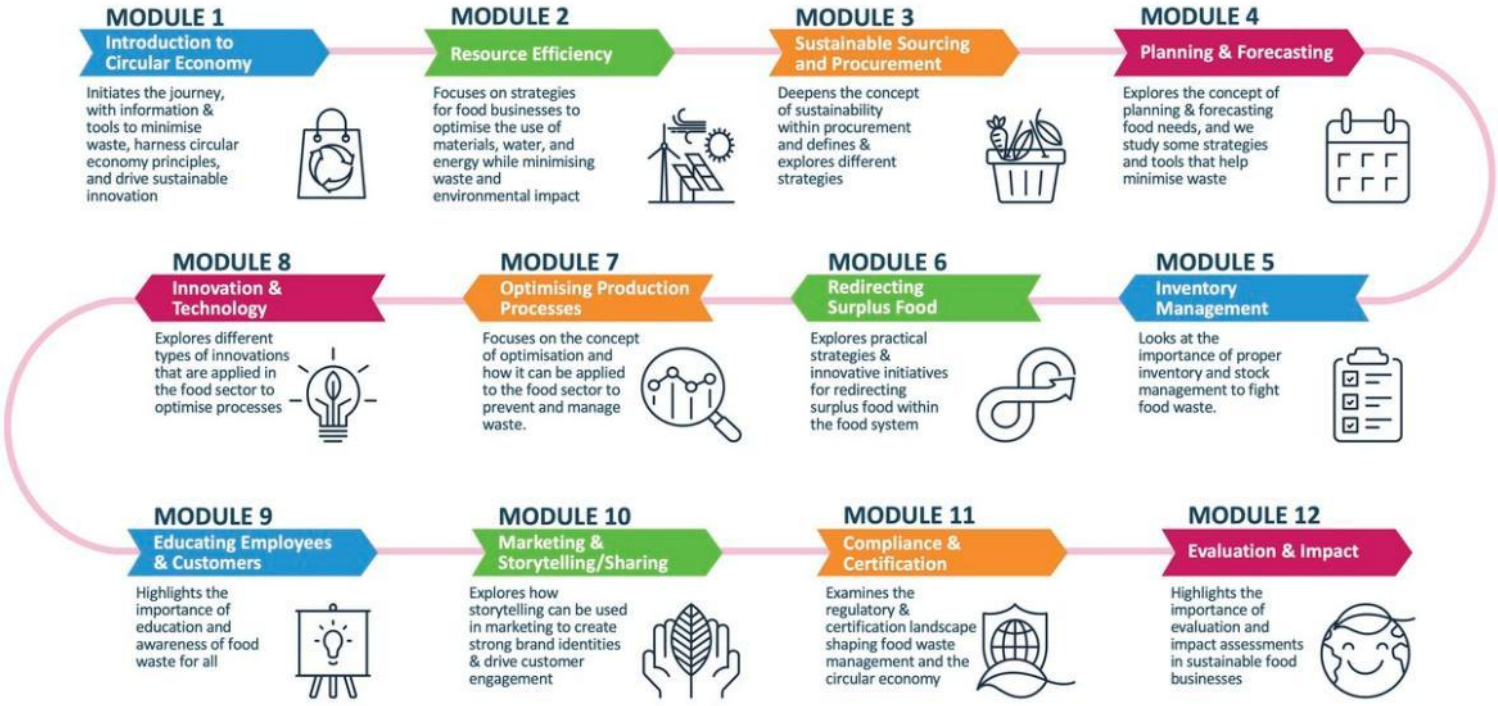
Contribution:

- A long-established VET provider with 30 branches across Italy, specialising in vocational training for the catering, pastry, and bakery sectors.
- Committed to promoting social and professional inclusion through training that reflects labour market needs.

What expertise do they bring?

FLC brings a large-scale, sector-specific training network and deep expertise in food-related vocational education. Their involvement ensures the OERs are designed to be practically transferable and relevant for integration into VET systems across Europe.

04 | THE WASTE2WORTH OERs



The Waste 2 Worth **Open Educational Resources** (OERs) have been developed to empower you as a learner with the knowledge, tools & confidence to turn local waste challenges into circular opportunities.

The 12 free, flexible modules introduce essential concepts such as circular economy thinking, resource efficiency, innovation & technology, and sustainable approaches to procurement and supply chains. Learners also explore the importance of community awareness, waste stream mapping, inventory & forecasting, marketing for circular products, and understanding compliance and regulatory frameworks — all critical for building a sustainable future.

At the heart of these resources are three core goals:

- **Inspiration**
- **Innovation**
- **Change**

Whether you're an individual learner, educator, or community leader, the OERs are designed to inspire fresh thinking, spark creative solutions, and support action at both local and regional levels.

This learner's workbook complements the online modules by offering space to reflect, document ideas, and apply learning to real-life contexts. It encourages you to think critically, explore possibilities, and take meaningful steps on your journey from waste to worth.

OERs

Open Educational Resources (OERs) are free learning materials that anyone can use, share, and adapt. They can include videos, worksheets, lesson plans, and interactive tools — all designed to support learning without cost or access restrictions. OERs help make education more open, flexible, and accessible for everyone.

KEY FEATURES OF THE OERs

- **Free & Open Access:** Available to everyone — no cost, no login, no barriers.
- **Modular & Flexible:** 12 standalone modules that can be followed in any order, at your own pace.
- **Real-World Focus:** Based on real examples, offering practical case studies.
- **Interactive & Visual:** Includes videos, graphics & engaging activities to support different learning styles.
- **Skill-Building:** Covers key areas like circular economy, resource efficiency, innovation, technology, marketing & compliance.
- **Locally Relevant:** Inspired by regional waste challenges across Europe, with ideas that can be adapted to your community.
- **Action-Oriented:** Encourages learners to reflect, plan, and take steps toward sustainable change.
- **Suitable for All:** Designed for youth, educators, community groups, and anyone interested in sustainability.

TARGET GROUPS

The Waste2Worth training course is a comprehensive training programme aimed first at **teachers and trainers** with the objective to provide them with new methods and content to enable a transformation in the sector.

Secondly, the course is aimed at you the final beneficiaries: ie. **students and SME's of the food and catering sector** to improve your skills & confidence to foster and promote sustainable thinking, methods and practices by gaining access to food circularity, bioeconomy and sustainability education & subsequently have an impact on the SDGs and therefore also promote sustainable food production and consumption.

Some General Instructions for the Course

Here are some instructions (which you can follow or not) to make your learning journey as easy as possible.

- **This course is scheduled to last an estimated 25-30 hours.**
- **These hours can be distributed however you like and according to your schedule. Our advice is that you dedicate an hour a day from Monday to Friday, being able to rest on weekends.**
- **Keep in mind that the entire course is about 450 slides. That means, if you spend an hour a day, you will have to review about 12 – 15 slides. This course was designed for flexible learning, and if you only have a spare 15 minutes, access the slides on your phone…it all counts.**
- **You should also know that throughout the course you will find external documents and videos, which have a certain duration. In that case, do not hesitate to reduce the number of slides, and occupy exclusively the time that you have scheduled.**
- **Finally…We all have days when we are more tired than others. So, if one day you don't part-take in the course, that's fine. You deserve to rest. You will catch up but please don't give up!**

Study suggestions that will take your learning to another level

1. **Buy a notebook** just for the course. Write down everything you think is interesting. Then you be able to come back to it whenever you want.

2. Put what you have learned into practice. In the course you will find a wide **variety of easily applicable practices**. Take advantage of them and test them out!

3. Create your own **Mind Map**. A mind map summarises and organises ideas. If you do it well, it can save you many hours of study time.

4. The best way to learn is to be curiously active. **Ask yourself questions** about the subjects and do your best to answer them on your own.

5. Especially**, don't forget to enjoy yourself**. Learning new things is a wonderful experience, whatever your age.


A LITTLE PROGRESS
EACH DAY ADDS UP
TO BIG RESULTS

MODULE 1

MODULE 1	Introduction to Circular Economy
Overview	Module 1 aims to equip you with the knowledge and tools to minimise waste, harness circular economy principles, and drive sustainable innovation. It examines historical and modern reduction approaches, SMEs' role in circular practices, and the regulatory landscape shaping the bio-based economy.
Learning Objectives	By the end of this module, you will have a better grasp of the concept of circular economy in the context of food waste, recognise the value of traditional food practices in reducing waste, and identify the role of SMEs in circular food systems and waste reduction. You will also be more informed on key EU policies & regulations supporting circular economy models and be able to explain how food waste reduction aligns with the UN SDGs
Topics Covered	▪ What is a Circular Economy in the Context of Food Waste? ▪ Learning from Our Past: Traditional Practices & Waste Reduction ▪ Role of SMEs in the Circular Economy & Food Waste Reduction ▪ EU Policies & Regulations on Food Waste & Circular Economy ▪ Alignment with SDGs: Food Waste as a Global Challenge
Case Study	DeliKatetxe, a Basque cooperative that transforms free-range hens into high-quality broths, reviving the once-valued tradition of using mature hens while minimising waste
Suggested Exercises	Slide 12 – A Self-reflection on your food habits and practices Slide 24 – Common food products journey and how it could be improved
Suggested Videos / Podcasts	Ellen MacArthur on the basics of the circular economy Ellen McArthur & her podcast on circular economy in the food waste context What is the European Green Deal and why is it important? Jobs and growth in the EU bioeconomy Explaining the Circular Economy and How Society Can Re-think Progress | Animated Video Essay
Further Reading	The Waste 2 Worth Waste Stream Maps The Asia-Europe Environment Forum (ENVforum) Annual Conference 2021, The European Green Deal The Farm to Fork Strategy EU Circular Economy Action Plan EU Bioeconomy Strategy Waste Framework Directive UN Sustainable Development Goals

M1 – Activity 1 – Slide 12

SELF-REFLECTION:

- Reflect on your current food-related habits at home, at work, or in your community.
- In what ways are you already contributing to a circular food system?
- Where could you improve?
- Identify one specific change you could make to reduce food waste or support circular practices—and think about how it aligns with environmental, economic, or social sustainability.

NOTES…SELF-REFLECTION, HOW TO THINK CIRCULAR:

M1 – Activity 2 – Slide 24

1. Choose a common food product (e.g. Ice Cream, Bread, or Cooked Chicken) and **trace its journey through the food system**—from production to potential waste.

2. Then, brainstorm at least **two circular strategies** to reduce waste at different stages (e.g. reuse, compost, upcycling, donation).

TIPS…

1. Keep it Local & Familiar
Choose food products you regularly use.

2. Break Down the Food Journey…think about the entire lifecycle of the food product:
- Where is it grown or produced?
- How is it packaged & transported?
- What happens to leftovers or scraps?

3. Think Circular at Each Stage…ask:
- Can this be reused, reimagined, or redirected?
- Is there a waste stream it could be diverted into?
- Could a new product or community benefit come from it?

4. Keep It Simple
Remember even small circular actions count—like composting peels, freezing portions, or using overripe fruit in smoothies.

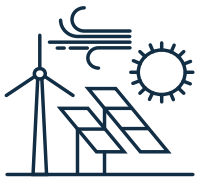
M2 – Activity 2 – Slide 24

What **food product** are you going to study:

_____

Potential Circular Strategies

MODULE 2



MODULE 2	Resource Efficiency
Overview	Module 2 introduces you to the concept of Resource Efficiency, with a focus on supporting food SMEs to become more sustainable. Using core principles such as the 3Rs (Reduce, Reuse, Recycle), the module explores how efficient resource management can lead to cost savings, environmental benefits, and long-term business resilience. It also highlights how energy efficiency, smart management, and supportive policy frameworks can drive practical change within organisations and communities.
Learning Objectives	By the end of this module, you will be able to define resource efficiency in the context of food businesses to apply the 3Rs to reduce waste and use materials and water more sustainably. In addition to this you will have a better understanding of how to improve energy efficiency through smart practices and how to identify policies and incentives that support efficiency.
Topics Covered	▪ What is Resource Efficiency? ▪ The 3Rs: Reduce, Reuse, Recycle ▪ Sustainable Use of Raw Materials & Water ▪ Energy Efficiency: Saving, Green Energy & Smart Management ▪ Incentives & Policies for Resource Efficiency
Case Studies	Zelai Txiki, a Basque restaurant that turned the challenges of the pandemic into an opportunity for sustainability, transforming into a zero-waste establishment MyGug, an Irish company that transforms food waste into valuable biogas and liquid bio-fertiliser through innovative micro-scale biodigesters.
Suggested Exercises	Slide 17 – reflection on the 3Rs in your Food Business
Suggested Videos / Podcasts	What is Food Waste Valorization and How Does it Contribute to Sustainable Solutions? European Resource Efficiency Knowledge Centre *The Food Fight* Spotlight: RethinkResource on creating value from food waste - The Food Fight | Podcast on Spotify
Further Reading	cicular economy principles Circular economy – Ellen MacArthur Foundation Sustainable Development Goals. Food Waste In Europe Statistics and Facts – eufic The 3Rs framework The Waste 2 Worth Good Practice Compendium Eurobarometer survey Energy Efficiency Directive (EU/2023/1791) A RESOURCE-EFFICIENT EUROPE the Europe 2020 Strategy OECD Policy Guidance on Resource Efficiency

M2 – Activity 1 – Slide 17

REFLECTION:
Reflect on how the 3Rs apply to your daily business practices. On paper, create three columns labeled Reduce, Reuse, Recycle.

List actions you **currently** take in each category and think of one new way to **improve** each area.

REDUCE	REUSE	RECYCLE

MODULE 3

MODULE 3	Supplier collaboration, Sustainable sourcing & procurement
Overview	This module provides useful materials and knowledge regarding the importance of implementing sustainable sourcing in your business. It offers key explanations and concepts, from an economic, social and environmental point of view, revising challenges and opportunities.
Learning Objectives	You will gain a better understanding of the concept of sustainable procurement, and the strategies that can be applied in your business (or place of work) in order to ensure economic, social and environmentally sustainable mechanisms, that will bring long-term profits to the business. Moreover, the aim is that you will understand the different types of networking and relations, acknowledging the difference between collaboration, coordination and cooperation.
Topics Covered	▪ Sustainable sourcing: basic concepts and key elements ▪ Defining partnerships: differences between collaboration, coordination and cooperation partnerships ▪ Strategies for sustainable procurement ▪ Challenges for sustainable procurement
Case Study	The Rice House Benefit corporation, a small start-up that has become one of the main organic businesses in the rice sector in Italy thanks to sustainable sourcing
Suggested Exercises	Slide 10 - Reflection about the coordinative partnership Slide 18 - Economic, Social and Environmental Sourcing Slide 23 - Questions testing differences in Sustainable Sourcing Slide 28 - Scenario based exercise
Suggested Videos	Sustainable Procurement: It's not just about being green – webinar. Mastering Sustainable Procurement: Essential skills you need to know. Partnerships for change – Fairuz Taqi-Eddin
Further Reading	C.Chauhan, P.Kaur, R. Arrawatia, P. Ractham, A. Dhir (2022), 'Supply chain collaboration and sustainable development goals (SDGs). Teamwork makes achieving SDGs dream work', Journal of Business Research, Volume 147, https://doi.org/10.1016/j.jbusres.2022.03.044. McNamara, M. (2012). Starting to Untangle the Web of Cooperation, Coordination, and Collaboration: A Framework for Public Managers. *International Journal of Public Administration*, *35*(6), 389–401. https://doi.org/10.1080/01900692.2012.655527 H.Zarei, M. Rasti-Barzoki, J. Altmann, B. Egger (2023), 'Cooperation, coordination or collaboration? A structured review of buyers' partnerships to support sustainable sourcing in supply chains', Environmental Science and Pollution Research, Volume 30, https://doi.org/10.1007/s11356-023-2754

M3 – Activity 1 – Slide 10

Think about a product you use every day.
Develop a **Journey Map** reflecting on:

- Where does it come from? _____
  _____
- Are there any environmental impacts?_____
  _____
- Who causes it?_____
  _____
- How is it transported? _____
  _____
- What happens once used?_____
  _____

Once you have answered,

What **alternatives** can you consider to reduce these impacts in your sourcing decisions

_____
_____
_____
_____
_____
_____
_____

M3 – Activity 2 – Slide 18

REFLECTION:

- Reflect and select which of the **8 elements** defining partnerships you think are the most important?
- Why?
- Would you consider some elements more important than others relating to the food sector?
- Why?

M3 – Questionnaire

Choose the correct answer:

1. Which of the following is an example of **economic sustainability** in procurement?

a) Choosing the cheapest supplier

b) Selecting durable products

c) Buying only from large corporations

d) Ignoring supplier stability as long as prices are low

2. What a key principle of **social sustainability**?

a) Ensuring suppliers follow fair labour practices

b) Reducing transport emissions

c) Choosing female-led supply businesses

3. Which decision best supports **environmental sustainability**?

a) Buying from a supplier that reduces water waste

b) Purchasing plastic packaging as it is the cheapest option

c) Choosing the fastest supplier, to reduce logistic pollution?

M3 – Activity 4 – Slide 28

Scenario-based exercise

In the following situation:

'You are a food SME owner/producer, trying to adopt a sustainable sourcing technique. However, your budget is tight, your suppliers are inconsistent, and certifications expensive.'

- What barriers would you face?
- What compromises might you be tempted to make?
- How would you explain your choices to your customers?

Reflect on the following questions and write down your thoughts

MODULE 4

MODULE 4	Planning and Forecasting
Overview	This module explores the concept of planning and forecasting food needs. Furthermore, it provides strategies and tools that help minimise waste, especially at the food production and distribution stages. These practices are essential, especially in canteens, restaurants, and supermarkets, where efficient management can make the difference between maximum resource utilisation and excessive waste.
Learning Objectives	In this module, you will explore the benefits, challenges, and various types of planning and forecasting. You will also gain an understanding of the advanced technologies used in this field and insights into different strategies for effective planning and forecasting, including optimal quantity determination, strategic use of raw materials, demand forecasting, and sales and operations planning. Finally, learners will examine the risks associated with planning and forecasting.
Topics Covered	• Planning and Forecasting • Types of Forecasting • Advanced Technologies used in Planning and Forecasting • Optimal Quantities • Strategic use of raw materials • Demand Forecasting in the food sector • Sales Operations Planning • Risk Management
Case Studies	**Tuidi** is an Italian startup specialized in using artificial intelligence to optimize inventory management in the retail sector, with the goal of reducing food waste and improving operational efficiency. **Escatafood** uses the waste from anchovy production; that is, heads and bones, to make a Garum, a very intense and flavourful condiment.
Suggested Exercises	Slide 16: Understand how seasonality and customer preferences help choose the right products and avoid food waste. Slide 27: Create your own waste management *software* Slide 32: Learn how to reduce food waste through creative reuse of ingredients.
Suggested Videos	How Can Blockchain Benefit the Food Industry & Supply Chains
Further Reading	Tuidi — Più vendite, meno problemi di stock con l'AI Recuperiamo Srl Società Benefit Tre startup italiane azzerano lo spreco lungo la filiera alimentare Tuidi: come una startup pugliese risolve lo spreco alimentare grazie all'intelligenza artificiale - Economyup

M4 – Activity 1 – Slide 16

SCENARIO BASED EXERCISE: ***WHAT DO WE BUY IN APRIL?***

Objective: Understand how seasonality and customer preferences help choose the right products and avoid food waste.

Scenario: You work in a canteen that serves 100 meals a day. You need to choose 3 fruits or vegetables to buy for the month of April.

You want to:

- Use seasonal products (tastier and cheaper),
- Choose those that customers like the most,
- Avoid those that often end up in the trash.

Product	Is it in season?	Do people like it? (⭐ = low, ⭐⭐⭐⭐⭐ = high)	Is it often thrown away?
Strawberries	✅ Yes	⭐⭐⭐⭐⭐	❌ No
Apples	⚠️ So-so	⭐⭐⭐	✅ Yes
Oranges	❌ No	⭐⭐	✅ Yes
Asparagus	✅ Yes	⭐⭐⭐⭐	❌ No
Zucchini	⚠️ So-so	⭐⭐⭐⭐	⚠️ Sometimes

Questions:

- Which 3 products would you choose for April?
- Why did you choose them?
- Which product would you not buy and why?

M4 – Activity 2 – Slide 27

PRACTICAL EXERCISE: Rudimentary Waste Management Software

A) Create a recipe and prepare it for 1 person; as you prepare it weigh each ingredient AND weigh the waste you create (peels, inedible parts, etc.).

B) Calculate the percentage of waste of each ingredient.

When cooking this recipe for several people, simply multiply the individual ingredient weights by the number of people, remembering to take out the percentage of the waste in order to be as accurate as possible.

Ingredient & its Weight	Waste Weight	% Waste

M4 – Activity 3 – Slide 32

Creative Exercise: The Circular Use of Food.

Goal: Learn how to reduce food waste through creative reuse of ingredients. Point out reusable items from this recipe and connect them to recipes that can be made

Ingredients: Pasta- potatoes- onion- carrot- celery- grated parmesan cheese - oil

Reusable Food waste	Recipes
❑ Potato skins	❑ Chips
❑ Onion skins	❑ Broth
❑ Carrot peels	❑ Microwave crispy snack
❑ Parmesan crusts	❑ Scube powder
❑ Celery leaves	❑ Seasoning soups
❑ Boiled pasta	❑ Pasta/omelette
❑ Boiled potatoes	❑ Puffed pasta
	❑ Salad
	❑ Croquettes

MODULE 5

MODULE 5	Inventory Management
Overview	This module focuses on the importance of proper inventory and stock management to fight food waste. In particular, it explains the implementation of effective strategies such as FIFO and FEFO and the use of new technologies that automate all processes and keep track of goods in stock
Learning Objectives	Thanks to this module, you will gain a clear understanding of what inventory management is, how it functions, and why it is essential. You will explore different types of inventory and learn about various inventory management methods. Furthermore, the module provides insights into optimisation strategies and the technologies used to enhance inventory management. In addition, you will become aware of common errors to avoid when managing inventory
Topics Covered	▪ Types of inventory ▪ Inventory Management Methods ▪ Strategies for Optimization ▪ Technologies to optimize inventory management
Case Studies	Just in time: A company using a Just in Time strategy to address significant inefficiencies. EasyFill TurnLoader is a rotating shelving system designed for efficient inventory management in supermarkets and grocery stores using First In, First Out method. Wasteless is a start-up that has developed an artificial intelligence-based solution to reduce food waste in supermarkets through dynamic pricing.
Suggested Exercises	Exercise Slide 16: Exercises about FIFO and FEFO Exercise Slide 28: Exercise about Smartshopping with IoT
Suggested Videos	• Inventory Management in 11 minutes • TurnLoader™ Multideck FIFO merchandising shelving • Wasteless Dynamic Pricing Technology – YouTube • Unlocking a greener future: How IoT tackles food waste! (
Further Reading	Waste Not, Want Not! 10 Tips for Food Inventory Management Using RFID for Inventory Management: Pros and Cons - Camcode

M5 – Activity 1 – Slide 16

UNDERSTANDING THE IMPORTANCE OF FIFO AND FEFO

1. FIFO IN PRACTICE

Scenario: *You are responsible for the stock of a school cafeteria. Today, a new supply of UHT milk arrives with an expiration date of September 15, 2025, while you still have packages with an expiration date of June 30, 2025.*

Questions:

A) How should you organise the warehouse to apply the FIFO system?

B) What might happen if you place the new stock in front of the old stock?

_____

_____

_____

_____

_____

_____

2: FEFO TO AVOID WASTE

Scenario: *You manage a restaurant pantry. You have several batches of yogurt with the following expiration dates*

Lot A: April 10, 2025
Lot B: March 25, 2025
Lot C: April 5, 2025

Questions:

A) Which lot should you use first by applying the FEFO principle?

B) If I used the FIFO system instead, could there be a risk of wastage? Why?

_____

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M5 – Activity 2 – Slide 28

GROUP ROLE PLAY or INDIVIDUAL REFLECTION:

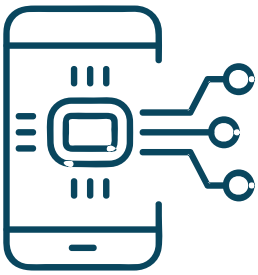
Goal: To understand how IoT helps to better manage groceries at home and in business.

Activity
All the chefs put food into the pantry. The IoT records what has been put into the pantry.
Subsequently the chefs take out food from the pantry to prepare recipes.
Only the IOT sees what has been taken out and knows about the inventory of the stock. The system has to inform the chefs when a product is almost gone. The partcipants need to discuss if and when to buy more of the products.

Roles:
1 person is the IOT which simulates the software managing the inventory
All the other participants are chefs.

Materials needed:
Sheets of paper with different foods written on them and a pantry (box or table). Every sheet of paper is a unit of food (kilograms, liters, etc).

Discussion: How could a connected refrigerator or app improve stock management?



Materials needed:
Sheets of paper with different foods written on them and a pantry (box or table). Every sheet of paper is a unit of food (kilograms, liters, etc).

MODULE 6

MODULE 6	Reorientation of Food Surplus
Overview	This module delves into the redirection of food surpluses and climate change, defining and exploring different strategies for the redistribution of these surpluses in the business environment. It shows various initiatives that have been implemented to reduce food waste, promoting innovative and sustainable solutions that encourage the reuse and redistribution of surpluses, in line with the principles of circular economy and sustainability.
Learning Objectives	You will gain a greater understanding of the definition, causes, and types of food surplus across the supply chain and explore innovative initiatives and strategies for its reduction and redistribution. You will analyse the links between food surplus and climate change, evaluate the role of technology, legislation, and community actions, and assess the challenges posed by strict food regulations. The module also encourages learners to critically reflect on sustainable solutions within a circular economy framework to minimise food waste and promote equity in food systems.
Topics Covered	▪ Definition of Food surplus, types and data ▪ Initiatives for the reduction of food surplus ▪ Climate-change and challenges ▪ Disadvantages of strict food standard regulations
Case Studies	**The ELIKA No Desperdicio programme,** also known as Zerodespilfarro, is an initiative promoted by ELIKA Fundazioa in collaboration with the Basque Government. **Rexcatering** is a comprehensive project focused on the recovery of surplus food from central kitchens and collective canteens. **Recircular** platform offers a space where different companies can register and upload their surplus for free. Using artificial intelligence, it analyses available resources and automatically identifies opportunities for reuse and recycling, notifying companies that could benefit from them. **Plan B** is an innovative initiative launched by the Federación Española de Bancos de Alimentos (FESBAL) to enhance the efficiency of food banks across Spain.
Suggested Exercises	Slide 11,12: Types of Food Surplus Slide 21, 33: Initiatives to reduce Food Surplus
Suggested Videos	Lanzamiento PLANB
Further Reading	European Commission – Date Marking Explanation Feedback Global – Awareness Campaigns Food Waste & Education FAO's "Do Good: Save Food!" Toolkit: Tailored for schools and youth groups. EPA's Food Too Good To Waste: Free curriculum and community templates. ec.europa.eu/

M6 – Activity 1 – Slides 11 & 12

QUESTIONS:

Q1. Which of the following is not a type of food surplus?

A. Agricultural Surplus
B. Processing Surplus
C. Educational Surplus
D. Hospitality and Food Service Surplus

Q2. What percentage of food waste in the EU was attributed to households in 2022?

A. 25%
B. 54%
C. 11%
D. 8%

Matching Exercise:

Match the food surplus type with its primary cause:

Surplus Type	Causes
A. Agricultural Surplus	1. Over-purchasing, poor label understanding
B. Processing Surplus	2. Cosmetic standards, overstocking
C. Hospitality Surplus	3. Inefficient production, forecast errors
D. Retail Surplus	4. Leftovers from restaurants and buffets
E. Household Surplus	5. Over-production, price drops

M6 – Activity 2 – Slides 21 & 33

What kind of initiative would you propose to avoid or reduce food surpluses throughout the food chain?

What initiative could realistically be implemented to reduce food surplus at the community or municipal level?

Do you believe that current EU food safety regulations strike the right balance between safety and waste reduction? Why or why not?

Describe how climate change could both increase and decrease food surplus depending on the region and infrastructure.

MODULE 7

MODULE 7	Optimising production processes
Overview	This module explores the concept of optimisation and its application in the food sector to prevent and manage waste. Implementing optimisation strategies is crucial for addressing waste at every stage Through a visually engaging approach, this module introduces the conceptual framework, reviews key concepts, and demonstrates how businesses can enhance their processes to improve efficiency in their food production processes
Learning Objectives	The module provides a general conceptual framework regarding what optimisation is – relevant concepts and important definitions such as the bottleneck concept or Waste Management Systems. One of the fundamental aspects of that learners will obtain is what is the optimisation process composed of –data collection, selecting a method, implementing and monitoring. Moreover, this module addresses the best strategies to achieve an efficient production in food-related businesses, according to the procurement, stock and production stages.
Topics Covered	▪ Concept and definition ▪ Optimisation Processes ▪ Strategies for Optimisation
Case Studies	BiaSol: This Irish company is focused on upcycling food waste into nutritious products. The key of their efficiency relies in their optimisation processes: Sourcing from local breweries and establishing long term relationships in procurement: Utilising climate-controlled storage and maximising space utilisation in storage and implementing a demand-driven approach in production Meade Farm Group. This is a great example of a business that has successfully implemented optimisation strategies to reduce waste. In procurement they have ensured to get support from FoodCloud's gleaning network to collect and distribute surplus. This surplus that is not fit for fresh sale, goes to alternative markets in the stock phase, while in production they have implemented strong recycle and reusing mechanisms – such as the starch extractor
Suggested Exercises	Slide 21– Waste streams, Slide 22 - Waste in Business, Slide 23 – Scenario-based exercise Slide 24 – Creating an Action Plan
Suggested Videos	Four Principles Lean Management – Get Lean in 90 seconds Optimising the heat treatment of particulate foods Implementing LOWINFOOD innovations: Software for optimization of bakeries production – from the Horizon project LOWINFOOD

M7 – Activity 1 – Slide 21

Food product waste streams

Think about a food product and reflect on the waste stream, according to the following prompts:

- Business process
- Types of waste
- Is it avoidable?
- Disposal/Reuse Method

Example

- Business process: **Curd Cutting**
- Types of Waste: **Whey loss, curd fines in whey**
- Is it avoidable? **Yes**
- Disposal/Reuse Method: **Use for animal feed**

Now try it yourself!

- Business process:
- Types of Waste:
- Is it avoidable?
- Disposal/Reuse Method:

- Business process:
- Types of Waste:
- Is it avoidable?
- Disposal/Reuse Method:

- Business process:
- Types of Waste:
- Is it avoidable?
- Disposal/Reuse Method:

M7 – Activity 2 – Slide 22

Choose the correct Answer

1. Where do most food waste inefficiencies occur?

- Marketing, customer service, and delivery
- Procurement, storage, and production
- Procurement, storage, and preparation

2. Which of the following is a common mistake in procurement?

- Buying before ordering
- Checking inventory before ordering
- Overordering due to poor forecasting

3. How does food preparation contribute to waste?

- Portion control
- Using all edible parts of ingredients
- Overproduction

NOTES:

M7 – Activity 3 – Slide 23

Scenario-based exercise:

‘‘A restaurant is experiencing high levels of food waste. The owner notices that the ingredients often go bad before they are consumed, and that many times they are overprepared, leading to the storage area frequently being disorganised.’

Where do you think the bottleneck is?
Choose the most likely and briefly explain why?

- Ordering too much food without forecasting demand
- Organising poorly, failing to track expiration dates
- Over-portioning in final dishes

M7 – Activity 4 – Slide 24

Create a simple **Action Plan** to reduce food waste and optimise production at your workplace, based on the concept of procurement, storage, and production, observed in the module.

- How can you ensure that you are procuring the right amount
- What changes can you make in the storage process?
- How can you optimise production?

Action Plan Steps:

MODULE 8

MODULE 8	Innovation & Technology
Overview	This module will analyse and explore different types of innovations that are applied in the food sector to optimise processes and minimise waste. It provides digital solutions designed for food waste avoidance, including artificial intelligence and smart technology. It also contains important information on the role of Biotechnology in food preservation.
Learning Objectives	The module introduces you to the transformative role of innovation and technology in the food sector, focusing on how digital tools, AI, automation, and biotechnology address global challenges like food waste, sustainability, and food security. It explores practical applications such as IoT-based monitoring, digital food redistribution platforms, blockchain for transparency, and biotech solutions for preservation.
Topics Covered	▪ Introduction to Innovation and Technology in the food sector ▪ Digital solutions for food waste reduction; Digital Platforms QR codes ▪ AI - Automation and intelligent technology in the food processing ▪ Biotechnology and food preservation
Case Studies	**Winnow**-smart tech automatically records what type of food is wasted. **Limetrack** adds value to food waste by capturing data about it. **Kitro** automates the collection of data on food waste in kitchens. **Oscillium** - biodegradable labels that indicate the condition of the food. **Olio** allows individuals and businesses to share food and other items they no longer need with people nearby. **Fooddiverse** is a platform that directly connects food companies with community organizations to redistribute surplus food of good quality. **ECOFEAST** is a digital platform developed to provide a sustainable solution to food waste. **Get wasted** gets surplus vegetables into soup for Antwerp schools.
Suggested Exercises	Slide 12: Innovation & Technology Slide 29: Digital Solutions Slide 38: AI or Blockchain solution Slide 52: Panel discussion on Genetically modified organisms Slide 54: Building a circular food tech ecosystem Slide 55: Personal innovation log
Suggested Videos/Podcasts	The Spoon Podcast - Podcast - Apple Podcasts(Topics on food tech) 20 Food Industry Technologies That Are At Another Level
Further Reading	How New Technology is Transforming the Food and Beverage Industry IBM Food Trust and Walmart: Ensuring Food Safety and Transparency Dynamic QR ; Smart Packaging Technologies for automating and optimizing food processing An Advanced Inventory Management System Powered by IoT and AI for Real-Time Tracking and Optimization How AI and IoT are Transforming the Food Industry? EATABLE ADVENTURES: Startups and innovations like blockchain in food traceability Is fermentation the secret weapon in a shifting food landscape?

M8 – ACTIVITY 1 – Slide 12

Group or Individual Research and Presentation

Task: In small groups, research one major global challenge (e.g., climate change, food security, resource depletion) and present how food sector innovations can help mitigate its impact.

Output: 5-minute presentation + 3-minute Q&A from peers.

Debate: "Traditional agriculture vs. Tech-enabled agriculture: Which is more sustainable in the long term?“

Notes:

M8 – ACTIVITY 2 – Slide 29

Group or Individual Research Task

Task: Each group selects one digital solution from the module (e.g., IoT, QR codes, or digital food redistribution platforms like Too Good To Go).

Deliverable: Create a poster or infographic explaining how it works, its impact, and suggest improvements.

Extension: Download and test one of the apps (e.g., OLIO, ResQ Club), then reflect on the experience in a short blog entry or video diary.

Notes:

M8 – ACTIVITY 3 – Slide 38

Scenario-Based Activity

Task: Imagine you are collaborating with a food tech startup, developing a new AI or blockchain solution for food processing.

Instructions:
- Define a problem/challenge that your Business experiences.
- Ideate on potential technological solutions.
- Highlight the benefits for sustainability and transparency.

Deliverable: 3-slide pitch deck

Notes:

M8 – ACTIVITY 4 – Slide 51

Role Play Activity

Task: Join a panel discussion where you and your peers assume roles (biotech scientist, consumer advocate, environmentalist, policymaker).

Topic: "*Should genetically modified organisms be used to prevent food waste?*"

Goal: Debate the ethical implications and present arguements from each perspective

Notes:

M8 – ACTIVITY 5 Slide 53

Reflection Activity:

Personal Innovation Log

Throughout the module ´Innovation and Technology´
What innovation impressed you most and why?

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One idea you would implement in your business or community to reduce food waste:

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How your views on food technology have evolved:

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MODULE 9

MODULE 9	Educating Employees & Customers
Overview	This module highlights the importance of education and awareness in food waste management and how to prepare individuals to understand and address the complex environmental, social, and economic challenges our world faces. Through visually engaging content, interactive materials and self-assessment mechanisms, this module provides interesting and valuable learning outcomes.
Learning Objectives	You will learn about the importance of education and awareness in business, related to circular economy, and the possibilities for raising awareness and changing behaviour that can be applied in life and business to ensure economic, social and environmentally sustainable mechanisms, that will bring long-term profits to humankind. Moreover, you will gain understanding of the different stages and methods of learning, acknowledging intergenerational learning.
Topics Covered	• Introduction to Education and Awareness in Business • Employee Training and Development Programmes • Intergenerational learning and behavioural change • Methods and stages of learning
Case Studies	Practical circular economy playbook for ambitious companies - Circular Economy business models for SMEs in the manufacturing industries provided by Sitra, Technology Industries of Finland and Accenture Strategy. Circular Economy Competence Badge provides a ready-made, national model for identifying and recognizing expert-level circular economy skills. Raising Consumer Awareness – several links as an example how to learn Methods of learning – several links as an example how to learn
Suggested Exercises	Slide 8-9 - Learn to understand relevant circular economy key definitions. Slide 13-14 - Learn to know implemented results/actions in your region. Slide 24-25 - Learn to know development programmes from your region. Slide 33-34 - Learn to know implemented actions/successful behavioral change programmes in your region. Slide 38-43 - Learn to know educational opportunities/mobile apps/digital tools developed for supporting waste management/behavioural change techniques/awareness campaigns in your region.
Suggested Videos	Learning to change the world! What is social sustainability - Regulatory Compliance Intergenerational Learning in the 21st Century: Importance, Role, Features, and Types Barriers to implementation of circular economy strategies within plastic manufacturing industries Systems thinking and behaviour change in a circular economy Using community based social marketing to enable behaviour change
Further Reading	Circular Economy Alliance. Empowering Communities for Sustainable Change: The Role of Circular Economy. 2023. Tiippana-Usvasalo M et al. The role of education in promoting circular economy. International Journal of Sustainable Engineering. 2023. Turku AMK. Methods for Circular Economy Teaching – Method Guide and Tool Kit. 2019.

M9 – ACTIVITIES 1-4

SLIDES 8 & 9: Find and study other relevant terms relevant to circular economy key definitions.

SLIDE 14: List examples of implemented results/actions related to circular economy/waste management in your region.

SLIDES 24 & 25: List examples of development programmes related to circular economy / waste management from your region.

SLIDES 33 & 34: List examples of successful behavioural change programmes related to circular economy/waste management in your region.

M9 – ACTIVITIES 5-9

SLIDES 38 & 39: List examples of educational opportunities related to circular economy/waste management in your region.

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SLIDE 40: List examples of mobile apps/digital tools developed for supporting circular economy/waste management in your region.

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SLIDE 41: List examples of behavioural change techniques related to circular economy / waste management in your region.

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SLIDE 42: List examples of awareness campaigns related to circular economy/waste management in your region.

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SLIDE 43: List examples of Educational Activities or experiences related to circular economy / waste management in your region.

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MODULE 10

MODULE 10	Marketing and Storytelling
Overview	This module examines the role of storytelling in marketing, highlighting its power to build strong brand identities and enhance customer engagement. By introducing storytelling as a strategic tool, we demonstrate how compelling narratives attract new consumers, boost profitability, and establish a foundation for consistent and predictable sales. Additionally, this module delves into brand development, offering practical tools to strengthen your business's branding. Finally, all the concepts explored will be applied to the issue of food waste, showcasing marketing strategies that amplify your message, supported by real-world examples.
Learning Objectives	This module will provide you with impactful learning outcomes as it delves into key concepts regarding marketing and storytelling, specifically tailored to the food waste topic. You will gain a greater comprehension of what storytelling means and what the crucial elements for delivering an impactful story are. Then, these elements will be transferred into marketing and will explain how can storytelling be a perfect marketing strategy. You will also gain a better understanding of the best marketing strategies for exploiting your food waste commitment in your businesses and how can that be turned into a successful marketing tool. Lastly, you will be provided with specific branding tools, with their advantages and disadvantages explained.
Topics Covered	▪ Introduction to storytelling ▪ Integrating storytelling in marketing ▪ Brand development ▪ Food Waste Marketing approaches
Case Studies	FoodCloud FoodCloud is an example on how efficient is to implement the partnership marketing approach, as they integrate with retailers and social enterprises Orange Fiber this company is focusing on marketing their innovative approach and products, representing this another strategy to enhance branding promotion
Suggested Exercises	Slide 9 – Creating a Story using the elements suggested Slide 23 – Creating a brand using the elements discussed
Suggested Videos	Leaf and Root Farm In this docu-video, Fergal Anderson, the owner of an organic-certified farm tell us his story and how he started his business from a narrative point of view. This video showcase the different storytelling approaches used to transmit Fergal's added value in the farm.
Further Reading	

M10 – Activity 1 – Slide 9

Create your own story

Following the provided material in slides 4-8, try to create a small story that combines all the elements mentioned

Be creative!

M10 – Create your own story

M10 – Activity 2 – Slide 23

Create your own brand

Following the provided material (slides 17-22), try to create a brand logo and motto that represent your business/organisation, using all the elements mentioned
Be creative!

Motto:_____
_____
_____
_____

Logo: Design/sketch/Paste your logo here!

MODULE 11

MODULE 11	Compliance and Certification
Overview	Module 3 examines the regulatory and certification landscape shaping food waste management and the circular economy. It explores EU and national policies, key certification schemes, and compliance requirements relevant to the agri-food sector.
Learning Objectives	By the end of this module, learners will gain practical knowledge of audit preparation and reporting obligations, enabling you to meet legal standards while fostering sustainability and business credibility.
Topics Covered	▪ European Policies & Regulations ▪ National Policies & Targets ▪ Certification & Compliance Standards ▪ Audit & Compliance Planning ▪ Best Practices & Case Studies
Case Studies	Orbisk and its ability to automate waste monitoring using image recognition & smart weighing, helping reduce food waste by up to 50% Spanish Energy group Calor Renove, which specialises in renewable and ecological energy solutions
Suggested Exercises	Slide 30 – A Scenario -Identify the main issue(s) related to food waste
Suggested Videos / Podcasts	The Business End of Farm to Fork: How can companies help deliver truly sustainable food systems? Waste Monitoring - Orbisk - Hyatt Regency Amsterdam
Further Reading	EU environmental policies and regulations to tackle food waste Waste Framework Directive EU Circular Economy Action Plan European Green Deal, EU Platform on Food Losses and Food Waste (2016) Council Regulation (EC) No 852/2004 on Food Hygiene National Food Waste Prevention Roadmap 2023-2025: of Ireland Finnish Waste Act Amendment (2011/646): Introduced Spanish Strategy More Food, Less Waste Italian Gadda Law (Law No. 166/2016): EU Organic Certification HACCP ISO 22000 B Corp Certification ISO 14001 EMAS

M11- ACTIVITY 1 – Slide 30

Scenario Based Activity

1. **Read the scenario carefully and identify the main issue(s) related to food waste.**

Scenario:

A supermarket chain in Spain regularly discards fruit and vegetables that are past their "best before" date but still safe to eat. They are looking for ways to repurpose or sell them instead of discarding them.

2. **Choose the most relevant EU policy:**

- ❑ Farm to Fork Strategy (2020)
- ❑ Waste Framework Directive (2008/98/EC)
- ❑ Council Regulation (EC) No 852/2004 on Food Hygiene

MODULE 12

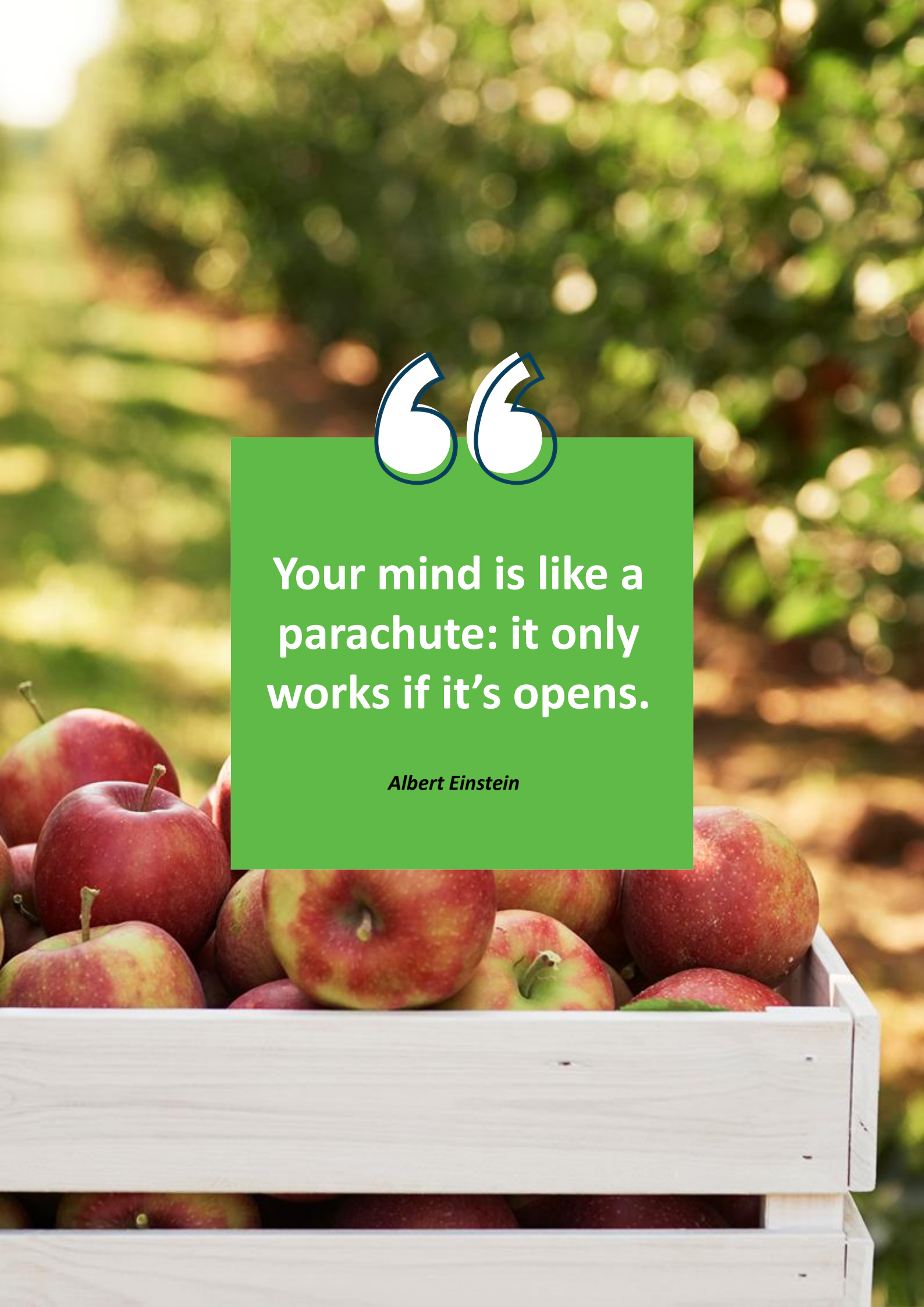
MODULE 12	Evaluation & Impact
Overview	The module highlights the importance of evaluation and impact assessments in sustainable businesses. By systematically assessing waste streams, we see the positive impact on environmental, economic, and social outcomes.
Learning Objectives	The module provides you with a general overview of various types of evaluation and impact assessment methods and key performance indicators – relevant examples, case studies and important definitions related to the circular economy and food waste management. One of the fundamental learnings you will obtain is how to evaluate environmental and socio-economic impacts of action in business.
Topics Covered	• Introduction to Evaluation and Impact Assessment • Types of evaluation - formative, summative, process, outcome, impact • Setting Objectives & Key Performance Indicators KPIs • Data Collection Methods for Evaluation • Evaluating Economic Impact
Case Studies	Corporate responsibility tools by Finnish Business & Society – FIBS is the largest corporate responsibility network in the Nordic countries acceleraing responsibility changemakers towards more sustainable world. International Association of Impact Assessment IAIA is the leading global network on best practice in the use of impact assessment for informed decision making regarding policies, programmes, plans and projects. Tools for measuring and developing a company's circular economy performance – SITRA introduces three proven tools for measuring and developing a company's circular economy performance. Digital product passports are a way of bringing together data on product sustainability, raw materials, materials and safety. Sitra introduces a playbook for digital product passports.
Suggested Exercises	Slide 8 - Update your knowledge about the latest publications of International Association of Impact Assessment. Slide 18 - Learn to find required statistics about your country. Slide 22-23 – Determining if methods are quantitative and/or qualitative and finding research articles related to the method.
Suggested Videos	What is impact assessment. What is formative assessment. - Summative assessment. - Outcome evaluation. What is impact evaluation. - Brief Introduction to Developmental Evaluation. - Participatory Evaluation Overview of the Product Environmental Footprint (PEF) method - What is PEF? - What is Life Cycle Assessment? Money Circulating Through An Economy: Economic Impact Analysis - Direct, Indirect, & Induced Effects - What is the Point of Economic Impact Analysis? Investment Analysis Tools - Input-Output Analysis (IOA) - Scenario Analysis. What is a Cost Benefit Analysis. - What is Life Cycle Assessment. - Stakeholder Engagement in 5 Slides
Further Reading	EU. Circular economy: indicators, tools and methods. EU. Environmental Footprint Methods - Calculating the environmental impact of products and service.

M12 – ACTIVITIES 1-3

SLIDE 8: Select an **interesting publication** from the website of International Association of Impact Assessment and write **a summary** about it.

SLIDE 18: Study **interesting statistics** about your country to be viewed on the European Topic Centre on Circular economy and resource use -platform.

SLIDE 22: Please find **research articles** related to circular economy /waste management and identify if **quantitative and/or qualitative methods are used.**


Your mind is like a parachute: it only works if it’s opens.
Albert Einstein

06 | SUGGESTED TIME MANAGEMENT STRUCTURE

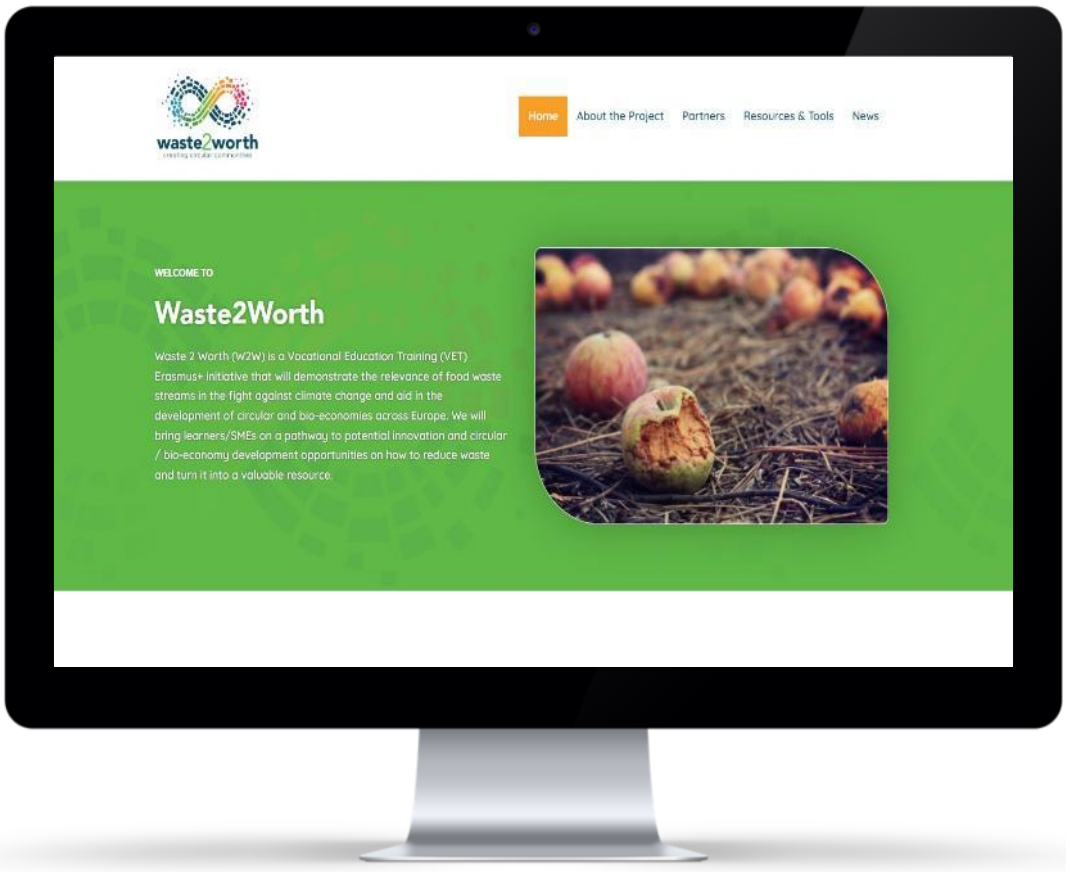
These WASTE2WORTH OERs have been created with an estimated duration of **25-30 hours**

You are free to do it in your own way, however, we offer you a suggestion:

WEEK	TRAINING CONTENT	TIME ALLOCATION per Day
1	Module 1 Module 2	Mon: 45 mins, Tues: 45mins Wed: 45 mins, Thurs: 45mins, Fri: 30mins
2	Module 3 Module 4	Mon: 45 mins, Tues: 45mins Wed: 45 mins, Thurs: 45mins, Fri: 30mins
3	Module 5 Module 6	Mon: 45 mins, Tues: 45mins Wed: 45 mins, Thurs: 45mins
4	Module 7 Module 8	Mon: 45 mins, Tues: 45mins Wed: 45 mins, Thurs: 45mins, Fri: 30mins
5	Module 9 Module 10	Mon: 45 mins, Tues: 45mins, Wed: 30 mins Thurs: 45mins, Fri: 45mins
6	Module 11 Module 12	Mon: 45 mins, Tues: 45mins Wed: 45 mins, Thurs: 45mins, Fri: recap

07 | Useful Links & Resources

Project Website	https://waste2worth.eu/
Exploration Guide and Waste Stream Maps	https://waste2worth.eu/sme-food-waste-community-exploration-guide/
Good Practice Compendium	https://waste2worth.eu/good-practice-compendium/
Learning Resources	https://waste2worth.eu/modules/
Project Facebook Page	https://www.facebook.com/profile.php?id=61558258990071&sk=about
Project Instagram account	https://www.instagram.com/waste_2_worth/
Project LinkedIn Page	https://www.linkedin.com/company/waste-two-worth/



"Never doubt that a small group of Thoughtful, Committed Citizens can change the world…indeed it is the only thing that ever has!"

-Margaret Mead

waste2worth

creating circular communities

Follow Our Journey

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Co-funded by
the European Union