



ZWITCH – Zero Waste in Training of  
Catering and Hotel



Co-funded by  
the European Union

# ZWITCH - ZERO WASTE IN TRAINING OF CATERING AND HOTEL

## Result 2 – Learning package for «Zero-Waste» curricular creation

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*Project no. 2021-1-FR01-KA220-VET-000024799*

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## Project details

|                          |  |
|--------------------------|--|
| <b>Project title:</b>    | ZWITCH – Zero Waste in Training of Catering and Hotel                    |
| <b>Agreement number:</b> | 2021-1-FR01-KA220-VET-000024799  |
| <b>Programme:</b>        | Erasmus+   |
| <b>Key Action 2:</b>     | Cooperation for Innovation   |
| <b>Field:</b>            | Strategic partnerships in the field of Vocational Education and Training |
| <b>Project Duration:</b> | 24 months  |

## Project partners

|                           |           |
|---------------------------|-----------|
| <b>OSENGO (Applicant)</b> | France    |
| <b>Euroform RFS</b>       | Italy     |
| <b>EU-Trade</b>           | Lithuania |
| <b>Pap Corp.</b>          | Greece    |
| <b>ITPIO</b>              | Bulgaria  |

## 1. ZWITCH Project

Waste reduction and zero-waste have become unavoidable topics nowadays as part of our awareness of the importance of ecological issues for the future of our planet. There are many existing vocational trainings in the respective partner's countries in the hotel and catering sector, although not specifically taking into account the concept of Zero-waste or addressing the issue. These trainings mostly rely on conventional Models or are targeted to individual basis at home, and should be upgraded with zero-waste consciences, how to reduce or avoid waste.

The aim is to bring zero-waste education to schools, and VET training centres in the catering and hospitality sector. Several needs will be addressed: 1 – Identify the methodology & skills needed to teach «Zero-Waste» in VET trainings; 2 – Professional development of VET teachers, trainers and mentors in training creation and work-based settings, 3 – Develop key competences of learners, 4 – General needs – a digital transition of VETs – Raise awareness of the «Zero-Waste» management in catering and hotel business.

The partnership will propose a new curriculum, based on concrete actions to take for zero-waste in the hotel and catering sector. It will be a collection of methods about zero-waste actions in hotels and catering, assembled in a Guide. These methods/examples will be elaborated from examples collected in each partner country contributing to a bottom-up learning experience.

## 2. Rationale and Purpose of the Learning package

This Learning package will be based on the established learning objectives and curricular activities, gathered and/or created teaching materials for conducting the activities and determined assessment methods.

The purpose of the Learning package is to let VET teachers/trainers acquire curricula creation regarding zero waste in hotels and catering.

The Learning package will support and improve the development of global waste reduction competences of students in VET schools and of the trainees in VET training centres.

The Learning package contains 6 sections:

- Section 1 – Methodology
- Section 2 – Learning objectives
- Section 3 – Curricular activities
- Section 4 – Teaching materials to conduct the activities
- Section 5 – Assessment methods
- Section 6 – Study plan

### 3. Methodology

The Methodology of Learning package for «Zero-Waste» curricular creation applies a competence-based teaching methodology approach, requiring students to tackle real ecological problems as protagonists, using all the cognitive, affective, cultural and relational resources at their disposal.

Thanks to this approach, students are not only brought into contact with reality and learn about real problems but they are encouraged to make their contributions to their solutions.

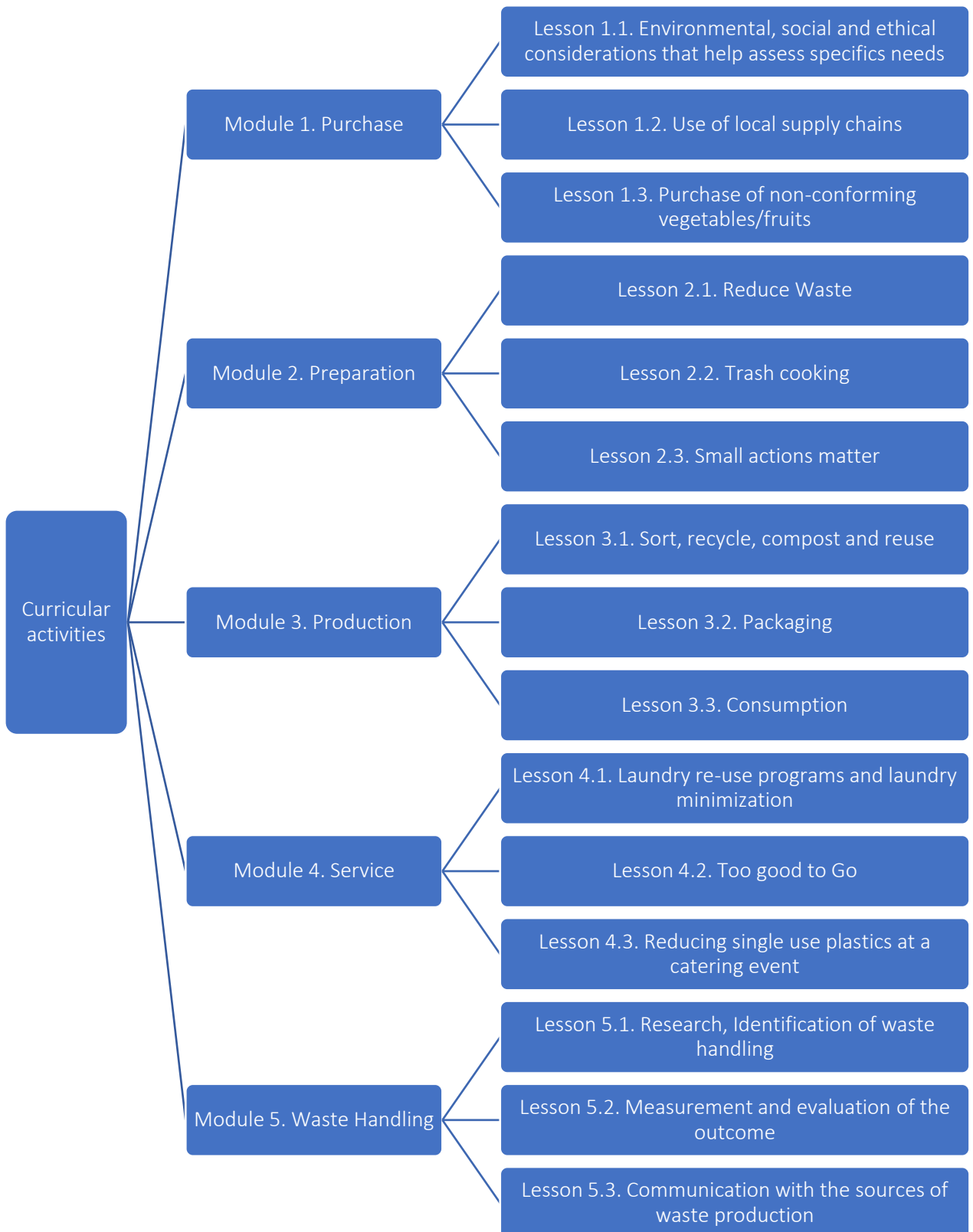
The methodological approach is focused on:

- *Research-oriented*: experiences arise from the detection of problems and the implemented project is addressed to their solution;
- *Curricular*: the activities are integrated and linked to the contents of the school/VET training centres' curriculum;
- *Competency-focused*: students test their knowledge and skills, and develop their competence by measuring themselves against authentic problems;
- *Interdisciplinary*: the problems are generally characterized by complexity and, for their solution, it is necessary to use more subjects, which interact and integrate;
- *Collaborative*: the design and implementation of Zero-waste activities involve the whole class group, which becomes a learning community.
- *Participatory*: this is not a welfare practice, but a collaboration with the participants in the activities, who are involved on an equal level. They do not simply receive help, but are themselves a resource for student growth;
- *Empowering*: the methodology allows for meaningful experiences of a Zero-waste mindset where the school is involved with social-ecological responsibility;
- *Transformative*: social-ecological responsibility means a commitment to both personal and social improvement as it is something that improves the reality of community life.

In order to guarantee the achievement of long-term results through the implementation of the methodology, it is necessary to support the development of a network of relationships, internal and external in the school/VET training centres.



The Methodology for «Zero-Waste» curricular creation is described in the figure:



The curricular activities are divided in 5 modules.

Each module leads to the achievement of different learning outcomes – knowledge, skills and competences.

Each module includes the three main learning objectives (listed in 4.1) as well as specific objective(s) (listed in 4.2).

Each module includes 3 lessons. Each lesson can be trained independently within 45 minutes in a VET school/training center, as well as be part of a standard school catering or hospitality lesson. The lessons could be provide online as well.

Each module will has Technical sheets, giving precise indications of how to do and how to implement zero-waste in catering and hotels.

### **IMPORTANT NOTE!**

The modules can be separated into an independent training program. This training program could be offered as a training course in VET centres. In VET schools, the training program may be offered as extracurricular activities.

## 4. Learning objectives:

The curricular activities have main and specific objectives.

### 4.1. Main learning objectives

- «Zero-Waste» conscience in hotel and catering
- Preparation for ecological change and change of habits
- Bottom-up learning from the field through examples

### 4.2. Specific learning objectives

The specific learning objectives are individual for each module.

|                          |   |
|--------------------------|---|
| Module 1. Purchase       | <ol style="list-style-type: none"><li>1. Realize for themselves and disseminate knowledge for the modern society of the 21<sup>st</sup> century</li><li>2. Be a proactive actor of change</li><li>3. Knowledge on the specific local chains around them</li><li>4. Knowledge on the use of non-conforming looking vegetables</li></ol>  |
| Module 2. Preparation    | <ol style="list-style-type: none"><li>1. Ability to analyse and take eco-responsible decisions in response.</li><li>2. Optimising each ingredient and developing creative skills.</li><li>3. Engage stakeholders in zero waste in hotels and restaurants and encourage them to be aware in their daily lives.</li></ol>   |
| Module 3. Production     | <ol style="list-style-type: none"><li>1. Develop an awareness of eco-responsible behavior in hotel and catering services</li><li>2. Understanding of the importance of eco practices for the quality of hotel and catering services</li><li>3. Experience a “real life” experience in the hospitality industry</li><li>4. Attraction of guests involvement in “zero waste” in hotel and catering services</li></ol> |
| Module 4. Service        | <ol style="list-style-type: none"><li>1. Develop an awareness of eco-responsible behavior in hotel and catering services</li><li>2. Understanding of the importance of eco practices for the quality of hotel and catering services</li><li>3. Experience a “real life” experience in the hospitality industry</li><li>4. Attraction of guests involvement in “zero waste” in hotel and catering services</li></ol> |
| Module 5. Waste handling | <ol style="list-style-type: none"><li>1. Bottom-up learning from the field through examples.</li></ol>  |

|  |   |
|--|---|
|  | <ol style="list-style-type: none"><li>2. Presentation of tools that will ease the waste handling process.</li><li>3. Identification of the types of waste.</li><li>4. Elaborate means to monitor the waste traffic.</li><li>5. Establish a communication with all sources of waste trafficking.</li></ol> |
|--|---|

Each curricular activity includes at least one main module's learning objective and the specific module's learning objective(s).

Each module includes all three main learning objective and its specific learning objective(s).

## 5. Curricular activities

This includes examples of curricular activities that will enable students/learners to acquire zero waste knowledge and skills.

| Curricular activities           |  |
|---------------------------------|--|
| <b>Module 1. Purchase</b>       | Lesson 1.1. Environmental, social and ethical considerations that help assess specific needs |
|                                 | Lesson 1.2. Use of local supply chains   |
|                                 | Lesson 1.3. Purchase of non-conforming vegetables/fruits                                     |
| <b>Module 2. Preparation</b>    | Lesson 2.1. Reduce Waste   |
|                                 | Lesson 2.2. Trash cooking  |
|                                 | Lesson 2.3. Small actions matter   |
| <b>Module 3. Production</b>     | Lesson 3.1. Sort, recycle, compost and reuse   |
|                                 | Lesson 3.2. Packaging  |
|                                 | Lesson 3.3. Consumption  |
| <b>Module 4. Service</b>        | Lesson 4.1. Laundry re-use programs and laundry minimization                                 |
|                                 | Lesson 4.2. Too good to Go   |
|                                 | Lesson 4.3. Reducing single use plastics at a catering event                                 |
| <b>Module 5. Waste handling</b> | Lesson 5.1. Research, Identification of waste handling                                       |
|                                 | Lesson 5.2. Measurement and evaluation of the outcome  |
|                                 | Lesson 5.3. Communication with the sources of waste production                               |

### 5.1. Example of Methodology for Creation of new curricular activities for integration into the standard education process.

In this regard, it is important to note that students/trainees must actively participate in all stages of development of the curricular activity.

Creation of new curricular activities are usually set up in **5 phases**, as shown in the following table.

| Phase                     | Description  | Action/outcome   |
|---------------------------|--|--|
| A. Motivation             | Sharing the project objectives among the involved actors.<br>Sharing the educational value of the proposal and involvement of students.<br>Raising students' awareness of their active role in each phase of the activity. | Minutes, agreements.<br>Meetings with stakeholders.<br>Awareness meetings with students.   |
| B. Preparation            | The teacher/trainer and the involved class investigates the theme/existing need and identifies the available resources (economic, human, etc.) for the implementation of the project.                                      | Summary document.  |
| C. Design and planning    | The teacher/trainer plans and designs specific actions as part of the curricular activity based on a careful assessment of risks, limitations, opportunities and strategies.   | Curricular activity draft that will answer the following questions: What to do? What is the purpose? What are the learning goals? Together with whom? Where? Who does what? What is learned (content)? When (time)? How much (cost)? |
| D. Implementation         | The VET school/training centers implements the planned curricular activity.  | Implementation of the planned curricular activity: development of the learning contents.   |
| E. Closing and assessment | The VET school/training centers reflect on the lessons learned, and the quality of the curricular activity.  | Evaluation tools: self-assessment questionnaire, evaluation grid, etc.   |

### 5.2. Template for creation of curricular activity (annex 1).

## 6. Teaching materials to conduct the activities

Teaching materials that teachers/trainers can use in developing and teaching the curricular activities include:

- Guide of «Zero-Waste» with specific examples, Result 1 from the ZWITCH project.
- A collection of open educational results for implementing the ZWITCH Model on a website for downloading/uploading training and didactics tools by teachers/trainers and parents and other project stakeholders (upon registration).
- Technical sheets, part of each module, giving precise indications of how to do and how to implement zero-waste in catering and hotels.
- The lessons include training material: case studies, PPT presentations, videos, quizzes, exercises and specific examples. The linked examples can be found on the platform so learners can visualise the examples. This will lead to a more interactive course as learners may read as many examples as they want on the platform.
- A webography given for further research in the different countries will allow students to step out of their comfort zone and search themselves on these EU countries' zero-waste websites for additional information. This will allow them to gain transversal skills and language competences as they need to be more autonomous and chose for themselves.

## 7. Assessment methods

Assessment of school activities is extremely important part of the learning process. It is related to the measurement and reporting of the results, achievements and effectiveness of these activities, the degree of their usefulness, the quality achieved in fulfilment of the set goals.

The assessment focuses on:

- The quality of knowledge acquisition, formed skills, habits and their alignment with curriculum goals;
- The degree of formation of learning skills, professional habits;
- The degree of development of life skills - ability to observe, analyse, compare, classify, summarize, think logically, solve creative tasks, etc.

Assessment methods:

### **1. Tests**

- 1.1. with true-false questions
- 1.2. with multiple choice questions
- 1.4. with matching (connecting) questions
- 1.5. with follow-up questions
- 1.6. with short answer questions
- 1.7. with fill-in-the-blank texts.

### **2. Written assignments (*e-learning with trainer/teacher support*)**

- 2.1. Essay
  - 2.1.1. Descriptive essay
  - 2.1.2. Expository essay
  - 2.1.3. Causality analysis essay
  - 2.1.4. compare/contrast essay
  - 2.1.5. Meaning definition essay
  - 2.1.6. Classification essay
  - 2.1.7. Evaluation essay
  - 2.1.8. Argumentative (academic)
- 2.2. Report.

### **3. Practical tasks (demonstration of skills)**



- 3.1. Case study
- 3.2. Project
- 3.3. Scientific research tasks
- 3.4. Presentation
- 3.5. Engage in discussion/discussion
- 3.6. Modeling (making a model)
- 3.9. Roleplay.

#### **4. Portfolio.**

The portfolio may contain drawings, photographs, video and audio, written work, tests, self-analysis and self-reflection data of the students/trainees. The portfolio serves as evidence of student/trainee`s development. The collection of the materials is done by predetermined criteria.

## 8. Study plan

| N  | Learning unit            | Learning activity   | Grade/<br>VET group  | Form of study<br><i>e-learning – E</i><br><i>self-learning – S</i> | hours |   |                |   |
|----|--------------------------|---|--|--|-------|---|----------------|---|
|    |                          |   |  |  | E     | S |                |   |
| 1. | Module 1.<br>Purchase    | Lesson 1.1.<br>Environmental, social and ethical considerations that help assess specific needs | <ul style="list-style-type: none"> <li>- Students – 11 – 12 grades in VET School</li> <li>- Students – 9-12 grades in VET School with dual form</li> <li>- Trainees in VET centers</li> <li>- Trainees (new employees, reassigned employees, workers) included in WBL</li> </ul> | E+ S exercises   | 1     | 1 |                |   |
| 2. |                          | Lesson 1.2. Use of local supply chains  |  |  |       |   | E+ S exercises | 1 |
| 3. |                          | Lesson 1.3. Purchase of non-conforming vegetables/fruits  |  |  |       |   | E+ S exercises | 1 |
| 4. | Module 2.<br>Preparation | Lesson 2.1. Reduce Waste  | <ul style="list-style-type: none"> <li>- Students – 11 – 12 grades in VET School</li> <li>- Students – 9-12 grades in VET School with dual form</li> <li>- Trainees in VET centers</li> <li>- Trainees (new employees, reassigned employees, workers) included in WBL</li> </ul> | E+ S exercises   | 1     | 1 |                |   |
| 5. |                          | Lesson 2.2. Trash cooking   |  |  |       |   | E+ S exercises | 1 |
| 6. |                          | Lesson 2.3. Small actions matter  |  |  |       |   | E+ S exercises | 1 |
| 7. | Module 3.<br>Production  | Lesson 3.1. Sort, recycle, compost and reuse  | <ul style="list-style-type: none"> <li>- Students – 11 – 12 grades in VET School</li> <li>- Students – 9-12 grades in VET School with dual form</li> <li>- Trainees in VET centers</li> <li>- Trainees (new employees, reassigned employees, workers) included in WBL</li> </ul> | E+ S exercises   | 1     | 1 |                |   |
| 8. |                          | Lesson 3.2. Packaging   |  |  |       |   | E+ S exercises | 1 |
| 9. |                          | Lesson 3.3. Consumption   |  |  |       |   | E+ S exercises | 1 |

|                                 |                             |  |  |                |           |          |
|---------------------------------|-----------------------------|--|--|----------------|-----------|----------|
| 10.                             | Module 4.<br>Service        | Lesson 4.1. Laundry re-use programs and laundry minimization   | <ul style="list-style-type: none"> <li>- Students – 11 – 12 grades in VET School</li> <li>- Students – 9-12 grades in VET School with dual form</li> <li>- Trainees in VET centers</li> <li>- Trainees (new employees, reassigned employees, workers) included in WBL</li> </ul> | E+ S exercises | 1         | 1        |
| 11.                             |                             | Lesson 4.2. Too good to Go                                     |  | E+ S exercises | 1         |          |
| 12.                             |                             | Lesson 4.3. Reducing single use plastics at a catering event   |  | E+ S exercises | 1         |          |
| 13.                             | Module 5.<br>Waste handling | Lesson 5.1. Research, Identification of waste handling         | <ul style="list-style-type: none"> <li>- Students – 11 – 12 grades in VET School</li> <li>- Students – 9-12 grades in VET School with dual form</li> <li>- Trainees in VET centers</li> <li>- Trainees (new employees, reassigned employees, workers) included in WBL</li> </ul> | E+ S exercises | 1         | 1        |
| 14.                             |                             | Lesson 5.2. Measurement and evaluation of the outcome          |  | E+ S exercises | 1         |          |
| 15.                             |                             | Lesson 5.3. Communication with the sources of waste production |  | E+ S exercises | 1         |          |
|                                 |                             |  |  | <b>Total:</b>  | <b>15</b> | <b>5</b> |
| <b>Total for the programme:</b> |                             |  |  |                | <b>20</b> |          |

## 9. Created curricular activities

### 9.1. Module 1. Purchase

|  |  |
|--|--|
| <b>E-learning resource (H5P)</b>             | Course presentation  |
| <b>Aim of the module</b>                     | This module encourages you to adopt a zero waste policy in regard to the act of purchasing.  |
| <b>Key points of the module</b>              | Lesson 1.1. Environmental social and ethical considerations that help assess specific needs<br>Lesson 1.2. Use of local supply chains<br>Lesson 1.3. Purchase of non-conforming vegetables/fruits  |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience in hotel and catering</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom up learning from the field through examples</li> </ul>  |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>5. Realize for themselves and disseminate knowledge for the modern society of the 21<sup>st</sup> century</li> <li>6. Be a proactive actor of change</li> <li>7. Knowledge on the specific local chains around them</li> <li>8. Knowledge on the use of non-conforming looking vegetables</li> </ol>  |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>- understanding the social and economic opportunities</li> <li>- awareness of ethical principles</li> <li>- knowledge of diversity</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>- critical thinking</li> <li>- decision-making</li> <li>- mobilize resources</li> <li>- strategic thinking and problem solving</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>- sense of initiative</li> <li>- curiosity</li> <li>- take responsibility for the environment</li> <li>- pro-activity</li> <li>- support sustainable</li> </ul> |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilingualism</li> <li><input type="checkbox"/> Numerical, scientific and engineering skills</li> <li><input type="checkbox"/> Digital and technology-based competences</li> <li><input checked="" type="checkbox"/> Interpersonal skills and the ability to adopt new competences</li> <li><input checked="" type="checkbox"/> Active citizenship</li> </ul>   |

|                         |  |
|-------------------------|--|
|                         | <input type="checkbox"/> Entrepreneurship<br><input type="checkbox"/> Cultural awareness and expression<br><input checked="" type="checkbox"/> Green skills  |
| <b>Grade/VET group</b>  | <ul style="list-style-type: none"> <li>- Students – 11 – 12 grades in VET School</li> <li>- Students – 9-12 grades in VET School with dual form</li> <li>- Trainees in VET centers</li> <li>- Trainees (new employees, reassigned employees, workers) included in WBL</li> </ul> |
| <b>Technical sheets</b> | <ul style="list-style-type: none"> <li>• Buying at 0 km</li> <li>• AUPARAGER, responsible food</li> <li>• Green purchasing decisions</li> </ul>  |

## Lesson 1. Environmental, social and ethical considerations that help assess specific needs

### 1.1. Aim, Learning objectives and outcomes

|                                  |   |
|----------------------------------|---|
| <b>E-learning resource (H5P)</b> | Interactive Book  |
| <b>Aim of the lesson</b>         | <p>The objective is to raise awareness that the world's resources are running out and that actions in favor of zero waste can help maintain a better balance with nature. A conscious choice at the time of purchase allows to limit the creation of waste afterwards.</p> <p>Specific ways to meet the needs of 21st century man will be explored. The social implications of resource scarcity will also be discussed, as they are already palpable when friction appears between population groups.</p>  |
| <b>Key points of the lesson</b>  | <ol style="list-style-type: none"> <li>1. The specific needs that the student have in private and in their work life and that connection to zero waste.</li> <li>2. Assessing the amount of things, the student need to purchase so to meet their particular needs</li> <li>3. Current standpoint on zero waste</li> <li>4. Questioning of the “function” of zero waste from an environmental, social and ethical standpoint.</li> <li>5. Do they think they can apply zero waste to the work place in hotel or catering and is there a need to do so?</li> </ol> |
| <b>Main Learning objectives</b>  | <p>Main LO: Awareness of Zero Waste Impact in a large manner</p> <ol style="list-style-type: none"> <li>1. Awareness of the state of the world</li> <li>2. Awareness of the impact zero waste can have</li> <li>3. Knowledge about social problems created by wastefulness</li> </ol>   |

|  |  |
|--|--|
| <b>Specific learning objective(s)</b>        | <ul style="list-style-type: none"> <li>• Able to state current environmental issues</li> <li>• Link these issues to the impact of zero waste actions</li> <li>• Know of social implications on zero waste issues</li> <li>• Have basic ethical background knowledge</li> <li>• Know how to convey information on problems</li> </ul>   |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>• Zero waste</li> <li>• Environmental gestures</li> <li>• buy responsibly</li> <li>• understanding the social and economic opportunities</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>• ability to identify situations</li> <li>• make financial decisions</li> <li>• critical and constructive reflection</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>• sense of initiative</li> <li>• curiosity</li> <li>• take responsibility for the environment</li> </ul>  |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilinguism</li> <li><input type="checkbox"/> Numerical, scientific and engineering skills</li> <li><input type="checkbox"/> Digital and technology-based competences</li> <li><input checked="" type="checkbox"/> Interpersonal skills and the ability to adopt new competences</li> <li><input checked="" type="checkbox"/> Active citizenship</li> <li><input type="checkbox"/> Entrepreneurship</li> <li><input checked="" type="checkbox"/> Cultural awareness and expression</li> <li><input checked="" type="checkbox"/> Green skills</li> </ul> |
| <b>Subjects involved</b>                     | <ul style="list-style-type: none"> <li>• Citizenship</li> <li>• Management in the hospitality industry</li> <li>• Ethics</li> <li>• Biology</li> </ul>   |
| <b>Methodology</b>                           | <p>The training will be online and distance learning.</p> <p>First, introduce the topic by emphasizing the knowledge to be developed, then use the illustrations provided to support your points. Students then work on their own, illustrating the course with concrete examples.</p> <p>Towards the end of the session, the student should take 5 minutes to prepare a summary of the knowledge they have just seen that they can then present to their friends and family, so that those around them are</p>  |

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|  | <p>made aware of the issues of zero waste amidst environmental, social and ethical considerations.</p> <p>Tools: The educational content will be delivered digitally with the support of innovative online tools.</p> |
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## 1.2. Training delivery guidelines

|                                  |  |
|----------------------------------|--|
| <b>Theory of the lesson</b>      | Environmental, social and ethical considerations that help assess specific needs   |
| <b>E-learning resource (H5P)</b> | <b>Interactive Book</b>  |
| <b>Introduction</b>              | <p>The planet's resources are depleting and zero waste actions can help maintain a better balance with nature. Conscious choices at the time of purchase can limit the creation of waste later on.</p> <p>The first step is to understand the social implications of resource scarcity, as tensions are already palpable and friction is emerging between population groups to gain access to resources. The ethical aspect of zero waste will also be addressed in order to understand the issue as a whole. According to the study "State of the World's Food in 2020", six out of ten consumers worldwide believe that choosing their food is a societal commitment, showing themselves to be more demanding on the content of their plate.</p> <p>The introduction of zero waste actions at a theoretical level will help the learners to build a broader vision of the world, and will allow them to become aware of current issues.</p> <p>Personal investment and motivation will be the key to understanding this module.</p> <p>The theoretical part of the course will be complemented by an interactive book in order to make the teaching more playful and concrete.</p> |
| <b>Main presentation</b>         | <ul style="list-style-type: none"> <li>• What is zero waste</li> </ul> <p>The European Union aims to reduce its food waste from 88 to 44 million tons per year by 2030. Each year, an estimated 17% of the world's total food production is wasted: 11% in households, 5% in food services and 2% at the retail stage.</p> <p>The Food and Agriculture Organization of the United Nations believes that reducing food loss and waste provides immediate climate benefits while improving the overall sustainability of our food systems.</p> <p>The Zero Waste approach is based on a strategy to reduce the waste produced by industrial society. The Zero Waste International Alliance has proposed a definition: "Zero waste means designing and managing products and processes to reduce the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them. The implementation of zero waste will eliminate all releases to</p>   |

land, water or air that may pose a threat to the health of the planet, humans, animals or plants."

The Zero Waste approach seeks to go beyond the recycling economy to prefer the circular economy, which would optimize waste management. It is mainly developed in three points: to eliminate incineration and to increase the quality of recyclable material, to encourage the reuse of recycled materials, and to support the eco-design and reparability of products.

- **Food Waste Today**

According to a report by the Environmental Protection Agency (EPA), food waste produces 18% of methane emissions from landfills. About one-third of the world's food - nearly 1.3 billion tons - is lost or wasted, with fruits and vegetables accounting for the largest amount of wasted food, according to the United Nations Food and Agriculture Organization. For all industrialized countries, food waste is worth about \$680 billion a year.

Waste has social, environmental and economic impacts, and it is up to the government to address it. Several laws and regulations, as well as awareness and engagement campaigns that combat this scourge and partnerships with other actors in the chain, are pushing cities and industries towards better organic waste management.

Food waste in the world encompasses three main issues :

1. **Food loss** This is loss caused upstream in the food supply chain, during cultivation or breeding, collection and processing of raw material.
2. **Food waste** This is waste generated during industrial processing, distribution and excess production (unsold product).
3. **Waste** It is food purchased but never consumed because the expiration dates have expired

- **Best practices**

**The use of bulk**

Packaging represents 40% of the plastic used in Europe every year. So to prevent them from ending up in the environment due to lack of recycling, many initiatives are flourishing around the principle of bulk. Popularized for the purchase of fruits and vegetables and dry goods (rice, pasta, nuts...), it is easily found in the shelves of supermarkets or in specialized grocery stores.

**Reduce your plastic consumption**

Europe produces 25 million tons of plastic waste every year, and this industry is one of the most polluting. Avoiding to buy plastic products is a good practice to protect the environment.

**Giving a second life to food waste**

Vegetable peelings, egg shells or plate bottoms, what to do with them? This is the principle of compost, a product resulting from the



fermentation of organic waste in the presence of oxygen and the combined action of bacteria, fungi and other micro-organisms. Compost is interesting for all gardeners because it is similar to soil. And when we know that this bio-waste represents  $\frac{1}{3}$  of our trash cans, it is an alternative that can be interesting

**Consuming in season**

Seasonal products are often more economical

Seasonal fruits and vegetables are generally less expensive because they do not grow in heated greenhouses and can be grown close to home: they are harvested and then quickly consumed. They don't need to be stored in cold rooms and, generally, have travelled little.

To reduce its ecological impact

A tomato produced locally, but under a heated greenhouse, generates about 4 times more greenhouse gases than the same tomato produced in the right season.

Out-of-season produce is sometimes imported by plane, boat or truck - all polluting means of transportation - and may have traveled thousands of kilometers before arriving in your basket. They must be kept in cold storage and stored until they are sold.

| <b>EXERCISES and/or QUESTIONS FOR SELF-REFLECTION</b> |   |
|---|---|
| <b>Exercise</b>                                       | When creating self-exercises, you can use various tools that are offered by HP5.<br>Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.<br><br><b>For example:</b><br><i>For the purposes of the lesson are suitable:</i><br>Click on the fruit/vegetable according to the right month |
| <b>Self-reflection</b>                                | The learners are encouraged to present their new knowledge to their immediate surrounding: friends and family in order to spread the learning activity.   |

| <b>Evaluation</b>          |  |
|----------------------------|--|
| E-learning resource (H5P)  | Interactive Book   |
| <b>Evaluation elements</b> | The aim is to assess the learners' understanding of the subject. Learners must know the seasonality of fruits and vegetables, understand the current situation of zero waste and know how to implement the good practices from the lesson by adapting them to their daily lives. |
| <b>Evaluation tools</b>    | Exercise Multiple Choice Test  |

|                   |   |
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|                   | Example : Exercise Multiple choice test |
| <b>Question 1</b> | <b>What is responsible nutrition?</b>   |

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| <b>Answer A</b>          | Consumption mode that takes into account the respect of social workers     |
| <b>Answer B</b>          | Climate-friendly consumption   |
| <b>Answer C</b>          | Consumption patterns that increase global warming                          |
| <b>Answer D</b>          | Environmentally friendly consumption                                       |
| <b>Correct answer(s)</b> | B,D  |
|                          |  |
| <b>Question 2</b>        | <b>To consume without wasting raw materials is ... ?</b>                   |
| <b>Answer A</b>          | Buy products with minimal packaging  |
| <b>Answer B</b>          | Buy ready-made meals   |
| <b>Answer C</b>          | Purchase as you go   |
| <b>Answer D</b>          | Buy products that will soon expire   |
| <b>Answer E</b>          | Buy local products   |
| <b>Correct answer(s)</b> | A,C,D,E  |
| <b>Question 3</b>        | <b>Is eating organic products the only way to respect the environment?</b> |
| <b>Answer A</b>          | Yes  |
| <b>Answer B</b>          | No   |
| <b>Correct answer(s)</b> | B  |
|                          |  |
| <b>Question 4</b>        | <b>During the month of April, I can eat according to the season...</b>     |
| <b>Answer A</b>          | Beetroot, carrot, cabbage  |
| <b>Answer B</b>          | Avocado, melon, leeks  |
| <b>Answer C</b>          | Lemon, tomato, apple   |
| <b>Answer D</b>          | Apricot, kiwi, cherry  |
| <b>Correct answer(s)</b> | A  |

|                        |                |
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|                        |                |
| <b>Self-reflection</b> | Image Hotspots |

### 1.3. Lesson summary points

- Apprehend the environmental status quo with a link to zero waste.
- Identify specific needs: application of zero waste in personal life and for work in the hotel or restaurant industry.
- Understanding of social and ethical considerations

## Lesson 2: Use of local supply chains

### 2.1. Aim, Learning objectives and outcomes

|  |   |
|--|---|
| <b>E-learning resource (H5P)</b>             | Interactive Book  |
| <b>Aim of the lesson</b>                     | At the beginning of this lesson, a definition of the word “supply chain” will be taught. It can be observed that often the general knowledge of local supply chains is scarce.<br>The learners will learn about the existing solutions around them. They may also develop strategies to build new supply chains or broaden the existing ones.   |
| <b>Key points of the lesson</b>              | <ul style="list-style-type: none"> <li>- Supply chain definition</li> <li>- Further comprehension on the aspect of local purchase with the link to supply chains</li> </ul>   |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>- Development of zero waste conscience in hotel and catering</li> <li>- Preparation for ecological change and change of habits</li> <li>- Bottom-up learning from the field through examples</li> </ul>  |
| <b>Specific learning objective(s)</b>        | The learners have a clear understanding of the different actors in a supply chain in connection to local food purchasing. They know of some initiatives of local supply chains in their vicinity and develop ideas on how to further contribute to zero waste in their personal and professional life.  |
| <b>Learning outcomes</b>                     | <p><b>Knowledge:</b><br/>a zero waste attitude needs to be lived by setting an example and local supply chains are a crucial factor in purchasing</p> <p><b>Skills:</b><br/>have an idea on how to develop local supply chains</p> <p><b>Competencies:</b><br/>knows exactly which local supply chains could be used to adhere to zero waste in the purchasing department of their catering service / hotel</p>   |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilingualism</li> <li>X Numerical, scientific and engineering skills</li> <li><input type="checkbox"/> Digital and technology-based competences</li> <li>X Interpersonal skills and the ability to adopt new competences</li> <li>X Active citizenship</li> <li><input type="checkbox"/> Entrepreneurship</li> <li>X Cultural awareness and expression</li> <li>X Green skills</li> </ul> |
| <b>Subjects involved</b>                     | Management in the restaurant & catering industry<br>Supply chain<br>Serving and bar tending   |

|                    |  |
|--------------------|--|
|                    | Economy of tourism   |
| <b>Methodology</b> | <p>First, a definition of the term local supply chains will be provided to understand the issues surrounding it.</p> <p>With some knowledge of existing local supply chains, students will realize that they may already be adopting other ways of purchasing that are closer to a zero waste attitude. This part will also present different buying alternatives to be able to consume locally.</p> <p>This session should be interactive and fun with the availability of the interactive book to illustrate the remarks.</p> <p>Tools:</p> <p>The training will be online and distance learning. The educational content will be delivered digitally with the support of innovative online tools.</p> <ul style="list-style-type: none"> <li>– Presentation</li> <li>– video</li> <li>– Quizzes</li> <li>– Test</li> </ul> <p>Resources:</p> <ul style="list-style-type: none"> <li>• Provide a definition of supply chains and link it to the work place in catering / hotel sector.</li> <li>• <a href="https://www.compliancechain.co.uk/the-top-5-benefits-of-employing-a-local-supply-chain/">https://www.compliancechain.co.uk/the-top-5-benefits-of-employing-a-local-supply-chain/</a></li> </ul> <p>Interactive book</p> |

## 2.2 Training delivery guidelines

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|                                  | <b>Theory of the lesson 2</b>  |
| <b>E-learning resource (H5P)</b> | <b>Interactive Book</b>  |
| <b>Introduction</b>              | <p>Strengthening local and regional food production and processing in the EU and ensuring decent working conditions for all farmers and food workers are important objectives on the way to improving the sustainability of the European food supply chain.</p> <p>At the beginning of this lesson, a definition of the word "supply chain" will be taught. Learners will discover existing local supply solutions around them. They will also be able to develop strategies to expand existing supply chains or imagine what new ones might look like, based on market needs.</p> <p>The lesson will begin with an explanation of the word "supply chain"; pictures and diagrams will be used to better understand the phenomenon</p> <p>It will also identify the advantages of a local supply chain over a traditional chain.</p> |

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|                             | <p>The theoretical course will be completed by an interactive book to make the lesson more interactive</p>  |
| <p>Theory of the lesson</p> | <ul style="list-style-type: none"> <li>• Definition</li> </ul> <p>The health crisis and the climate catastrophes are accelerating our awareness of the need to take concrete action to reduce our negative impact on the environment and preserve the planet.</p> <p>The task is immense and concerns all aspects of life in society: living, consuming and managing waste</p> <p>The use of local sourcing claims can be defined as the method of delivering food to consumers based on the supply of producers geographically close to the consumers. Thus, we find that the notion of local sourcing claims is subject to the constraints of seasonality, which allows to provide useful nutrients according to the season, to strengthen the self-sufficiency of populations and to protect the environment. Local purchasing can therefore be summarized as the purchase of goods and services from local businesses. Understanding and implementing a local supply chain has many benefits and contributes to the development of waste awareness in the hotel and restaurant industry. More than ever, the shelves of supermarkets are overflowing with food from around the world and consumer demand is growing for a variety of exotic products.</p> <ul style="list-style-type: none"> <li>• The interest of local supply claims</li> </ul> <p>The geographical specialization of production, the increase in import-export activities and the low cost of transportation.</p> <p>Considered as less harmful for the environment, local food systems have become a real challenge today. The objective is to produce goods and services while limiting the consumption and waste of resources and the production of waste. have contributed to the lengthening of marketing channels over the last few years. The notion of a local food product is attached to the act of consuming that product. The act of consumption as well as the stage(s) of production of the food product must take place within a geographical distance considered reasonable by the consumer.</p> <p>This distance is subjective in several respects. It depends :</p> <ul style="list-style-type: none"> <li>- the product consumed, depending on whether or not production is possible near the place of consumption consumption;</li> <li>- the possible stages of transformation and, therefore, the place of production of the raw materials raw materials;</li> <li>- the geographical characterization of a territory: is the local considered at the scale of the commune, the department, the region, the</li> </ul> <p>The work on the notion of proximity in certain food sectors shows that this notion</p> |

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|  | <p>is not always expressed in terms of distance, but refers to belonging to a territory (terroir, region, country).</p> <ul style="list-style-type: none"> <li>• Example in Italy</li> </ul> <p>In Italy there is no regulatory definition of local food product. However, the main organization of agricultural entrepreneurs in Italy, Coldiretti, has carried out the project "Campagna Amica", aimed at building exclusively Italian agri-food supply chains.. It supports a concept of local product that goes beyond geographical origin geographical origin to enhance key concepts such as quality, production and cultivation methods, tradition tradition and the attractiveness of the territory. Coldiretti has a network of about 1200 direct sales markets in Italy.</p> <ul style="list-style-type: none"> <li>• Example in France</li> </ul> <p>In addition, in France there are a wide variety of initiatives to promote the supply of local products to households and restaurants. For example, direct sales by the producer on the farm or on markets. This category includes farm sales, farm picking, open-air markets, farmers' markets or farmers' markets. Thus, the Bienvenue à la Ferme network includes farms that offer goods and services for sale directly on the farm, including direct sales at the farm and farmers' markets, but also farmers' stores and farm drives. There are also centralized withdrawal points between producers and consumers. This category includes associations or companies that put producers and consumers in contact with each other, with a physical point of deposit of the goods allowing, systematically or occasionally, a meeting between them. Finally, we can mention the local shops, including producers' stores. Local shops can enhance the value of local production. In particular, producer stores allow producers to sell their products directly in a physical sales outlet. The change in purchasing habits is achieved through different types of initiatives. This can be done on a daily basis, by asking around, either to the public authorities or directly to the producers present in the local markets.</p> |
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| <b>Exercices and/or questions for self-reflection</b> |   |
|---|---|
| <b>Exercice</b>                                       | <p>When creating self-exercises, you can use various tools that are offered by HP5.</p> <p>Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p><b>For example:</b><br/>Image Hotspots on H5P about Food quality control</p> |

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| <b>Self-reflection</b> | <p><b>For example:</b><br/> <i>Study case</i><br/> The students list the local supply chain solutions that most probably apply to their needs</p> |
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|                            | <b>Evaluation</b>   |
| E-learning resource (H5P)  | Interactive Book  |
| <b>Evaluation elements</b> | Learners should be familiar with the vocabulary used to describe the use of local claims<br>They should also be familiar with local claims initiatives in their country and region                  |
| <b>Evaluation tools</b>    | In this section you have to write a self-assessment test.<br>The test should include 5 questions.<br>You can choose between a true/false test or a multiple choice test.<br><br><b>For example:</b> |

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|--------------------------------------|--|
| <b>Exercice Multiple choice test</b> |  |
| <b>Question 1</b>                    | <b>Good supply management is very important for ?</b>                |
| <b>Answer A</b>                      | Avoid stock-outs, short circuits and buy at the best price           |
| <b>Answer B</b>                      | Avoid stock shortages, central purchasing and buy at the best price  |
| <b>Answer C</b>                      | Avoid stock-outs, overstocking and buy at the best price             |
| <b>Correct answer(s)</b>             | C  |
|                                      |  |
| <b>Question 2</b>                    | <b>The out-of-stock condition is ...</b>                             |
| <b>Answer A</b>                      | When a product required for a dish is missing                        |
| <b>Answer B</b>                      | When a product needed for a dish is available in sufficient quantity |
| <b>Answer C</b>                      | When an overloaded storage cabinet breaks                            |
| <b>Correct answer(s)</b>             | A  |



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| <b>Question 3</b>        | <b>The merchandise is...</b>                                    |
| <b>Answer A</b>          | Goods resold as is to the customer                              |
| <b>Answer B</b>          | Services provided by suppliers                                  |
| <b>Answer C</b>          | Durable goods of high value necessary to carry out the activity |
| <b>Correct answer(s)</b> | A   |
|                          |   |
| <b>Question 4</b>        | <b>The suppliers are....</b>                                    |
| <b>Answer A</b>          | Goods resold as is to the customer                              |
| <b>Answer B</b>          | Goods that are part of the dishes sold                          |
| <b>Answer C</b>          | Low value assets needed to conduct the business                 |
| <b>Correct answer(s)</b> | C   |

### 2.3. Lesson summary points

- Understanding the use of supply chains in general
- Understanding operation of local supply chains in particular
- Identify how to purchase responsibly

## Lesson 3: Purchase of non-conforming vegetables/fruits

### 3.1. Aim, Learning objectives and outcomes

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|--|---|
| <b>E-learning resource (H5P)</b>             | Interactive Book  |
| <b>Aim of lesson</b>                         | The aim of this lesson is to prove that “ugly” or non-conforming vegetables or fruits can be purchased safely and that there are even advantages to it. Until recently, before the zero waste movement got more popular, these vegetables / fruits were often disregarded by the food industry, which led and still leads to unnecessary waste.   |
| <b>Key points of the lesson</b>              | Non-conforming looking vegetables or fruits can be useful in a variety of ways. By purchasing them you can <ul style="list-style-type: none"> <li>➤ Effectively cut on cost</li> <li>➤ Have ingredients of great quality</li> <li>➤ Build your image in marketing to consumers</li> </ul>   |
| <b>Main Learning objective(s)</b>            | Main LO:<br>Awareness of the impact zero waste can have <ul style="list-style-type: none"> <li>- Knowledge about nutrition</li> <li>- Preparation for ecological change and change of habits</li> <li>- Bottom up learning from the field through examples</li> </ul>   |
| <b>Specific learning objective(s)</b>        | <ul style="list-style-type: none"> <li>➤ Strategy to optimise purchasing cost-wise</li> <li>➤ Strategy to work on the company’s brand / marketing</li> </ul>  |
| <b>Learning outcomes</b>                     | <p><b>Knowledge:</b> knowledge of contemporary events, knowledge of diversity, be aware of ethical principles and challenges</p> <p><b>Skills:</b> communicate, critical thinking, decision-making, critical and constructive reflection</p> <p><b>Competencies:</b> awareness of the impact of language or other support sustainable lifestyles, take responsibility for the environment</p>   |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilingualism</li> <li>X Numerical, scientific and engineering skills</li> <li><input type="checkbox"/> Digital and technology-based competences</li> <li>X Interpersonal skills and the ability to adopt new competences</li> <li>X Active citizenship</li> <li><input type="checkbox"/> Entrepreneurship</li> <li>X Cultural awareness and expression</li> <li>X Green skills</li> </ul> |
| <b>Subjects involved</b>                     | Purchase<br>Management in the restaurant & catering industry<br>Serving and bar tending<br>Economy of tourism   |
| <b>Methodology</b>                           | A definition as well as images will be proposed in order to understand what it is about.  |

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|  | <p>It should be a fun session with the objective of changing the perception of ugly vegetables and fruits.</p> <p>Tools:</p> <p>This lesson will be conducted in distance learning with the support of a theoretical course and an interactive book</p> <ul style="list-style-type: none"> <li>– video</li> <li>– case studies</li> <li>– illustrations of non-compliant fruits and vegetables</li> <li>– Recipe proposal</li> <li>– Interactive book</li> </ul> |
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### 3.2. Training delivery guidelines

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|-----------------------------|--|
|                             | Theory of the lesson 3   |
| E-learning resource (H5P)   | <b>Interactive Book</b>  |
| <b>Introduction</b>         | <p>Non-conforming fruits and vegetables represent a large portion of the food that ends up in the garbage. It's worth asking why.</p> <p>In this lesson, we will define what is an ugly vegetable/fruit. For example, a non-conforming vegetable/fruit could be a twisted carrot, an orange that is smaller than the others, or a zucchini that has turned over on itself. However, these foods taste exactly the same as the others, but because of their visual appearance, they will be more difficult to place next to the others.</p> <p>To avoid any kind of waste, some supermarkets have set up advertising campaigns to encourage people to buy fruits and vegetables with non-conforming aspects, it will be studied the marketing campaigns around this phenomenon.</p> <p>Moreover, it will be developed in this part, the different virtues and interests of these non-conforming vegetables/fruits, as well as the places where it is possible to buy them. The students will learn about the existence of these normal phenomena in nature and the impact it has on waste management. Begin the lesson by showing the image of vegetables or fruits that do not look right. Look for videos or photographs that can help illustrate the value of using this different-looking image.</p> <p>The theoretical course will be completed by an interactive book to make the lesson more interactive</p> |
| <b>Theory of the lesson</b> | <ul style="list-style-type: none"> <li>• Definition</li> </ul> <p>Not all fruits and vegetables are found on our market stalls or shops: out of the ordinary, too small or too big, too thick spots or not bright enough color, and yet they are perfectly fit for consumption Food</p>  |

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|  | <p>waste is mostly due to consumption. The promotion of non conforming vegetables and fruits is a way to highlight the multiplicity of nature and to limit waste. By this way, these vegetables with their particular aspect allow to create a new look on nature and on what we consume.</p> <p>Ugly fruits and vegetables are those that do not correspond to the standards of size, shape and are considered unfit for sale. In general, these fruits and vegetables are processed or directly thrown away</p> <ul style="list-style-type: none"> <li>• The weight of food aesthetics</li> </ul> <p>Today, appearance is central in our society. The emergence of social networks based on the image only accentuates this phenomenon that affects all aspects of our lives, up to the most essential as the choice of our food. The hashtag #food is mentioned 400 million times on Instagram, so this trend has spread to the whole food sector. Many people admit it, some of their meals are motivated by taking a great shot. To ride this wave, establishments are specializing in Instagrammable dishes, so much so that guides on the most Instagrammable restaurants are appearing. However, this fashion of "eating beautiful" clashes with other trends such as the anti-waste trend.</p> <ul style="list-style-type: none"> <li>• The influence of marketing on our food choices</li> </ul> <p>Food aesthetics is a central concern for the marketing departments of food industry brands. Indeed, in order for a customer to buy a product, it must be pleasing to the eye and correspond to certain standards or aesthetic criteria to which the consumer is accustomed. Ugly fruits and vegetables are often neglected because their aesthetics are too far away from the codes that we have imagined. We can understand why the presence of an aesthetically imperfect fruit on the shelves is not really encouraged in supermarkets. However, some supermarkets like Intermarché, launched in 2014 a daring and humorous campaign encouraging customers not to denigrate ugly fruits and vegetables (see the presentation). In the same way, the company "Hungryharvest" created "ugly vegetable" emojis to "change the norm of smooth, beautiful vegetables at all costs." (see the presentation)</p> <ul style="list-style-type: none"> <li>• The virtues of non-conforming vegetables/fruits</li> </ul> <p>The most obvious answer is to avoid food waste. Moreover, they bring a renewed relationship with nature. Indeed, ugly fruits and vegetables remind us that nature is also made of singularities, that there are natural hazards. The awareness of this concept is a step towards a new vision of nature and towards the reconnection between humans and nature. The use of these products allows to sensitize the consumers to the protection of our environment and contributes to the awareness that no matter the shape of the vegetables or the fruits, the taste remains the same.</p> <ul style="list-style-type: none"> <li>• Where to buy them</li> </ul> |
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|  | <ol style="list-style-type: none"> <li>1. Go and have a look at the market<br/>The local market gardeners offer seasonal fruits and vegetables (therefore affordable) with looks that are often far removed from the beauty canons in vogue in the supermarket</li> <li>2. Recovering unsold produce in specialized stores</li> <li>3. Some retailers</li> </ol> |
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|                 | Exercices and/or questions for self-reflection  |
| Exercice        | <p>When creating self-exercises, you can use various tools that are offered by HP5.<br/>Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p><b>For example:</b><br/>Fill the blanks</p> |
| Self-reflection | <p><b>For example:</b><br/>Create recipe to cook non-conforming fruits</p>  |

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| Fill the blanks  |
| <p>- On what criteria is a fruit considered ...?<br/>Several factors affecting the appearance of the fruit can weigh in the balance to remove it...<br/>For instance, ...: some fruits are naturally smaller, larger, darker or have grown with an atypical ... or an unusual ...</p> <p>- What exactly is a size?<br/>Rather than taste characteristics, mass production has had the effect of privileging fruits and vegetables according to ... Little by little, products have been ... to adopt the same visual, to the detriment of ... and...</p> <p>Two types of standards are to be remembered:<br/>The general standard: mainly focused on food and ..., with minimum characteristics of quality and maturity<br/>The specific standards: they are added to the general standard with requirements based on the ... of the products: shape, color, size, etc.</p> <p>- Eating "ugly" fruits and vegetables is an ... act<br/>Buying unsized produce not only helps to fight against ..., but also helps to preserve ..., an essential element for the survival of the planet. Large quantities of ... are used to irrigate the fields because of the ...that affects more and more regions</p> <p>- Organic fruits and vegetables are often less ...<br/>In turn, organic fruits and vegetables are not ...and do not have a ...size. Because they are grown without ..., they grow naturally and may have different ...</p> |

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| Ugly compote recipe |
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The ingredients to make a compote

- about 4 apples
- 3 tablespoons of water
- optional: a vanilla bean
- optional: 20g of butter
- optional: a little sugar

Cut the fruit into small pieces and remove the pits. We pass to the saucepan to soft fire during 20-25mn with the water and the optional ingredients if necessary. Crush the fruit with a fork and blend with a blender at the end if necessary. Store in a closed jar in the fridge for a few days.

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|                           | Evaluation   |
| E-learning resource (H5P) | Interactive Book   |
| Evaluation elements       | It will be for the students to understand the interest of non-conforming vegetables and fruits and the impact of their consumption on ecology and the fight against food waste |
| Evaluation tools          | Multiple choice test   |

Multiple choice test

|   |  |
|---|--|
| <b>Question 1: What is zero waste ?</b>   |  |
| <b>Answer 1</b>   | Combination of community and industrial responsibility that includes deconstruction in spite of demolition |
| <b>Answer 2</b>   | Composting to keep odorous organic waste out of landfills  |
| <b>Answer 3</b>   | Recycling  |
| <b>Answer 4</b>   | Screening facility to allow more separation and reuse of waste rather than incineration                    |
| <b>Answer 5</b>   | All of the above   |
| <b>Correct answer(s)</b>  | 5  |
| <b>Question 2: Which of these global challenges in the 21<sup>st</sup> century link to zero waste ?</b> |  |
| <b>Answer 1</b>   | Securing cyberspace  |
| <b>Answer 2</b>   | Sustainable and resilient infrastructure   |
| <b>Answer 3</b>   | Sustaining land and oceans   |
| <b>Answer 4</b>   | Economical clean energy  |
| <b>Answer 5</b>   | Sustainable cities   |
| <b>Answer 6</b>   | Access to clean water and sanitation   |
| <b>Answer 7</b>   | Clean air  |
| <b>Answer 8</b>   | Food security  |
| <b>Correct answer(s)</b>  | Accept all answers, but the students should at least have ticked answers 4-8                               |

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| <b>Question 3: What are some benefits of local supply chains?</b>              |   |
| <b>Answer 1</b>  | Lower transport costs   |
| <b>Answer 2</b>  | Higher transport costs  |
| <b>Answer 3</b>  | Stimulates the local economy  |
| <b>Answer 4</b>  | Arrives often late  |
| <b>Answer 5</b>  | Local Supply chain disruptions are frequent   |
| <b>Answer 6</b>  | Is better brandable   |
| <b>Answer 7</b>  | More sustainable  |
| <b>Correct answer(s)</b>   | 1,3,6,7   |
|  |   |
| <b>Question 4: What is ethics?</b>   |   |
| <b>Answer 1</b>  | The science of right conduct and character; the science which treats of the nature and grounds of moral obligation and of the rules which ought to determine conduct in accordance with this obligation; the doctrine of man's duty in respect to himself and the rights of others. |
| <b>Answer 2</b>  | The whole of the moral sciences; natural jurisprudence.   |
| <b>Answer 3</b>  | The religion of atheists  |
| <b>Answer 4</b>  | A particular system of principles and rules concerning moral obligations and regard for the rights of others, whether true or false; rules of practice in respect to a single class of human actions and duties: as, social ethics; medical ethics.                                 |
| <b>Correct answer(s)</b>   | 1,3,4   |
|  |   |
| <b>Question 5 What makes non-conforming produce differ from usual produce?</b> |   |
| <b>Answer 1</b>  | Shape   |
| <b>Answer 2</b>  | Taste   |
| <b>Answer 3</b>  | Smell   |
| <b>Answer 4</b>  | Nutrition   |
| <b>Answer 5</b>  | Benefits for health   |
| <b>Correct answer(s)</b>   | 1   |

### 3.3. Lesson summary points

- Identify non-compliant looking vegetables and fruits in general
- Clearly assimilate how integrating these products can benefit everyone on an individual level, as well as the benefits to a company that can purchase them on a larger scale.

## Further reading

|   |   |  |
|---|---|--|
| <p>0 km restaurants in Rome</p> <p><b>where nature is the protagonist</b></p> | <p>This article gives some examples of restaurants that have made seasonality their strong point by buying local produce at km 0 and offering a varied menu respecting the times and flavours of nature.</p>  | <p><a href="https://2night.it/c38bcc-/si-scrive-km-si-legge-slow-food-ristoranti-di-roma-dove-il-cibo-natura.html">https://2night.it/c38bcc-/si-scrive-km-si-legge-slow-food-ristoranti-di-roma-dove-il-cibo-natura.html</a></p> |
| <p>Nordic council of Ministers office of Latvia</p>                           | <p>To better understand the changes in food consumption and agrifood start-up environment in Baltics in the time of the Covid-19 pandemic, the EIT Food CLC NE and Nordic Council of Ministers Office in Latvia collaborate on assessing opportunities for the future of the food system in Nordic and Baltic countries. Both organizations will perform an analysis of the local situation and global trends as well as disseminate information on the new trends to a wider audience in Baltic countries.</p> | <p><a href="https://norden.lv/en/projects/sustainable-development/future-trends-of-food-in-nordic-baltic-region">https://norden.lv/en/projects/sustainable-development/future-trends-of-food-in-nordic-baltic-region</a></p>     |
| <p>ZERO WASTE LYON</p>  | <p>The Zero Waste Lyon association was created in April 2015 as a result of the desire of the Zero Waste France association to spread the Zero Waste movement throughout the country. It brings together committed citizens and volunteers who want to act to reduce waste and spread the Zero Waste movement. After one year of existence, the collective has become a non-profit association.</p>   | <p><a href="https://zerodechetlyon.org/">https://zerodechetlyon.org/</a></p>   |
| <p>ZERO WASTE FRANCE</p>  | <p>They advocate an ambitious zero waste, zero waste approach that prioritises reduction at source. Their vision is part of a global ecological transition, respect for human rights and a better consideration of the most disadvantaged populations and future generations. In practice, this will manifest itself in actions aimed at producing differently, optimising and extending the use and preservation of materials.</p>   | <p><a href="https://www.zerowastefrance.org/">https://www.zerowastefrance.org/</a></p>   |
| <p>Fruta Freia / Ugly Fruits</p>  | <p>Fruta Feia Cooperative is a non-profit consumer's cooperative, established to</p>  | <p>Isabel Soares,</p>  |



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|  | reduce food waste due to its appearance, channeling directly from the region's farmers to consumers; part of the production of fruits and vegetables currently rejected for mere aesthetic reasons – shape, size or colour.           | Project Manager/Coordinator<br>FRUTA FEIA / FLAW4LIFE<br><a href="https://frutafeia.pt/en">https://frutafeia.pt/en</a><br>+ 351966177519<br><a href="mailto:info@frutafeia.pt">info@frutafeia.pt</a> |
| Alliance for the Reduction of Food Waste | In this collective effort, public authorities, professional and scientific bodies, food and catering companies from all stages of the supply chain, civil society organizations, academic and research community members join forces. | Barboka Vicky<br>WWF Greece – Food programm officer<br><a href="http://www.wwf.gr">www.wwf.gr</a><br>210 3314893<br><a href="mailto:v.barboka@wwf.gr">v.barboka@wwf.gr</a>                           |

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## Glossary

|                      |  |
|----------------------|--|
| <b>Globalisation</b> | <ol style="list-style-type: none"> <li>1. the increase of trade around the world, especially by large companies producing and trading goods in many different countries</li> <li>2. a situation in which available goods and services, or social and cultural influences, gradually become similar in all parts of the world</li> </ol>  |
| <b>Ethics</b>        | <ol style="list-style-type: none"> <li>1. The science of right conduct and character; the science which treats of the nature and grounds of moral obligation and of the rules which ought to determine conduct in accordance with this obligation; the doctrine of man's duty in respect to himself and the rights of others.</li> <li>2. The whole of the moral sciences; natural jurisprudence.</li> </ol> |

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|                         | 3.A particular system of principles and rules concerning moral obligations and regard for the rights of others, whether true or false; rules of practice in respect to a single class of human actions and duties: as, social ethics; medical ethics.  |
| <b>Supply chain</b>     | The sequence or system of organizations or operations that work together to design, produce, and deliver a product or service to a market, extending from the extraction of raw materials to the distribution of finished products or services.<br>A system of organizations, people, technology, activities, information and resources involved in moving a product or service from supplier to customer. |
| <b>Sustainability</b>   | the quality of causing little or no damage to the environment and therefore able to continue for a long time   |
| <b>Carbon footprint</b> | Someone's carbon footprint is a measurement of the amount of carbon dioxide that their activities produce  |
| <b>Compost</b>          | A mixture that consists largely of decayed organic matter and is used for fertilizing and conditioning land  |
| <b>Non-conformity</b>   | Absence of agreement or correspondence   |
| <b>Produce</b>          | Agricultural products and especially fresh fruits and vegetables as distinguished from grain and other staple crops  |

## Technical sheet 1

|  |   |
|--|---|
| <b>E-learning resource (H5P)</b>           | <b>Pdf file</b>   |
| <b>Name of the technical specification</b> | Buying at 0km   |
| <b>Aim</b>                                 | <p>0 km shopping is synonymous with short supply chain, environmental sustainability, genuine food and savings. Thanks to the short supply chain, middlemen are cut out and prices linked to transport and large-scale distribution are eliminated.</p> <p> It is a practice that can be implemented from restaurants into the habits of individual households</p> |
| <b>Step by step implementation</b>         | <ol style="list-style-type: none"> <li>1.Find a local farmer that produces enough for the hotel/catering service</li> <li>2.Contact and negotiate on typical products that are sold there</li> <li>3.Imagining to create seasonal menus that change approximately every three months without losing creativity</li> </ol>   |
| <b>Link to good practices/ Example</b>     | <p>In this section, indicate the name of specific practical examples of Outcome 1 with which this technical sheet corresponds.</p> <p><b>For example:</b><br/>           Buying at 0km<br/> <a href="https://2night.it/c38bcc-/si-scrive-km-si-legge-slow-food-ristoranti-di-roma-dove-il-cibo-natura.html">https://2night.it/c38bcc-/si-scrive-km-si-legge-slow-food-ristoranti-di-roma-dove-il-cibo-natura.html</a></p>                           |
| <b>Link to EU green priorities</b>         | <a href="https://environment.ec.europa.eu/strategy/circular-economy-action-plan_en">https://environment.ec.europa.eu/strategy/circular-economy-action-plan_en</a>   |

## Technical sheet 2

|  |   |
|--|---|
| <b>E-learning resource (H5P)</b>           | <b>Pdf file</b>   |
| <b>Name of the technical specification</b> | AUPARAGER, responsible food   |
| <b>Aim</b>                                 | <p>Auparager is a food-truck that aims to raise awareness about food waste. The products they use are products whose appearance does not fit the requirements of current demand but also parts of products that are not usually used.</p>   |
| <b>Step by step implementation</b>         | <ol style="list-style-type: none"> <li>1. Observe that there is a problem: Students at the French gastronomy school Ferrandi were unhappy about the amount of food destined to leave the traditional sales cycle.</li> <li>2. Act accordingly, find solutions: They found a place to serve the cooked dishes to the residents of the Emmaus hostel where people in need live</li> </ol> |

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|  | 3. Promoting this Successful anti-waste restaurant operation through social media so that others learn from this idea  |
| <b>Link to good practices/ Example</b> | In this section, indicate the name of specific practical examples of Outcome 1 with which this technical sheet corresponds.<br><b>For example:</b><br>AUPARAGER, responsible food<br><a href="https://www.auparager.fr/#contact">https://www.auparager.fr/#contact</a> |
| <b>Link to EU green priorities</b>     | <a href="https://food.ec.europa.eu/safety/food-waste/eu-actions-against-food-waste/food-waste-reduction-targets_en">https://food.ec.europa.eu/safety/food-waste/eu-actions-against-food-waste/food-waste-reduction-targets_en</a>                                      |

## Technical sheet 2

|  |   |
|--|---|
| <b>E-learning resource (H5P)</b>           | <b>Pdf file</b>   |
| <b>Name of the technical specification</b> | Green purchasing decisions  |
| <b>Aim</b>                                 | When making purchasing decisions Gergini takes into account environmental, social and ethical considerations.   |
| <b>Step by step implementation</b>         | <ol style="list-style-type: none"> <li>1. Consider before purchasing: <ul style="list-style-type: none"> <li>• whether a purchase is necessary at all</li> <li>• what products are made of</li> <li>• under what conditions they have been made</li> <li>• how far they have travelled</li> <li>• their packaging components</li> <li>• how they will be used; and how they will be disposed of</li> </ul> </li> <li>2. Apply the guidelines to a broad item line, which in the case of Gergini includes: <ul style="list-style-type: none"> <li>• Paint</li> <li>• Office supplies, writing pads, and pens</li> <li>• Light bulbs</li> <li>• Cleaning supplies, sanitizers, and adhesives</li> <li>• Paper products</li> <li>• Kitchen electrical appliances</li> </ul> </li> <li>3. Purchase and know that this process was closer to zero waste than before</li> </ol> |
| <b>Link to good practices / example</b>    | In this section, indicate the name of specific practical examples of Outcome 1 with which this technical sheet corresponds.<br><b>For example:</b><br>THE RECYCLER<br><a href="https://www.namrb.org/nosrb-hotel">https://www.namrb.org/nosrb-hotel</a>   |
| <b>Link to EU green priorities</b>         | <a href="https://ec.europa.eu/environment/pdf/circular-economy/new_circular_economy_action_plan.pdf">https://ec.europa.eu/environment/pdf/circular-economy/new_circular_economy_action_plan.pdf</a>   |

## 9.2. Module 2. Preparation

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|--|--|
| <b>E-learning resource (H5P)</b>             | Interactive Book   |
| <b>Aim of the module</b>                     | This module aims to understand and assimilate the concept of zero waste, in particular in the preparation phase in hotels and catering. It will give participants a better appreciation of the amount of waste produced in their daily lives.  |
| <b>Key points of the module</b>              | The main key points of this module are:<br>Lesson 1: Reduce waste<br>Lesson 2: Trash cooking<br>Lesson 3: Small actions matter   |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience in hotel and catering</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom-up learning from the field through examples</li> </ul>  |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>4. Ability to analyse and take eco-responsible decisions in response.</li> <li>5. Optimising each ingredient and developing creative skills.</li> <li>6. Engage stakeholders in zero waste in hotels and restaurants and encourage them to be aware in their daily lives.</li> </ol>  |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>- Identify each environmentally irresponsible operation in the organisation</li> <li>- Create and Judge eco-friendly practices</li> <li>- Describe the organisation of the company, in particular its environmental practices.</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>- Adapt menus according to fresh waste and seasonal foods</li> <li>- Design eco practises in all aspects of the organisation</li> <li>- Demonstrate the relevance of the actions taken</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>- Awareness about climate change and the impact of the hotel and catering industry</li> <li>- Discuss on ecological practices</li> <li>- Challenge of zero waste in the catering and hotel sectors</li> </ul> |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilingualism</li> <li><input type="checkbox"/> Numerical, scientific and engineering skills</li> <li><input checked="" type="checkbox"/> Digital and technology-based competences</li> <li><input checked="" type="checkbox"/> Interpersonal skills and the ability to adopt new competences</li> </ul>  |

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|                         | <ul style="list-style-type: none"> <li>X Active citizenship</li> <li>X Entrepreneurship</li> <li>X Cultural awareness and expression</li> <li>X Green skills</li> </ul>  |
| <b>Grade/VET group</b>  | <ul style="list-style-type: none"> <li>- Students – 11 – 12 grades in VET School</li> <li>- Students – 9-12 grades in VET School with dual form</li> <li>- Trainees in VET centers</li> <li>- Trainees (new employees, reassigned employees, workers) included in WBL</li> </ul> |
| <b>Technical sheets</b> | <ol style="list-style-type: none"> <li>1. Reducing Food waste</li> <li>2. Trash cooking</li> <li>3. Rhino Alpine Resort</li> </ol>   |

## Lesson 1. Reduce Waste

### 1.1. Aim, Learning objectives and outcomes

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|--|--|
| <b>E-learning resource (H5P)</b>             | Interactive book   |
| <b>Aim of the lesson</b>                     | The objective of this lesson is to provide an overview of the amount of waste generated by the hotel and restaurant industries. The lesson will identify several sources of waste to be considered. In addition, the course will raise awareness of the opportunities to improve and diversify their food consumption, optimise the use of their fresh produce and reduce the additional costs and waste associated with it. In sum, some ecological gestures can be sensitised and adopted by actors, thus encouraging eco-responsible behaviours on a daily basis.   |
| <b>Key points of the lesson</b>              | <ol style="list-style-type: none"> <li>1. Analyse operations because food waste occurs at different stages</li> <li>2. Adopt a good delivery and storage system</li> <li>3. Understand and adapt your menus</li> </ol>   |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience in hotel and catering</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom-up learning from the field through examples</li> <li>➤ Design menus with a minimum of waste</li> </ul>  |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>1. Ability to identify each operation that is contrary to the company's objectives</li> <li>2. Acquire good organisation and knowledge of the products used</li> </ol>  |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>- Define and describe green objectives</li> <li>- Differentiate and judge different types of waste</li> <li>- Analyse the consequences of purchases</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>- Adapt menus according to seasonal foods</li> <li>- Design original and tasty dishes</li> <li>- Deliver innovative and satisfactory results to customers</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>- challenge and raise awareness about waste among employees</li> <li>- Discuss with stakeholders</li> </ul> |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilingualism</li> <li><input checked="" type="checkbox"/> Numerical, scientific and engineering skills</li> <li><input checked="" type="checkbox"/> Digital and technology-based competences</li> <li><input checked="" type="checkbox"/> Interpersonal skills and the ability to adopt new competences</li> </ul>   |

|                          |  |
|--------------------------|--|
|                          | <input type="checkbox"/> Active citizenship<br><input checked="" type="checkbox"/> Entrepreneurship<br><input type="checkbox"/> Cultural awareness and expression<br><input checked="" type="checkbox"/> Green skills  |
| <b>Subjects involved</b> | <ul style="list-style-type: none"> <li>- Management in hotel and catering industries</li> <li>- Communication with stakeholders</li> <li>- Budget administration</li> <li>- Economy of tourism</li> </ul>  |
| <b>Methodology</b>       | <ul style="list-style-type: none"> <li>- online training</li> <li>- from practice to theory</li> <li>- self-work, self-reading, self-reflection; self-exercise; self-assessment; self-work with technical sheets</li> <li>- viewing video demonstrations</li> <li>- formal education in VET schools and VET centers</li> <li>- WBL</li> <li>- dual form of education</li> </ul> <p><b>Tools:</b></p> <ul style="list-style-type: none"> <li>- video</li> <li>- case studies</li> <li>- Quizzes</li> <li>- Drag and drop</li> <li>- Test</li> </ul> |

## 1.2. Training delivery guidelines

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|                                  | <b>Theory of the lesson 1</b>  |
| <b>E-learning resource (H5P)</b> | Interactive Book   |
| <b>Introduction</b>              | <p>In this section you have to write 2-3 sentences to introduce the topic of the lesson.</p> <p>To make it more attractive for learners, we suggest using a short introductory video 1-2 minutes or photos or interesting testimonial. The video must have an open use license. You can also use your own video if you have one.</p> <p><b>For example:</b></p> <p>In 2020, Eurostat<sup>1</sup> estimated the amount of waste produced per European citizen in one year at 4.8 tonnes.</p> <p>A lot of waste could be avoided in hotels and restaurants.</p> <p>Food waste is a scourge of the 21st century.</p> <p>Food production is responsible for about a quarter of the world's greenhouse gas emissions. Unfortunately, some of this production is wasted and thrown away. Hotel buffets and oversized portions in</p> |

<sup>1</sup> Eurostat is a European institution that provides statistics and data on Europe.



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|   | <p>restaurants contribute to this waste. In addition, restaurants import products from abroad to satisfy the tastes of their visitors.</p> <p>Link for introduction video &gt;&gt;<br/> <a href="https://www.youtube.com/watch?v=4xHB1hW570w">https://www.youtube.com/watch?v=4xHB1hW570w</a></p>  |
| <p><b>Main presentation</b></p>         | <p>In this section you have to present detailed information about the topic of the lesson.</p> <p>The main presentation should have at least three key points that corresponding to the defined specific learning objectives of the lesson. The volume of the content depends on the topic of the lesson. But it should not be more than 2 pages.</p> <p>Important!<br/> Indicate in the description that there are self-tasks (self-exercises, self-reflection). Completing these tasks will help students to supplement new knowledge and further develop new skills.</p> <p><b>For example:</b><br/> The lesson will focus on three key points.<br/> Once you become familiar with them, you will be able to implement eco-practices in hotels and catering services.<br/> The key points are:</p> <ol style="list-style-type: none"> <li>1. Analyse operations because food waste occurs at different stages</li> <li>2. Adopt a good delivery and storage system</li> <li>3. Understand and adapt your menus</li> </ol> <p>In order to consolidate the acquired new knowledge and develop the new skills, it is necessary to do exercises and self-reflection.</p> <p>(and a detailed description of each of the three key points follows...)</p> |
|   | <p>EXERCISES and/or QUESTIONS FOR SELF-REFLECTION</p>  |
| <p><b>E-learning resource (H5P)</b></p> | <p>When creating self-exercises, you can use various tools that are offered by HP5.<br/> Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p>For example:<br/> For the purposes of the lesson are suitable:</p> <ul style="list-style-type: none"> <li>- Quizzes</li> <li>- Drag and drop</li> </ul>   |
| <p><b>Exercise</b></p>                  | <p>In this section you have to write 1 - 3 exercises to supplement the learners' knowledge and skills.</p> <p><b>For example:</b><br/> <b>Exercise 1</b></p>   |

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|                                  | <p>Each student should answer several questions (5-10), which will enable them to identify relevant actions to reduce the amount of food waste produced.</p> <p><b>Exercise 2</b></p> <p>Each student has to identify, in different pictures (2-3), sustainable practices and those which are contrary to ecological objectives. These practices may have been discussed during the main presentation.</p>   |
| <b>E-learning resource (H5P)</b> | <p>When creating self-reflection tasks, you can use various tools that are offered by HP5. Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p><b>For example:</b></p> <p>Self – reading/watching by external links.</p>   |
| <b>Self-reflection</b>           | <p>In this section you have to write 1 - 3 task to supplement the learners' knowledge and skills.</p> <p><b>For example:</b></p> <p>1. Individual reflection - Do you think you waste a high, low or moderate amount of food? Why or why not? Do you know what types of food you waste most you waste the most, on what occasions and can you think of reasons why this might be?<br/>In hotels and catering: which waste could potentially be avoided and how?</p> <p>2. Rank steps to save food :</p> <p>Use smaller portions (5)<br/>Turn, what is possible, into garden feed (7)<br/>FIFO: First in, first out! (4)<br/>Check your cupboards (1)<br/>Don't leave leftovers, cook them or offer Doggy bags (6)<br/>Shop smart (2)<br/>Buy “ugly” fruits and vegetables (3)</p> <p>3. Interesting reading &gt;&gt; <a href="http://Publications   Champions 12.3 (champions123.org)"><u>Publications   Champions 12.3 (champions123.org)</u></a></p> |

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|                                  | Evaluation  |
| <b>E-learning resource (H5P)</b> | Interactive Book  |
| <b>Evaluation elements</b>       | <ul style="list-style-type: none"> <li>- Identification and differentiation of different waste types</li> <li>- Analyse the consequences of purchases</li> <li>- Skills to adapt menus according to seasonal foods</li> </ul> |

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|                                  | - Know how to raise employee awareness  |
| <b>E-learning resource (H5P)</b> | Test  |
| <b>Evaluation tools</b>          | <p>In this section you have to write a self-assessment test. The test should include 5 questions. You can choose between a true/false test or a multiple-choice test.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. Does sorting waste have a real impact?<br/>Yes / No</li> <li>2. should I use a compost bin?<br/>Yes / No</li> <li>3. Is it important to communicate on the actions taken?<br/>Yes / No</li> <li>4. Food waste represents half of the waste generated on earth<br/>Yes / No</li> <li>5. Individual products are more eco-friendly<br/>Yes / No</li> </ol> |

## Lesson 2. Trash cooking

### 2.1. Aim, Learning objectives and outcomes

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| <b>E-learning resource (H5P)</b>             | Interactive Book  |
| <b>Aim of the lesson</b>                     | This lesson encourages learners to reduce the amount of waste thrown away and the associated costs. To achieve this goal, it focuses on the ambitious and challenging concept of trash cooking. The aim is to create dishes from the leftovers of one or more foods in order to make full use of the product.   |
| <b>Key points of the lesson</b>              | <ol style="list-style-type: none"> <li>1. Buy differently</li> <li>2. Cook in a new way</li> </ol>  |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience in hotel and catering</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom-up learning from the field through examples</li> <li>➤ Learn to change habits</li> </ul>   |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>1. Identify the potential of each ingredient, buy those that might be thrown away because they are not standard and buy local products.</li> <li>2. Cook with waste, optimise every part of the vegetables, learn to combine tastes and develop new recipes and communicate these ambitions and actions.</li> </ol>  |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>- Identify potential of each ingredient</li> <li>- Analyse waste</li> <li>- Create new menus</li> <li>- Recommend simple and good dishes with waste</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>- Adapt menus according to seasonal foods</li> <li>- Design original and tasty dishes</li> <li>- Calibrate quantities</li> <li>- Fix ugly dishes</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>- Raise awareness about trash cooking</li> <li>- Ask customers, chefs and suppliers</li> <li>- Judge taste</li> </ul> |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilingualism</li> <li><input checked="" type="checkbox"/> Numerical, scientific and engineering skills</li> </ul>   |

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|                          | <ul style="list-style-type: none"> <li>X Digital and technology-based competences</li> <li><input type="checkbox"/> Interpersonal skills and the ability to adopt new competences</li> <li>X Active citizenship</li> <li><input type="checkbox"/> Entrepreneurship</li> <li>X Cultural awareness and expression</li> <li>X Green skills</li> </ul>  |
| <b>Subjects involved</b> | <ul style="list-style-type: none"> <li>- Management in hotel and catering industries</li> <li>- Communication with stakeholders</li> <li>- Budget administration</li> <li>- Economy of tourism</li> <li>- Kitchen management</li> </ul>   |
| <b>Methodology</b>       | <ul style="list-style-type: none"> <li>- online training</li> <li>- from practice to theory</li> <li>- self-work, self-reading, self-reflection; self-exercise; self-assessment; self-work with technical sheets</li> <li>- viewing video demonstrations</li> <li>- formal education in VET schools and VET centers</li> <li>- WBL</li> <li>- dual form of education</li> </ul> <p><b>Tools:</b></p> <ul style="list-style-type: none"> <li>- video</li> <li>- case studies</li> <li>- Fill in the blanks</li> <li>- Drag and drop</li> <li>- Test</li> </ul> |

## 2.2. Training delivery guidelines

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|                                  | <b>Theory of the lesson 2</b>  |
| <b>E-learning resource (H5P)</b> | <b>Interactive book</b>  |
| <b>Introduction</b>              | <p>In this section you have to write 2-3 sentences to introduce the topic of the lesson.</p> <p>To make it more attractive for learners, we suggest using a short introductory video - 2-3 minutes.</p> <p>The video must have an open use license. You can also use your own video if you have one.</p> <p><b>For example:</b></p> <p>Buying locally can actively contribute to reduce the amount of waste produced. Buying products that do not meet industry standards is also beneficial. However, many foods should be used to the maximum to further reduce waste and money spent.</p> |

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|                          | <p>Link for introduction video &gt;&gt;<br/> <a href="#">Cooking Ugly Vegetables: A Dish Using The Whole Carrot   Zero Waste Kitchen - YouTube</a></p>  |
| <b>Main presentation</b> | <p>In this section you have to present detailed information about the topic of the lesson.</p> <p>The main presentation should have at least three key points that corresponding to the defined specific learning objectives of the lesson. The volume of the content depends on the topic of the lesson. But it should not be more than 2 pages.</p> <p>Important!<br/> Indicate in the description that there are self-tasks (self-exercises, self-reflection). Completing these tasks will help students to supplement new knowledge and further develop new skills.</p> <p><b>For example:</b><br/> The key points are:<br/> 1. Buy differently<br/> 2. Cook in a new way</p> <p>This main presentation will clearly explain how and why you should try to buy differently from others and consider each ingredient. Then, the concept of trash cooking will be explored, illustrating your points with pictures and examples.</p> <p>In order to consolidate the acquired new knowledge and develop the new skills, it is necessary to do exercises and self-reflection.</p> |

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|                                  | <b>EXERCISES and/or QUESTIONS FOR SELF-REFLECTION</b>  |
| <b>E-learning resource (H5P)</b> | <p>When creating self-exercises, you can use various tools that are offered by HP5.</p> <p>Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p>For example:<br/> For the purposes of the lesson are suitable:<br/> - Fill in the blanks<br/> - Drag and drop</p> |
| <b>Exercise</b>                  | <p>In this section you have to write 1 - 3 exercises to supplement the learners' knowledge and skills.</p> <p><b>For example:</b></p>  |

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|   | <p><b>Exercise 1</b><br/> Guess causes of food waste :<br/> Food is lost or wasted along the whole food supply chain.</p> <ul style="list-style-type: none"> <li>- Insufficient <b>food</b> management skills</li> <li>- Aesthetic <b>considerations</b> (bruised fruit and vegetables etc.)</li> <li>- Standardised portion <b>sizes</b> in restaurants and canteens</li> <li>- <b>Difficulty</b> in anticipating the number of customers (a problem for catering services)</li> <li>- <b>Overproduction</b> or lack of demand for certain products at certain times of the year</li> <li>- Inadequate <b>storage</b>/transport at all stages of the food chain including households (e.g. refrigerator temperatures)</li> </ul> <p>Source : <a href="http://europa.eu">Food Waste (europa.eu)</a></p> <p><b>Exercise 2</b><br/> Each learner should identify, in different pictures (2-3), which elements can be cooked or not. The recipes should have been discussed during the main presentation.</p> |
| <p><b>E-learning resource (H5P)</b></p> | <p>When creating self-reflection tasks, you can use various tools that are offered by HP5.<br/> Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p>For example:<br/> Self – reading/watching by external links</p>  |
| <p><b>Self-reflection</b></p>           | <p>In this section you have to write 1 - 3 task to supplement the learners' knowledge and skills.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. <b>Self-work:</b> Take a look at various recipes made from waste or commonly thrown away elements</li> <li>2. <b>Self-research:</b> Look for tips and techniques about best way to manage food, to avoid waste.</li> <li>3. <b>Interesting reading</b> &gt;&gt; <a href="http://europa.eu">Love Food Hate Waste</a> and <a href="http://europa.eu">European Food Loss and Waste Prevention Hub (europa.eu)</a></li> </ol>   |

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|   | Evaluation   |
| <p><b>E-learning resource (H5P)</b></p> | Interactive Book   |
| <p><b>Evaluation elements</b></p>       | <ul style="list-style-type: none"> <li>- Awareness about eco practices</li> <li>- Skills to adapt menus according to seasonal foods</li> </ul> |

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|                                  | <ul style="list-style-type: none"> <li>- Skills to design original and tasty dishes</li> <li>- Knowledge of ingredients</li> </ul>   |
| <b>E-learning resource (H5P)</b> | Test   |
| <b>Evaluation tools</b>          | <p>In this section you have to write a self-assessment test.<br/> The test should include 5 questions.<br/> You can choose between a true/false test or a multiple-choice test.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. Working with local producers could help reduce the amount of food thrown away?<br/> Yes / No</li> <li>2. Buying damaged products reduces waste?<br/> Yes / No</li> <li>3. Once the expiry date of the product has passed, I can no longer use it?<br/> Yes / No</li> <li>4. Is it possible to cook fish bones<br/> Yes / No</li> <li>5. Can I get any benefits from trash cooking?<br/> Yes / No</li> </ol> |



## Lesson 3. Small actions matter

### 3.1. Aim, Learning objectives and outcomes

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| <b>E-learning resource (H5P)</b>             | Interactive book   |
| <b>Aim of the lesson</b>                     | <p>This lesson aims to demonstrate the ability of restaurant and hotel sectors to act on sustainability objectives and even to serve as an example to other sectors.</p> <p>Many green initiatives, which could be implemented during the preparation phase, will be discussed here. This course aims to highlight all the "small actions" that may have really beneficial consequences.</p>   |
| <b>Key points of the lesson</b>              | <ol style="list-style-type: none"> <li>1. Develop green ideas</li> <li>2. Implement these practices</li> <li>3. Be an actor of change</li> </ol>   |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience in hotel and catering</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom-up learning from the field through examples</li> <li>➤ Implement ecological projects</li> </ul>   |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>1. Identify "responsible" practices</li> <li>2. Develop good habits</li> <li>3. Encourage the search for continuous improvement towards zero waste.</li> </ol>  |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>- Explain projects</li> <li>- Identify green washing</li> <li>- Resolve environmental concerns in hotel and catering</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>- Adapt one's ambitions</li> <li>- Design eco-friendly practices</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>- Raise awareness among stakeholders</li> <li>- Discuss Zero-waste concept</li> <li>- Synthesise company's goals</li> </ul> |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input checked="" type="checkbox"/> Multilingualism</li> <li><input type="checkbox"/> Numerical, scientific and engineering skills</li> <li><input type="checkbox"/> Digital and technology-based competences</li> <li><input checked="" type="checkbox"/> Interpersonal skills and the ability to adopt new competences</li> <li><input checked="" type="checkbox"/> Active citizenship</li> </ul>                              |

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|                          | <ul style="list-style-type: none"> <li>X Entrepreneurship</li> <li>X Cultural awareness and expression</li> <li>X Green skills</li> </ul>   |
| <b>Subjects involved</b> | <ul style="list-style-type: none"> <li>- Hotels and catering services</li> <li>- Green management</li> <li>- Economy of tourism</li> <li>- Project implementation</li> </ul>  |
| <b>Methodology</b>       | <ul style="list-style-type: none"> <li>- online training</li> <li>- from practice to theory</li> <li>- self-work, self-reading, self-reflection; self-exercise; self-assessment; self-work with technical sheets</li> <li>- viewing video demonstrations</li> <li>- formal education in VET schools and VET centers</li> <li>- WBL</li> <li>- dual form of education</li> </ul> <p>Tools:</p> <ul style="list-style-type: none"> <li>- Image hotspots</li> <li>- Mark the words</li> <li>- Video</li> <li>- Test</li> </ul> |

### 3.2. Training delivery guidelines

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|                                  | <b>Theory of the lesson 3</b>   |
| <b>E-learning resource (H5P)</b> | Interactive book  |
| <b>Introduction</b>              | <p>In this section you have to write 2-3 sentences to introduce the topic of the lesson.</p> <p>To make it more attractive for learners, we suggest using a short introductory video - 2-3 minutes or photos or interesting testimonial. The video must have an open use license. You can also use your own video if you have one.</p> <p><b>For example:</b></p> <p>For several years now, we have seen changes in consumption and very different expectations, more respectful to the environment. These expectations do not spare tourism and catering sectors, which must adapt to customer expectations. Many practices can be implemented without the customer noticing changes made by the organisation. However, to take these actions further, it is necessary to involve customers who, once alerted and aware, are more inclined to play the game and pay attention.</p> |
| <b>Main presentation</b>         | In this section you have to present detailed information about the topic of the lesson.   |

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|  | <p>The main presentation should have at least three key points that corresponding to the defined specific learning objectives of the lesson. The volume of the content depends on the topic of the lesson. But it should not be more than 2 pages.</p> <p>Important!<br/>Indicate in the description that there are self-tasks (self-exercises, self-reflection). Completing these tasks will help students to supplement new knowledge and further develop new skills.</p> <p><b>For example:</b><br/>The lesson will focus on two key points:</p> <ol style="list-style-type: none"> <li>1. Develop green ideas</li> <li>2. Implement these practices</li> <li>3. Be an actor of change</li> </ol> <p>This course will help you become more rigorous, have a critical eye and be more inspired. As many concrete actions as possible should be covered, analysing them to demonstrate the feasibility of the measures in question.</p> <p>In this section, the development of new ideas and their implementation in the organisation will be discussed. The idea of being an actor of change and raising awareness about these green practices will be covered in the third part of the lesson.</p> |
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| EXERCISES and/or QUESTIONS FOR SELF-REFLECTION |   |
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| <b>E-learning resource (H5P)</b>               | <p>When creating self-exercises, you can use various tools that are offered by HP5. Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p><b>For example:</b><br/>For the purposes of the lesson are suitable:</p> <ul style="list-style-type: none"> <li>- Image hotspots</li> <li>- Mark the words</li> </ul> |
| <b>Exercise</b>                                | <p>In this section you have to write 1 - 3 exercises to supplement the learners' knowledge and skills.</p> <p><b>For example:</b><br/><b>Exercise 1</b><br/>This exercise can include two or three photos in which the trainee has to identify elements that can be changed to develop ecological practices.</p>  |

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|                                  | <p>Ex: squeezing the water tray that was used to clean vegetables to feed the plants, the toilet to reduce the litres of water used for the flush..</p> <p><b>Exercise 2</b><br/>Match the words to their definitions.<br/>These words refer to practices or vocabulary related to the lesson.</p>   |
| <b>E-learning resource (H5P)</b> | <p>When creating self-reflection tasks, you can use various tools that are offered by HP5. Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p><b>For example:</b><br/>Self – work</p>   |
| <b>Self-reflection</b>           | <p>In this section you have to write 1 - 3 task to supplement the learners' knowledge and skills.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. Watch the video:<br/><a href="https://www.youtube.com/watch?v=ffnMUBm6rsE&amp;feature=emb_imp_woyt">https://www.youtube.com/watch?v=ffnMUBm6rsE&amp;feature=emb_imp_woyt</a><br/>Pay attention to the staff, customers and the cleanliness of the place</li> <li>2. <b>Imagine</b> developing a green project in an organisation. What do you think are the steps to follow? Stakeholders? Budget? Obstacles? The added value of this project for the organisation? Could you receive financial support (state aids...)?</li> </ol> |

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|                                  | Evaluation  |
| <b>E-learning resource (H5P)</b> | Interactive Book  |
| <b>Evaluation elements</b>       | <ul style="list-style-type: none"> <li>- Knowledge about projects development</li> <li>- Skills for identify green washing</li> <li>- Environmental problem solving in hotel and catering</li> <li>- Awareness of eco-responsible behaviour</li> <li>- Skills to synthetise company objectives</li> </ul>   |
| <b>E-learning resource (H5P)</b> | Test  |
| <b>Evaluation tools</b>          | <p>In this section you have to write a self-assessment test.<br/>The test should include 5 questions.<br/>You can choose between a true/false test or a multiple-choice test.</p> <p><b>For example</b></p> <ol style="list-style-type: none"> <li>1. Several European laws encourage citizens and businesses to move towards more environmentally sustainable practices?<br/>Yes / No</li> </ol> |

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|  | <p>2. Can small actions have great results?<br/>Yes / No</p> <p>3. Is it useful to involve customers in these green initiatives?<br/>Yes / No</p> <p>4. Does the service offered inevitably deteriorate with eco-practices?<br/>Yes / No</p> <p>5. Is it appropriate to establish penalties for clients who violate certain environmental principles of the organisation?<br/>Yes / No</p> |
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## Further reading

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| <p><b>E-learning resource (H5P): Interactive Book</b></p> <p>To supplement trainees' knowledge and skills, you have to offer them additional materials. Please indicate appropriate sources of information in languages accessible to learners. Arrange the sources for each lesson separately.</p> <p><b>For example:</b></p> <p><b>Lesson 1:</b></p> <p><a href="https://www.oneplanetnetwork.org/">https://www.oneplanetnetwork.org/</a></p> <p><a href="https://www.unwto.org/">https://www.unwto.org/</a></p> <p><a href="https://united-against-waste.at/">https://united-against-waste.at/</a></p> <p><b>Lesson 2:</b></p> <p><a href="https://food.ec.europa.eu/system/files/2021-04/fw_lib_fwm_unece_quantification_2019.pdf">https://food.ec.europa.eu/system/files/2021-04/fw_lib_fwm_unece_quantification_2019.pdf</a></p> <p><a href="https://flwprotocol.org/">https://flwprotocol.org/</a></p> <p><a href="https://www.supercook.com/#/desktop">https://www.supercook.com/#/desktop</a></p> <p><b>Lesson 3:</b></p> <p><a href="https://www.oneplanetnetwork.org/knowledge-centre/resources/sustainable-food-manual-tourism-providers">https://www.oneplanetnetwork.org/knowledge-centre/resources/sustainable-food-manual-tourism-providers</a></p> <p><a href="https://ec.europa.eu/environment/emas/takeagreenstep/bemp.html">https://ec.europa.eu/environment/emas/takeagreenstep/bemp.html</a></p> <p><a href="https://www.marseille-tourisme.com/en/travel-trade/news-for-tourism-professionals/good-practice-guides-for-a-sustainable-transition-for-tourism-professionals/">https://www.marseille-tourisme.com/en/travel-trade/news-for-tourism-professionals/good-practice-guides-for-a-sustainable-transition-for-tourism-professionals/</a></p> |
|---|

## Bibliographical references

|  |
|--|
| <p><b>E-learning resource (H5P): Interactive Book</b></p> <p>Please indicate the Bibliographical references that you used in developing the learning content.</p> <p><b>For example:</b></p> |
|--|

<https://eur-lex.europa.eu/homepage.html>

[https://commission.europa.eu/index\\_en](https://commission.europa.eu/index_en)

[https://environment.ec.europa.eu/index\\_en](https://environment.ec.europa.eu/index_en)

<https://ec.europa.eu/eurostat/>

<https://www.lovefoodhatewaste.com/>

<https://stopfoodwaste.ie/>

<https://champions123.org/publications>

## Glossary

### E-learning resource (H5P) Interactive Book

List the main terms that are related to the lessons in the module. Give a brief description of each term.

**For example:**

|                         |   |
|-------------------------|---|
| <b>Eco-friendly</b>     | Not harmful to the environment.   |
| <b>Green management</b> | A virtuous management method, it transposes ecological approaches into the professional world. It includes all the actors in the structure, who are encouraged to adopt more responsible and sustainable behaviour. |
| <b>Greenwashing</b>     | The act of conveying to the public a distorted presentation of facts, in order to appear more socially and/or environmentally responsible.  |
| <b>Zero-waste</b>       | The conservation of all resources through responsible actions, without burning and without discharges into the soil, water or air that threaten the environment or human health.                                    |
| <b>Food waste</b>       | Refers to discarded food that was fit for consumption. Food waste occurs when food is sold to the consumer or in the home.  |
| <b>Food loss</b>        | Food lost in the food supply chain before reaching the consumer.  |
| <b>Trash cooking</b>    | Term used to promote the creation of dishes from the remains of one or more foods in order to make full use of the product.   |
| <b>Overproduction</b>   | Produce more products than needed to meet demand.   |

## Technical sheet 1

|                                     |   |
|-------------------------------------|---|
| E-learning resource (H5P)           | <b>Pdf file</b>   |
| Name of the technical specification | <b>Reducing food waste</b>  |
| Aim                                 | The aim of this technical sheet is to describe the sequential steps that must be followed in order to reduce food waste in hospitality.   |
| Step by step implementation         | <p>In this section, you should describe the sequential steps for implementing this eco-practice. The steps must be logically connected.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. Analyse storage and preparation food process</li> <li>2. Analyse customers food consumption: how much food waste and what type of food is left</li> <li>3. Analyse the staff preparation and re-use offcuts habits</li> <li>4. Create conditions for the implementation of practices to reduce food waste</li> <li>5. Staff training</li> <li>6. Adapt menu planning and correct portion sizes</li> <li>7. Monitoring recycling and resource recovery</li> <li>8. Share practices with guests and highlight environmental benefit</li> </ol> |
| Link to good practices/ Example     | <p>In this section, indicate the name of specific practical examples of Outcome 1 with which this technical sheet corresponds.</p> <p><b>For example:</b><br/>Reducing food waste</p>   |
| Link to EU green priorities         | <p>In this section, indicate specific EU priorities with which this technical sheet corresponds. Provide an internet link.</p> <p><b>For example:</b><br/> <a href="https://food.ec.europa.eu/safety/food-waste/eu-actions-against-food-waste_en">https://food.ec.europa.eu/safety/food-waste/eu-actions-against-food-waste_en</a><br/> <a href="https://zerowasteurope.eu/">https://zerowasteurope.eu/</a><br/> <a href="https://eur-lex.europa.eu/resource.html?uri=cellar:50edd1fd-01ec-11e4-831f-01aa75ed71a1.0001.01/DOC_1&amp;format=PDF">https://eur-lex.europa.eu/resource.html?uri=cellar:50edd1fd-01ec-11e4-831f-01aa75ed71a1.0001.01/DOC_1&amp;format=PDF</a></p>  |

## Technical sheet 2

|  |   |
|--|---|
| <b>E-learning resource (H5P)</b>           | <b>Pdf file</b>   |
| <b>Name of the technical specification</b> | <b>Art of trash cooking</b>   |
| <b>Aim</b>                                 | <p>The aim of this sheet is to describe the sequential steps to be followed to create dishes from the waste of one or more products in a real working environment.</p>  |
| <b>Step by step implementation</b>         | <p>In this section, you should describe the sequential steps for implementing this practice. The steps must be logically connected.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. Analyse the current state of the waste thrown away in the restaurant</li> <li>2. Analyse economic benefits of this practice, including savings in raw materials.</li> <li>3. Survey of restaurant guests' attitudes</li> <li>4. Survey of staff attitudes</li> <li>5. Create conditions for the implementation of practices to reduce good waste</li> <li>6. Adapt preparations to the use of food “scraps”</li> <li>7. Enhance good knowledge of ingredients and combinations</li> <li>8. Staff training</li> <li>9. Promote the culture of “throw nothing away” with guests</li> </ol> |
| <b>Link to good practices/ Example</b>     | <p>In this section, indicate the name of specific practical examples of Outcome 1 with which this technical sheet corresponds.</p> <p><b>For example:</b><br/>Trash cooking</p>   |
| <b>Link to EU green priorities</b>         | <p>In this section, indicate specific EU priorities with which this technical sheet corresponds. Provide an internet link.</p> <p><b>For example:</b><br/> <a href="https://www.eu-fusions.org/phocadownload/Publications/FUSIONS%20Food%20Waste%20Quantification%20Manual.pdf">https://www.eu-fusions.org/phocadownload/Publications/FUSIONS%20Food%20Waste%20Quantification%20Manual.pdf</a><br/> <a href="https://feedbackglobal.org/wp-content/uploads/2022/09/Feedback-EU-2022-No-Time-To-Waste-report.pdf">https://feedbackglobal.org/wp-content/uploads/2022/09/Feedback-EU-2022-No-Time-To-Waste-report.pdf</a></p>   |



## Technical sheet 3

|  |   |
|--|---|
| <b>E-learning resource (H5P)</b>           | <b>Pdf file</b>   |
| <b>Name of the technical specification</b> | Waste reduction and separation measures   |
| <b>Aim</b>                                 | The purpose of this sheet is to describe the sequential steps that must be followed in order to implement the eco-practice of waste reduction and separation measures in hotels.  |
| <b>Step by step implementation</b>         | <p>In this section, you should describe the sequential steps for implementing this eco-practice. The steps must be connected.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. Analyse periodic production of waste in the hotel</li> <li>2. Analyse periodic water and energy consumption</li> <li>3. Think about new eco-practices</li> <li>4. Analyse feasibility of each project</li> <li>5. Survey of hotel guests' attitudes</li> <li>6. Creating conditions for implementing zero-waste policy</li> <li>7. Increase separate waste collection and reduce water and energy consumption</li> <li>8. Reduce amount of rubbish</li> <li>9. Staff training</li> <li>10. Make customers aware of responsible waste management and the use of resources</li> <li>11. Elaboration of information boards</li> <li>12. Promote ecological practices</li> </ol> |
| <b>Link to good practices/ Example</b>     | <p>In this section, indicate the name of specific practical examples of Outcome 1 with which this technical sheet corresponds.</p> <p><b>For example:</b><br/>Rhino Alpine Resort</p>   |
| <b>Link to EU green priorities</b>         | <p>In this section, indicate specific EU priorities with which this technical sheet corresponds. Provide an internet link.</p> <p><b>For example:</b><br/> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32008L0098&amp;from=IT">https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32008L0098&amp;from=IT</a><br/> <a href="https://ewwr.eu/project/">https://ewwr.eu/project/</a><br/> <a href="http://publications.europa.eu/resource/cellar/bb444830-94bf-11ea-aac4-01aa75ed71a1.0001.01/DOC_1">http://publications.europa.eu/resource/cellar/bb444830-94bf-11ea-aac4-01aa75ed71a1.0001.01/DOC_1</a></p>  |

### 9.3. Module 3. Production

|  |  |
|--|--|
| <b>E-learning resource (H5P)</b>             | Interactive Book   |
| <b>Aim of the module</b>                     | This module aims to improve the learners' knowledge and skills on zero waste during production, using the products left after production.  |
| <b>Key points of the module</b>              | The main key points of this module are:<br>Lesson 1: Sort, recycle, compost and reuse<br>Lesson 2: Packaging<br>Lesson 3 : Consumption   |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience in hotel and catering</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom up learning from the field trough examples</li> </ul>   |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>1. Develop an awareness of eco-responsible behavior in catering production</li> <li>2. Understanding what can be sorted of the waste left after production</li> <li>3. Understanding and learning what can be recycled and used for a different purpose</li> <li>4. Attraction of producing or growing materials that will be used during production in catering.</li> </ol>  |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>- Apply different waste management techniques to handle waste left after production</li> <li>- Identify the best packaging option for products</li> <li>- Analyze current consumption habits and how it can be altered to reduce consumption in the catering and hospitality sector</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>- Use the knowledge acquired in waste management techniques in the catering and hospitality sector</li> <li>- Perform in a manner that would reduce waste</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>- Integrate various zero waste ideas into existing work habits</li> <li>- Spread awareness on the importance of sustainability</li> </ul> |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li>X Literacy</li> <li><input type="checkbox"/> Multilingualism</li> <li><input type="checkbox"/> Numerical, scientific and engineering skills</li> <li><input type="checkbox"/> Digital and technology-based competences</li> <li>X Interpersonal skills and the ability to adopt new competences</li> <li>X Active citizenship</li> <li><input type="checkbox"/> Entrepreneurship</li> <li><input type="checkbox"/> Cultural awareness and expression</li> </ul>   |

|                         |  |
|-------------------------|--|
|                         | X Green skills   |
| <b>Grade/VET group</b>  | <ul style="list-style-type: none"> <li>- Students – 11 – 12 grades in VET School</li> <li>- Students – 9-12 grades in VET School with dual form</li> <li>- Trainees in VET centers</li> <li>- Trainees (new employees, reassigned employees, workers) included in WBL</li> </ul> |
| <b>Technical sheets</b> | <ol style="list-style-type: none"> <li>1. Sort, recycle, compost and reuse</li> <li>2. Packaging</li> <li>3. Consumption</li> </ol>  |

## Lesson 1. Sort, recycle, compost and reuse

### 1.1. Aim, Learning objectives and outcomes

|  |  |
|--|--|
| <b>E-learning resource (H5P)</b>             | Interactive book   |
| <b>Aim of the lesson</b>                     | Learning how to sort waste, identify what can no more be reused. Learn how to use waste and compost it and use it as a fertilizer to grow vegetables and other goods if needed.  |
| <b>Key points of the lesson</b>              | <ol style="list-style-type: none"> <li>1. Ways that waste can be sorted</li> <li>2. what can be recycled</li> <li>3. what is composting and how to do it</li> <li>4. single use items, what can be reused</li> </ol>   |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience in hotel and catering</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom up learning from the field through examples</li> </ul>  |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>1. Learning and understanding what can be sorted of the waste left after production</li> <li>2. Understanding and learning what can be recycled and used for a different purpose</li> <li>3. Understanding the importance of composting and how it can be done in the catering and hospitality sector</li> <li>4. Learning what single use items can be replaced and what reusable items can be used instead</li> </ol>   |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>- Identify materials that can be composted and recycled</li> <li>- identify items that can be replaced with multiple use items</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>- use the waste management knowledge gained</li> <li>- operate in a way that would produce less waste</li> </ul> <p>Competences:</p> <ul style="list-style-type: none"> <li>- Integrate zero waste ideas into the catering and hospitality sector</li> <li>- Discuss on ways that waste can be reduced</li> </ul> |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilingualism</li> <li><input type="checkbox"/> Numerical, scientific and engineering skills</li> <li><input type="checkbox"/> Digital and technology-based competences</li> <li>X Interpersonal skills and the ability to adopt new competences</li> <li>X Active citizenship</li> <li>X Entrepreneurship</li> <li>X Cultural awareness and expression</li> <li>X Green skills</li> </ul>  |

|                          |   |
|--------------------------|---|
| <b>Subjects involved</b> | <ul style="list-style-type: none"> <li>- Waste management</li> <li>- Composting</li> <li>- Recycling</li> <li>- Catering sector</li> <li>- hospitality sector</li> </ul>  |
| <b>Methodology</b>       | <ul style="list-style-type: none"> <li>- Online training</li> <li>- From practice to theory</li> <li>- independent-work – viewing video presentations, independent reading, self-reflection, exercise, self-assessment, independent-work with technical sheet.</li> <li>- Formal education in VET school and VET centers</li> <li>- WBL</li> <li>- Dual form education</li> </ul> <p>Tools:</p> <ul style="list-style-type: none"> <li>- Video</li> <li>- Case studies</li> <li>- Quizzes</li> <li>- Scrambled words</li> <li>- Test</li> </ul> |

## 1.2. Training delivery guidelines

|                                   |   |
|-----------------------------------|---|
|                                   | <b>Theory of the lesson 1</b>   |
| <b>E- learning resource (H5P)</b> | Interactive book  |
| <b>Introduction</b>               | <p>In this lesson first the main topic will be introduced. The main definitions will be explained to better understand the topic. The important of the topic should also be presented. Why is it important to implement these gestures into production.</p>   |
| <b>Main presentation</b>          | <p>First the main words should be defined. It should be explained in detail what is composting, sorting, recycling and what can be reused after production.</p> <p>The important of applying these methods should be highlighted. How working in such way benefits the environment and most importantly the company that uses these methods.</p> <p>Several options on what items can be used in the catering and hospitality sector should be presented that can be used multiple times during production.</p> <p>For example:</p> <p>It can be presented that the food left after production can be sorted and it can be evaluated what can be used in a different way after production. Food left can be sold or given away to people that are struggling and need help. Some food can be composted and used as fertilizer while growing vegetables, fruits and herbs. During the production process the tools used that are only for single use, can be</p> |

|  |  |
|--|--|
|  | exchanged for tools of multiple use, exchanging paper towels to towels that can be washed. |
|--|--|

|                                  | <b>EXERCISES and/or QUESTIONS FOR SELF-REFLECTION</b>   |
|----------------------------------|---|
| <b>E-learning resource (H5P)</b> | Multiple tools offered by HP5 can be used in developing exercise to test and improve the knowledge gained during the theoretical part of the lesson.<br>For example: <ul style="list-style-type: none"> <li>- Multiple choice questions</li> <li>- True or false statements</li> </ul>  |
| <b>Excercise</b>                 | 1-3 excersises should be created to improve and test the knowledge gained.<br>For example: <ul style="list-style-type: none"> <li>- Students need to match the words to their definition, to test how they understood the main words</li> <li>- Situations can be presented and options on how to solve or manage it would be best. Let the students pick the option that they think would be most fitting</li> </ul>   |
| <b>E-learning resource (H5P)</b> | Multiple tools offered by HP5 can be used in developing self-reflection tasks.  |
| <b>Self-reflection</b>           | In this section you have to write 1-3 task to supplement the learners' knowledge and skills.<br><br><b>For example:</b> <ol style="list-style-type: none"> <li>1. Study case – read the current national positions on waste management of catering sector<br/>For Lithuania:<br/><a href="https://vmvt.lt/maisto-sauga/verslui/sgp-tvarkymas/sgp-viesojo-maitinimo-imonese">https://vmvt.lt/maisto-sauga/verslui/sgp-tvarkymas/sgp-viesojo-maitinimo-imonese</a></li> </ol> |

|                                  | <b>Evaluation</b>  |
|----------------------------------|--|
| <b>E-learning resource (H5P)</b> | Interactive book   |
| <b>Evaluation elements</b>       | <ul style="list-style-type: none"> <li>- Knowledge in the main definitions fo the topic</li> <li>- Skills of analyzing situation when the presented concepts can be applied</li> <li>- Ability to successfully apply the best solutions to problems</li> <li>- Ability to differensiate what can be reused and what can not</li> </ul> |
| <b>E-learning resource (H5P)</b> | Test   |

**Evaluation tools**

In this section you have to write a self-assessment test.

The test should include 5 questions.

You can choose between a true/false test or a multiple choice test.

## Lesson 2. Packaging

### 2.1. Aim, Learning objectives and outcomes

|  |  |
|--|--|
| <b>E-learning resource (H5P)</b>             | Interactive book   |
| <b>Aim of the lesson</b>                     | Purpose of this lesson is to inform the students on the different packaging that can be used, to inform them of all of the possible options and show them ways that waste can be reduced.  |
| <b>Key points of the lesson</b>              | <ol style="list-style-type: none"> <li>1. Package damage to the environment</li> <li>2. Reducing packaging</li> <li>3. Reusable packaging</li> </ol>   |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience in hotel and catering</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom up learning from the field through examples</li> </ul>  |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>1. Understand the different material packaging that can be used</li> <li>2. Understand the importance of reducing the amount of packaging used in the sector</li> </ol>   |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>- Differentiate the different kind of packaging.</li> <li>- identify materials that are the least damaging for the environment</li> <li>- analyse the possibilities of reducing packaging</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>- Display knowledge of the importance of packaging used</li> <li>- Perform in a way that would least harm the environment</li> </ul> <p>Competences:</p> <ul style="list-style-type: none"> <li>- Discuss the ways that packaging can be reduced or exchanged to less harmful materials</li> </ul>   |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilingualism</li> <li><input checked="" type="checkbox"/> Numerical, scientific and engineering skills</li> <li><input type="checkbox"/> Digital and technology-based competences</li> <li><input checked="" type="checkbox"/> Interpersonal skills and the ability to adopt new competences</li> <li><input checked="" type="checkbox"/> Active citizenship</li> <li><input checked="" type="checkbox"/> Entrepreneurship</li> <li><input checked="" type="checkbox"/> Cultural awareness and expression</li> <li><input checked="" type="checkbox"/> Green skills</li> </ul> |
| <b>Subjects involved</b>                     | <ul style="list-style-type: none"> <li>- Catering sector</li> <li>- Hospitality sector</li> </ul>  |
| <b>Methodology</b>                           | <ul style="list-style-type: none"> <li>- Online training</li> <li>- From practice to theory</li> </ul>   |



|  |  |
|--|--|
|  | <ul style="list-style-type: none"> <li>- independent-work – viewing video presentations, independent reading, sel-reflection, excersise, self-assesment, independent-work with technical sheet.</li> <li>- Formal education in VET school and VET centers</li> <li>- WBL</li> <li>- Dual form education</li> </ul> <p>Tools:</p> <ul style="list-style-type: none"> <li>- Video</li> <li>- Case studies</li> <li>- Quizzes</li> <li>- Scrambled words</li> <li>- Test</li> </ul> |
|--|--|

## 2.2. Training delivery guidelines

|                                  |   |
|----------------------------------|---|
|                                  | <b>Theory of the lesson 2</b>   |
| <b>E-learning resource (H5P)</b> | Interactive book  |
| <b>Introduction</b>              | In this lesson first the main topic will be introduced. The main definitions will be explained to better understand the topic. The important of the topic should also be presented. Why is it important to implement these gestures into production.  |
| <b>Main presentation</b>         | <p>First the main topic should be clearly defined, what will be talked about in the lesson.</p> <p>Second, the different types of packaging should be presented and their affect on the environment.</p> <p>Next several options on how to reduce packaging should be presented. How to reduce packaging when purchasing supplies that are needed for production.</p> <p>And lastly several eco friendly gestures and packaging should be presented. Packaging the degrades faster, is from recycled materials or reusable packaging.</p> |

|                                  |  |
|----------------------------------|--|
|                                  | <b>EXERCISES and/or QUESTIONS FOR SELF-REFLECTION</b>  |
| <b>E-learning resource (H5P)</b> | <p>Multiple tools offered by HP5 can be used in developing exercises to test and improve the knowledge gained during the theoretical part of the lesson.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>- Multiple choice questions</li> <li>- True or false statements</li> </ul> |
| <b>Exercise</b>                  | <p>1-3 exercises should be created to improve and test the knowledge gained.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>- Students need to match the words to their definition, to test how they understood the main definitions</li> </ul>                                    |

|                           |  |
|---------------------------|--|
|                           | <ul style="list-style-type: none"> <li>- Situations can be presented and options on how to solve or manage it would be best. Let the students pick the option that they think would be most fitting</li> </ul>   |
| E-learning resource (H5P) | Multiple tools offered by HP5 can be used in developing self-reflection tasks.   |
| Self-reflection           | <p>In this section you have to write 1-3 task to supplement the learners' knowledge and skills.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. Study case – read the current national positions on packaging reduction<br/>For Lithuania:<br/><a href="https://www.vaatc.lt/specialiste-pakuociu-neisvengsime-taciau-galime-sumazinti-ju-kiekus/">https://www.vaatc.lt/specialiste-pakuociu-neisvengsime-taciau-galime-sumazinti-ju-kiekus/</a></li> <li>2. Video on sustainable packaging:<br/><a href="https://www.youtube.com/watch?v=lwYwKQcmXhY">https://www.youtube.com/watch?v=lwYwKQcmXhY</a></li> </ol> |

|                           |  |
|---------------------------|--|
|                           | <b>Evaluation</b>  |
| E-learning resource (H5P) | Interactive book   |
| Evaluation elements       | <ul style="list-style-type: none"> <li>- Understanding of the different types of packaging</li> <li>- Ability to differentiate different packaging materials</li> <li>- Awareness of the impact that different packaging has on the environment</li> <li>- Skills to reduce the amount of single use packaging used in production</li> </ul> |
| E-learning resource (H5P) | Test   |
| Evaluation tools          | Multiple tools offered by HP5 can be used in developing self-reflection tasks.   |

## Lesson 3. Consumption

### 3.1. Aim, Learning objectives and outcomes

|  |   |
|--|---|
| <b>E-learning resource (H5P)</b>             | Interactive book  |
| <b>Aim of the lesson</b>                     | In this lesson, the learners will learn the benefits of reducing consumption during production.   |
| <b>Key points of the lesson</b>              | <ol style="list-style-type: none"> <li>1. Importance of reducing consumption during production</li> <li>2. Different ways to reduce consumption during production</li> </ol>  |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience in hotel and catering</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom up learning from the field through examples</li> </ul>   |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>1. Ability to develop awareness on importance of reducing consumption</li> <li>2. Ability to develop new habits that would help to reduce consumption</li> </ol>   |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>- Apply habits that reduce consumption</li> <li>- Analyse in what ways consumption can be reduced</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>- Adapt to different work habits</li> <li>- Ability to analyse work habits, ability to analyse consumption.</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>- Discuss new ways to reduce consumption</li> <li>- Practice work with minimal consumption</li> </ul>  |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilingualism</li> <li><input checked="" type="checkbox"/> Numerical, scientific, and engineering skills</li> <li><input type="checkbox"/> Digital and technology-based competences</li> <li><input checked="" type="checkbox"/> Interpersonal skills and the ability to adopt new competences</li> <li><input checked="" type="checkbox"/> Active citizenship</li> <li><input checked="" type="checkbox"/> Entrepreneurship</li> <li><input checked="" type="checkbox"/> Cultural awareness and expression</li> <li><input checked="" type="checkbox"/> Green skills</li> </ul> |
| <b>Subjects involved</b>                     | <ul style="list-style-type: none"> <li>- Catering sector</li> <li>- Hospitality sector</li> </ul>   |
| <b>Methodology</b>                           | <ul style="list-style-type: none"> <li>- Online training</li> <li>- From practice to theory</li> <li>- independent-work – viewing video presentations, independent reading, self-reflection, exercise, self-assessment, independent-work with technical sheet.</li> <li>- Formal education in VET school and VET centers</li> </ul>   |

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|  | <ul style="list-style-type: none"> <li>- WBL</li> <li>- Dual form education</li> </ul> <p>Tools:</p> <ul style="list-style-type: none"> <li>- Video</li> <li>- Case studies</li> <li>- Quizzes</li> <li>- Scrambled words</li> <li>- Test</li> </ul> |
|--|--|

### 3.2. Training delivery guidelines

|                                  |   |
|----------------------------------|---|
|                                  | Theory of the lesson 1  |
| <b>E-learning resource (H5P)</b> | Interactive book  |
| <b>Introduction</b>              | <p>In this lesson the topic should be introduced shortly. The key points of the lesson should be introduced.</p> <p>To make the lesson more interesting a short video of 2-3 minutes could be shown, or some photos might be added to make the lesson more interactive.</p>   |
| <b>Main presentation</b>         | <p>In this lesson main definitions should be explained.</p> <p>The main lesson should introduce different ways that consumption might be reduced, different work habits to be implemented in the existing ones to help reach the goal.</p> <p>It also can be included how some products that are needed for the catering sector can be grown locally if there are possibilities for that, that way reducing the amount of products purchased.</p> <p><i>First the main term will be explained, what is consumption. Later it will be presented what kind of consumption can be reduced in the catering and hospitality sector. Work habits will be presented that can help a company reduce electricity expenses, later it will be talked how purchasing certain products can be grown, like herbs and some vegetables. Growing products naturally reduces purchasing and transportation because there is no need for that.</i></p> |

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|                                   | EXERCISES and/or QUESTIONS FOR SELF-REFLECTION   |
| <b>E-learning resources (H5P)</b> | <p>Multiple tools offered by H5P can be used in developing exercises to test and improve the knowledge gained during the theoretical part of the lesson.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>- Multiple choice questions</li> <li>- True or false statements</li> </ul> |
| <b>Exercise</b>                   | 1-3 exercises should be created to improve and test the knowledge gained.  |

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|                                  | <p>For example:</p> <ul style="list-style-type: none"> <li>- Students need to match the words to their definition, to test how they understood the main definitions</li> <li>- Situations can be presented and options on how to solve or manage it would be best. Let the students pick the option that they think would be most fitting</li> </ul>   |
| <b>E-learning resource (H5P)</b> | Multiple tools offered by H5P can be used in developing self-reflection tasks.   |
| <b>Self-reflection</b>           | <p>In this section you have to write 1-3 tasks to supplement the learners' knowledge and skills.</p> <p>For example:</p> <p>Study case – Explore the current national policies on consumption and consumption reduction</p> <p>For Lithuania:</p> <p><a href="https://enmin.lrv.lt/lt/naujienos/pritarta-elektros-vartojimo-mazinima-ir-solidarumo-inasa-numatancioms-pataisoms">https://enmin.lrv.lt/lt/naujienos/pritarta-elektros-vartojimo-mazinima-ir-solidarumo-inasa-numatancioms-pataisoms</a></p> |

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|                                  | <b>Evaluation</b>   |
| <b>E-learning resource (H5P)</b> | Interactive book  |
| <b>Evaluation elements</b>       | <ul style="list-style-type: none"> <li>- Awareness on the importance of reducing consumption</li> <li>- Knowledge on the different areas that consumption may be reduced</li> <li>- Knowledge on ways that consumption can be reduced</li> <li>- Skills to adapt to new working habits that help to reduce consumption</li> </ul> |
| <b>E-learning resource (H5P)</b> | Test  |
| <b>Evaluation tools</b>          | Multiple tools offered by HP5 can be used in developing self-reflection tasks.  |

## Further reading

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| E-learning resource (H5P). Interactive book  |
| To supplement trainees' knowledge and skills, you have to offer them additional materials. Please indicate appropriate sources of information in languages accessible to learners. Arrange the sources for each lesson separately. |
| <b>For example:</b>  |
| <i>Lesson 1</i>  |
| <a href="https://sciencing.com/list-materials-recyclable-8073576.html">https://sciencing.com/list-materials-recyclable-8073576.html</a>  |
| <a href="https://www.toadandco.com/blogs/blog/20-things-you-can-reuse-at-home">https://www.toadandco.com/blogs/blog/20-things-you-can-reuse-at-home</a>  |
| <a href="https://www.epa.gov/recycle/composting-home">https://www.epa.gov/recycle/composting-home</a>  |
| <i>Lesson 2</i>  |

|   |
|---|
| <a href="https://www.ecoandbeyond.co">https://www.ecoandbeyond.co</a>   |
| <a href="https://foodprint.org/issues/the-environmental-impact-of-food-packaging/">https://foodprint.org/issues/the-environmental-impact-of-food-packaging/</a>   |
| <a href="https://www.assemblies.com/food-packaging-9-types-and-differences-explained/">https://www.assemblies.com/food-packaging-9-types-and-differences-explained/</a>                                   |
| <i>Lesson 3</i>   |
| <a href="https://www.climatecolab.org/wiki/Reducing+consumption">https://www.climatecolab.org/wiki/Reducing+consumption</a>   |
| <a href="https://www.fundingoptions.com/blog/education/reducing-energy-at-workplace">https://www.fundingoptions.com/blog/education/reducing-energy-at-workplace</a>                                       |
| <a href="https://www.webstaurantstore.com/blog/1744/growing-a-culinary-garden-for-your-restaurant.html">https://www.webstaurantstore.com/blog/1744/growing-a-culinary-garden-for-your-restaurant.html</a> |

## Bibliographical references

|   |                  |
|---|------------------|
| E-learning resource (H5P)   | Interactive book |
| Please indicate the Bibliographical references that you used in developing the learning content.  |                  |
| <b>For example:</b>   |                  |
| <a href="https://www.sciencedirect.com/topics/earth-and-planetary-sciences/composting">https://www.sciencedirect.com/topics/earth-and-planetary-sciences/composting</a> |                  |
|   |                  |
|   |                  |

## Glossary

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|--|---|
| <b>E-learning resources (H5P)</b>  | Interactive book  |
| List the main terms that are related to the lesson in the module. Give a brief description of each term. |   |
| <b>For example:</b>  |   |
| <b>Waste reduction</b>   | the practice of using less material and energy to minimize waste generation and preserve natural resources.   |
| <b>Compost</b>   | Compost is a mixture of ingredients used as plant fertilizer and to improve soil's physical, chemical and biological properties. It is commonly prepared by decomposing plant, food waste |
|  |   |

## Technical sheet 1

|  |  |
|--|--|
| <b>E-learning resource (H5P)</b>           | <b>Pdf file</b>  |
| <b>Name of the technical specification</b> | Sort, recycle, compost and reuse   |
| <b>Aim</b>                                 | The aim of this technical sheet is to describe the sequential steps that must be followed in order to implement the practice of sorting, recycling, composting and reusing in hospitality and catering sector.   |
| <b>Step by step implementation</b>         | <p>In this section, you should describe the sequential steps for implementing the practice. The steps must be logically connected.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. Analyze all of the possible waste management practices</li> <li>2. Survey which of the practices could be implemented in the selected sector</li> <li>3. Discuss possibilities with staff</li> <li>4. Create conditions to implement the practices</li> <li>5. Train the staff</li> <li>6. Share the benefits of the practices to the environment and the establishment</li> </ol> |
| <b>Link to good practices/ Example</b>     | <p>In this section, indicate the name of specific practical examples of outcome 1 with which this technical sheet corresponds.</p> <p><b>For example:</b></p> <p>Zero food waste and support for students</p> <p>The recycler</p>  |
| <b>Link to EU green priorities</b>         | <p>In this section, indicate specific EU Priorities with which this technical sheet corresponds. Provide an internet link</p> <p><b>For example:</b></p> <p><a href="https://environment.ec.europa.eu/topics/waste-and-recycling_en">https://environment.ec.europa.eu/topics/waste-and-recycling_en</a></p>  |

## Technical sheet 2

|  |                  |
|--|------------------|
| <b>E-learning resource (H5P)</b>           | <b>Pdf file</b>  |
| <b>Name of the technical specification</b> | <b>Packaging</b> |

|  |  |
|--|--|
| <b>Aim</b>                             | The aim of this technical sheet is to describe the sequential steps that must be followed in order to implement the practice of eco-friendly packaging in hospitality and catering sector.   |
| <b>Step by step implementation</b>     | <p>In this section, you should describe the sequential steps for implementing the practice. The steps must be logically connected.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. Analyze the packaging used in the catering sector</li> <li>2. Survey the possibilities to reduce and change packaging</li> <li>3. Discuss the possibilities with staff</li> <li>4. Select the best practices and type of packaging to be used</li> <li>5. Share the benefits for the environment of implementing the practice</li> </ol> |
| <b>Link to good practices/ Example</b> | <p>In this section, indicate the name of specific practical examples of outcome 1 with which this technical sheet corresponds.</p> <p><b>For example:</b><br/>Becoming a zero waste caterer</p>  |
| <b>Link to EU green priorities</b>     | <p>In this section, indicate specific EU Priorities with which this technical sheet corresponds. Provide an internet link</p> <p><b>For example:</b><br/><a href="https://environment.ec.europa.eu/topics/waste-and-recycling_en">https://environment.ec.europa.eu/topics/waste-and-recycling_en</a><br/><a href="https://environment.ec.europa.eu/topics/plastics_en">https://environment.ec.europa.eu/topics/plastics_en</a></p>   |

### Technical sheet 3

|  |  |
|--|--|
| <b>E-learning resource (H5P)</b>           | <b>Pdf file</b>  |
| <b>Name of the technical specification</b> | <b>Consumption</b>   |
| <b>Aim</b>                                 | The aim of this technical sheet is to describe the sequential steps that must be followed in order to implement the practice of reducing consumption in hospitality and catering sector.   |
| <b>Step by step implementation</b>         | <p>In this section, you should describe the sequential steps for implementing the practice. The steps must be logically connected.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. Analyze the current work habits and their consumption</li> </ol> |



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|---|---|
|   | <ol style="list-style-type: none"> <li>2. Survey what can be changed to reduce electricity consumption</li> <li>3. Analyze what can be done to reduce purchasing and product consumption</li> <li>4. Discuss with staff the possibilities to implement new working habits</li> <li>5. Train the staff</li> <li>6. Share the benefits to the environment of implementing new working habits to reduce consumption</li> </ol> |
| <p><b>Link to good practices/<br/>Example</b></p> | <p>In this section, indicate the name of specific practical examples of outcome 1 with which this technical sheet corresponds.</p> <p><b>For example:</b><br/>An eco-responsible chef</p>   |
| <p><b>Link to EU green priorities</b></p>         | <p>In this section, indicate specific EU Priorities with which this technical sheet corresponds. Provide an internet link</p> <p>For example:<br/> <a href="https://environment.ec.europa.eu/topics/urban-environment_en">https://environment.ec.europa.eu/topics/urban-environment_en</a><br/> <a href="https://environment.ec.europa.eu/topics/water_en">https://environment.ec.europa.eu/topics/water_en</a></p>         |

## 9.4. Module 4. Service

| E-learning resource (H5P)                    | Interactive Book  |
|--|---|
| <b>Aim of the module</b>                     | This module aims to develop and improve learners' knowledge and skills regarding zero waste in hospitality and catering services. In addition, it aims to shape environmental behaviour and change working habits in hospitality and catering.  |
| <b>Key points of the module</b>              | The main key points of this module are:<br>Lesson 1. Laundry re-use programs and laundry minimization<br>Lesson 2. Too good to Go<br>Lesson 3. Reducing single use plastics at a catering event   |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience in hotel and catering</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom up learning from the field through examples</li> </ul>   |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>1. Develop an awareness of eco-responsible behavior in hotel and catering services</li> <li>2. Understanding of the importance of eco practices for the quality of hotel and catering services</li> <li>3. Experience a “real life” experience in the hospitality industry</li> <li>4. Attraction of guests involvement in “zero waste” in hotel and catering services</li> </ol>  |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>- describe different eco practises applicable in hotel and catering services</li> <li>- recommend specific eco practises depending on the needs</li> <li>- apply eco practises in hotel and catering services</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>- adapt eco practises in hotel and catering services</li> <li>- demonstrate different eco practises in hotel and catering services</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>- discuss the importance of eco practices for the quality of hotel and catering services</li> <li>- awareness of eco-responsible behavior in hotel and catering services</li> </ul> |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilinguism</li> <li><input type="checkbox"/> Numerical, scientific and engineering skills</li> <li>X Digital and technology-based competences</li> <li>X Interpersonal skills and the ability to adopt new competences</li> <li>X Active citizenship</li> <li>X Entrepreneurship</li> <li><input type="checkbox"/> Cultural awareness and expression</li> </ul>   |

|                         |  |
|-------------------------|--|
|                         | X Green skills   |
| <b>Grade/VET group</b>  | <ul style="list-style-type: none"> <li>- Students – 11 – 12 grades in VET School</li> <li>- Students – 9-12 grades in VET School with dual form</li> <li>- Trainees in VET centers</li> <li>- Trainees (new employees, reassigned employees, workers) included in WBL</li> </ul> |
| <b>Technical sheets</b> | <ol style="list-style-type: none"> <li>1. Laundry re-use programs and laundry minimization</li> <li>2. The good to Go</li> <li>3. Reducing single use plastics at a catering event</li> </ol>  |

## Lesson 1. Laundry re-use programs and laundry minimization

### 1.1. Aim, Learning objectives and outcomes

| <b>E-learning resource (H5P)</b>             | <b>Interactive Book</b>  |
|--|--|
| <b>Aim of the lesson</b>                     | The aim of this lesson is to familiarize the trainees with an eco-practice to reduce laundry in hotel service. In addition, the lesson will raise awareness of opportunities to reduce water, energy and chemical usage in laundry. The lesson will encourage eco behavior and change of daily habits.   |
| <b>Key points of the lesson</b>              | <ol style="list-style-type: none"> <li>1. Analysis of the laundry process in the hotel</li> <li>2. Survey of guests' attitudes towards implementing an eco-practice to reduce laundry</li> <li>3. Creation of conditions for implementation of the practice</li> </ol>   |
| <b>Main Learning objectives</b>              | <ol style="list-style-type: none"> <li>1. «Zero-Waste» conscience in hotel service</li> <li>2. Preparation for ecological change and change of habits</li> <li>3. Bottom up learning from the field trough examples</li> <li>4. Attraction of guests involvement in “zero waste” in hotel and catering services</li> </ol>   |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>1. Understanding of reduced water and energy consumption, as well as reduced chemical use</li> <li>2. Attracting of guests involvement in “zero waste” in hotel</li> <li>3. Develop an awareness of eco-responsible behavior in hotel and catering services</li> </ol>  |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>- describe different eco practises for laundry minimization</li> <li>- recommend laundry minimization depending on the needs of the hotel</li> <li>- apply laundry minimization in hotel services</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>- adapt laundry minimization in hotel services</li> <li>- demonstrate laundry minimization in hotel services</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>- discuss the importance of laundry minimization for the quality of hotel services</li> <li>- awareness of eco-responsible behavior in hotel services</li> </ul> |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilingualism</li> <li><input type="checkbox"/> Numerical, scientific and engineering skills</li> <li><input checked="" type="checkbox"/> Digital and technology-based competences</li> <li><input checked="" type="checkbox"/> Interpersonal skills and the ability to adopt new competences</li> <li><input checked="" type="checkbox"/> Active citizenship</li> </ul>  |

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|                          | <ul style="list-style-type: none"> <li>X Entrepreneurship</li> <li><input type="checkbox"/> Cultural awareness and expression</li> <li>X Green skills</li> </ul>   |
| <b>Subjects involved</b> | <ul style="list-style-type: none"> <li>- Management in the hospitality industry</li> <li>- Service in a laundry division</li> <li>- House keeping</li> <li>- Hospitality in tourism</li> </ul>   |
| <b>Methodology</b>       | <ul style="list-style-type: none"> <li>- online training</li> <li>- from practice to theory</li> <li>- self-work – viewing video demonstrations, self-reading, self-reflection; self-exercise; self-assessment; self-work with technical sheets</li> <li>- formal education in VET schools and VET centers</li> <li>- WBL</li> <li>- dual form of education</li> </ul> <p>Tools:</p> <ul style="list-style-type: none"> <li>- video</li> <li>- case studies</li> <li>- Quizzes</li> <li>- Scrambled words</li> <li>- Test</li> </ul> |

## 1.2. Training delivery guidelines

|                                  |  |
|----------------------------------|--|
|                                  | <b>Theory of the lesson 1</b>  |
| <b>E-learning resource (H5P)</b> | <b>Interactive Book</b>  |
| <b>Introduction</b>              | <p>In this section you have to write 2-3 sentences to introduce the topic of the lesson.</p> <p>To make it more attractive for learners, we suggest using a short introductory video - 2-3 minutes. The video must have an open use license. You can also use your own video if you have one.</p> <p><b>For example:</b><br/> <i>Washing bed linen and towels causes significant energy and water consumption. Practices can be implemented to reduce the environmental footprint of catering services.</i><br/> <i>An example of such an eco-practice is minimizing laundry.</i><br/> <i>An important element is raising the awareness of guests that this eco-practice leads to an increase in the quality of services in the hotel.</i></p> <p><i>Link for introduction video &gt;&gt;</i><br/> <a href="https://www.youtube.com/watch?v=l8IKmaSzUOc&amp;t=3s">https://www.youtube.com/watch?v=l8IKmaSzUOc&amp;t=3s</a></p> |
| <b>Main presentation</b>         | In this section you have to present detailed information about the topic of the lesson.  |

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|  | <p>The main presentation should have at least three key points that corresponding to the defined specific learning objectives of the lesson.</p> <p>The volume of the content depends on the topic of the lesson. But it should not be more than 2 pages.</p> <p>Important!</p> <p>Indicate in the description that there are self-tasks (self-exercises, self-reflection). Completing these tasks will help students to supplement new knowledge and further develop new skills.</p> <p><b>For example:</b><br/> <i>The lesson will focus on three key points.<br/> Once you become familiar with them, you will be able to implement eco-practices in hotel services.</i></p> <p><i>The key points are:</i></p> <ol style="list-style-type: none"> <li><i>1. Analysis of the laundry process in the hotel</i></li> <li><i>2. Survey of guests' attitudes towards implementing an eco-practice to reduce laundry</i></li> <li><i>3. Creation of conditions for implementation of the practice</i></li> </ol> <p><i>In order to consolidate the acquired new knowledge and develop the new skills, it is necessary to do exercises and self-reflection.</i></p> <p><i>(and a detailed description of each of the three key points follows...)</i></p> |
|--|---|

|                                  | <b>EXAMPLES FOR EXERCISES and/or QUESTIONS FOR SELF-REFLECTION</b>  |
|----------------------------------|---|
| <b>E-learning resource (H5P)</b> | <p>When creating self-exercises, you can use various tools that are offered by HP5.</p> <p>Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p><b>For example:</b><br/> <i>For the purposes of the lesson are suitable:</i></p> <ul style="list-style-type: none"> <li>- <i>Quizzes.</i></li> <li>- <i>Scrambled words</i></li> </ul> |
| <b>Exercise</b>                  | <p>In this section you have to write 1 - 3 exercises to supplement the learners' knowledge and skills.</p> <p><b>For example:</b><br/> <b>Exercise 1</b><br/> <i>Each student should create a survey of 5 questions. The words for the questions will be pre-given and scrambled. The learner must arrange the words into meaningful questions.</i></p>   |

|                                  |  |
|----------------------------------|--|
|                                  | <p><b>Exercise 2</b><br/>Each student should make an info board by himself. The words for the sign will be pre-given and scrambled. The learner must arrange the words into a meaningful text.</p>   |
| <b>E-learning resource (H5P)</b> | <p>When creating self-reflection tasks, you can use various tools that are offered by HP5.<br/>Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p><b>For example:</b><br/><i>Self – reading/watching by external links</i></p>  |
| <b>Self-reflection</b>           | <p>In this section you have to write 1 - 3 task to supplement the learners' knowledge and skills.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li><b>1. Study case</b> – reading of specific section of <i>Simple Water Saving Tips for Work</i> from Alliance for Water Efficiency - <a href="https://www.allianceforwaterefficiency.org/resources/topic/water-saving-tips-cii-water-use">https://www.allianceforwaterefficiency.org/resources/topic/water-saving-tips-cii-water-use</a></li> <li><b>2. Self-Calculation</b> of reduced costs according to the given example. The amount of laundry for each room is variable - it depends on the size of the bed, the size of the towels, the density of the fabrics, the number of items to be washed per room.<br/>Example:<br/>For a room with 75% occupancy and 4 kg of laundry per night, all year round, with costs per kg/wash of 0.50 EUR/kg, the annual price amounts to 479 EUR. These costs, for a hotel with one hundred rooms, can reach 47,900 euros/year, and the rate of reuse of textile items can reach 5%, i.e. savings of €2,400 per year could be generated.</li> <li><b>3. Interesting reading &gt;&gt;</b><br/>Need help in planning your water conservation programs? The Alliance for Water Efficiency (AWE) has a solution for you.<br/><u><a href="#">Conservation Tracking Tool</a></u></li> </ol> |

|                                  |   |
|----------------------------------|---|
|                                  | <b>Evaluation</b>   |
| <b>E-learning resource (H5P)</b> | Interactive Book  |
| <b>Evaluation elements</b>       | <ul style="list-style-type: none"> <li>- Knowledge about eco practices to minimize laundry;</li> <li>- Skills for analysis of the state of the laundry process in the hotel;</li> <li>- Skills for adapting eco practices to minimize laundry;</li> <li>- Awareness of the importance of implementing eco practices to minimize laundry;</li> </ul> |

|                                  |   |
|----------------------------------|---|
|                                  | - Awareness of eco-responsible behavior in hotel services   |
| <b>E-learning resource (H5P)</b> | Test  |
| <b>Evaluation tools</b>          | <p>In this section you have to write a self-assessment test. The test should include 5 questions. You can choose between a true/false test or a multiple choice test with three possible answers.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. <i>Does the eco-practice "minimize laundry" in hospitality services help to reduce water and electricity consumption?</i><br/>Yes/no</li> <li>2. <i>Is it important to analyze the hotel service before implementing eco-practices?</i><br/>Yes/no</li> <li>3. <i>Do hotel guests play an important role in implementing the eco-practice "minimize laundry"?</i><br/>Yes/no</li> <li>4. <i>Should staff be trained to implement eco practices in hotel service?</i><br/>Yes/no</li> <li>5. <i>Does the quality of service in the hotel increase when eco practices are applied?</i><br/>Yes/no</li> </ol> |



## Lesson 2. Too good to Go

### 2.1. Aim, Learning objectives and outcomes

| E-learning resource (H5P)                    | Interactive Book   |
|--|--|
| <b>Aim of the lesson</b>                     | The purpose of this lesson is to introduce learners to reducing food waste in the restaurant. Learners will learn about EU policies on reducing food waste, as well as simple eco-practices that can be implemented to reduce food waste and ready meals in the restaurant service.  |
| <b>Key points of the lesson</b>              | <ol style="list-style-type: none"> <li>1. Reducing food waste: the EU's response to a global challenge</li> <li>2. Eco practices to reduce food waste in restaurant service</li> </ol>   |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience in catering service</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom up learning from the field through examples</li> <li>➤ Experience a “real life” experience in the hospitality industry</li> </ul>   |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>1. Understanding of reduced food waste and EU policies on reducing food waste</li> <li>2. Develop an awareness of eco-responsible behaviour in a catering services and Attracting restaurant customers to food waste reduction policies</li> </ol>  |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>- describe different eco practises for food waste reduction</li> <li>- explain EU policies on reducing food waste</li> <li>- recommend food waste reduction practices depending on the needs of the restaurant</li> <li>- apply food waste reduction practices in restaurant services</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>- design food waste reduction practices depending on the needs of the restaurant</li> <li>- arrange food waste reduction practices in restaurant services</li> <li>- demonstrate food waste reduction practices in restaurant services</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>- discuss the importance of food waste reduction for mankind</li> <li>- awareness of eco-responsible behaviour in restaurant services</li> </ul> |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilingualism</li> <li><input type="checkbox"/> Numerical, scientific and engineering skills</li> <li>X Digital and technology-based competences</li> <li>X Interpersonal skills and the ability to adopt new competences</li> <li>X Active citizenship</li> <li>X Entrepreneurship</li> </ul>  |




|                          |   |
|--------------------------|---|
|                          | <input type="checkbox"/> Cultural awareness and expression<br><input checked="" type="checkbox"/> Green skills  |
| <b>Subjects involved</b> | Management in the restaurant industry<br>Restaurant service<br>Serving and bar tending<br>Economy of tourism  |
| <b>Methodology</b>       | <ul style="list-style-type: none"> <li>– online training</li> <li>– from practice to theory</li> <li>– self-work – viewing video demonstrations, self-reading, self-reflection; self-exercise; self-assessment; self-work with technical sheets</li> <li>– formal education in VET schools and VET centers</li> <li>– WBL</li> <li>– dual form of education</li> </ul> Tools: <ul style="list-style-type: none"> <li>– video</li> <li>– case studies</li> <li>– Quizzes</li> <li>– Scrambled words</li> <li>– Test</li> </ul> |

## 2.2.Training delivery guidelines

|                                  |   |
|----------------------------------|---|
|                                  | <b>Theory of the lesson 2</b>   |
| <b>E-learning resource (H5P)</b> | <b>Interactive Book</b>   |
| <b>Introduction</b>              | <p>In this section you have to write 2-3 sentences to introduce the topic of the lesson.<br/> To make it more attractive for learners, we suggest using a short introductory video - 2-3 minutes or photos. The video must have an open use license. You can also use your own video if you have one.</p> <p><b>For example:</b><br/> <i>Around 88 million tonnes of food is wasted every year in the EU - around 20% of all food produced, with associated costs estimated at €143 billion. We are looking for every opportunity to prevent food waste and to strengthen the sustainability of the food system.<br/> Every day we can do simple things to save food and money when grocery shopping.<br/> This tutorial will introduce an easy eco practice to save resources and food in restaurant service.</i></p> <p><i>Warm up photo</i><br/> <u><b>HOW TO REDUCE FOOD WASTE IN YOUR DAILY LIFE</b></u></p> |

|                                 |   |
|---------------------------------|---|
| <p><b>Main presentation</b></p> | <p>In this section you have to present detailed information about the topic of the lesson.</p> <p>The main presentation should have at least three key points that corresponding to the defined specific learning objectives of the lesson. The volume of the content depends on the topic of the lesson. But it should not be more than 2 pages.</p> <p>Important!</p> <p>Indicate in the description that there are self-tasks (self-exercises, self-reflection). Completing these tasks will help students to supplement new knowledge and further develop new skills.</p> <p><b>For example:</b></p> <p><i>Did you know that a one-third of the world's food is actually thrown away?</i></p> <p><i>The lesson will focus on two key points.</i></p> <p><i>Once you become familiar with them, you will be able to implement eco-practices in hotel services.</i></p> <p><i>The key points are:</i></p> <ol style="list-style-type: none"> <li><i>1. Reducing food waste: the EU's response to a global challenge</i></li> <li><i>2. Eco practices to reduce food waste in restaurant service</i></li> </ol> <p><i>Let's first familiarize ourselves with the EU's efforts on this global problem.</i></p> <p><i>(and a detailed description of the first key point follows...)</i></p> <p><i>In the second part of the lesson, you will learn about an easy eco-practice to reduce food waste, which is applied in restaurant service.</i></p> <p><i>(and a detailed description of the second key point follows...)</i></p> <p><i>In order to consolidate the acquired new knowledge and develop the new skills, it is necessary to do exercises and self-reflection.</i></p> |
|---------------------------------|---|

|   | <p><b>EXAMPLES FOR EXERCISES and/or QUESTIONS FOR SELF-REFLECTION</b></p>   |
|---|---|
| <p><b>E-learning resource (H5P)</b></p> | <p>When creating self-exercises, you can use various tools that are offered by HP5.</p> <p>Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p><b>For example:</b></p> <p><i>For the purposes of the lesson are suitable:</i></p> <ul style="list-style-type: none"> <li><i>- Drag and drop.</i></li> <li><i>- QR codes and Drag the Words</i></li> </ul> |
| <p><b>Exercise</b></p>                  | <p>In this section you have to write 1 - 3 exercises to supplement the learners' knowledge and skills.</p>  |

|   |   |
|---|---|
|   | <p><b>For example:</b><br/> <b>Exercise 1</b><br/> <i>Watch the video:</i><br/> <a href="https://audiovisual.ec.europa.eu/en/video/I-195618?&amp;lg=EN">https://audiovisual.ec.europa.eu/en/video/I-195618?&amp;lg=EN</a><br/> <i>Arrange in right order the Food loss and waste related actions proposed by EU.</i></p> <p><b>Exercise 2</b><br/> <i>Scan the QR codes and pull the correct words into the sentences.</i></p> <div style="display: flex; justify-content: space-around; align-items: center;">    </div> <ol style="list-style-type: none"> <li>1. <i>We ..... need to take action against food waste. (all)</i></li> <li>2. <i>Reducing ..... also means reducing greenhouse gas emissions. (food loss and waste)</i></li> <li>3. <i>Reducing food loss and waste can ..... for redistribution for those in need. (save nutritious food)</i></li> </ol> |
| <p><b>E-learning resource (H5P)</b></p> | <p>When creating self-reflection tasks, you can use various tools that are offered by HP5.<br/> Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p><b>For example:</b><br/> <i>Self – reading/watching by external links</i></p>   |
| <p><b>Self-reflection</b></p>           | <p>In this section you have to write 1 - 3 task to supplement the learners' knowledge and skills.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. <i>Study case</i><br/> <i>To explore the national policy for food conservation and reduction of food waste. To make sense of one's own country's contribution to EU efforts.</i><br/> <i>For Bulgaria:</i><br/> <a href="https://www.mzh.government.bg/media/filer_public/2021/10/15/natsionalna_programa_za_predotvrativane_i_namaliavane_na_zaqubata_na_khrani.docx">https://www.mzh.government.bg/media/filer_public/2021/10/15/natsionalna_programa_za_predotvrativane_i_namaliavane_na_zaqubata_na_khrani.docx</a></li> <li>2. <i>Watch the video:</i><br/> <a href="https://audiovisual.ec.europa.eu/en/video/I-180488?&amp;lg=INT">https://audiovisual.ec.europa.eu/en/video/I-180488?&amp;lg=INT</a><br/> <i>Consider the importance of reducing food waste.</i></li> </ol>  |

|                                  | <b>Evaluation</b>  |
|----------------------------------|--|
| <b>E-learning resource (H5P)</b> | Interactive Book   |
| <b>Evaluation elements</b>       | <ul style="list-style-type: none"> <li>- Knowledge about EU policies on reducing food waste</li> <li>- Knowledge about eco practices for reduction of food waste;</li> <li>- Skills for design food waste reduction practices depending on the needs of the restaurant</li> <li>- Skills for arrange and demonstrate food waste reduction practices in restaurant services</li> <li>- Awareness of the importance of food waste reduction for mankind;</li> <li>- Awareness of eco-responsible behaviour in restaurant services</li> </ul>   |
| <b>E-learning resource (H5P)</b> | Test   |
| <b>Evaluation tools</b>          | <p>In this section you have to write a self-assessment test. The test should include 5 questions. You can choose between a true/false test or a multiple choice test with three possible answers.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. <i>Is the EU making efforts to reduce food waste?</i><br/>Yes/no</li> <li>2. <i>Do all EU member states have policies in place to reduce food waste?</i><br/>Yes/no</li> <li>3. <i>Is 29 September the International Day of Awareness of Food Loss and Waste (IDAFLW)?</i><br/>Yes/no</li> <li>4. <i>Is it true that restaurants should implement policies to reduce food waste?</i><br/>Yes/no</li> <li>5. <i>Is it an eco-practice - to package and sell at a lower price cooked but unsold food in the restaurant?</i><br/>Yes/no</li> </ol> |

## Lesson 3 - Reducing single use plastics at a catering event

### 3.1. Aim, Learning objectives and outcomes

|  |  |
|--|--|
| <b>Aim of the lesson</b>                     | In this lesson, learners will learn about the harm of plastic and the need to take urgent action to reduce the use of single-use plastics in catering.   |
| <b>Key points of the lesson</b>              | <ol style="list-style-type: none"> <li>1. EU directive to stop the use of single-use plastics.</li> <li>2. Eco-practices to reduce the use of plastic in organizing catering events.</li> </ol>  |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience by not using plastic in the catering service</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom up learning from the field through examples</li> <li>➤ Understanding of the importance of eco practices for the quality of hotel and catering services</li> </ul>  |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>1. Understanding of reducing of plastic waste in catering services and EU policies on reducing of plastic waste</li> <li>2. Develop an awareness of eco-responsible behaviour in a catering services and Attracting restaurant customers to reduce the use of single-use plastics</li> </ol>  |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>- describe different eco practises for reducing of plastic waste in catering services</li> <li>- explain EU policies on reducing of plastic waste</li> <li>- Apply eco practises for reducing of single-use plastics in catering.</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>- design single-use plastics waste reduction practices depending on the needs of the catering event</li> <li>- arrange single-use plastics waste reduction practices in catering services</li> <li>- demonstrate single-use plastics waste reduction practices in catering services</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>- discuss the importance of single-use plastics waste reduction for mankind</li> <li>- awareness of eco-responsible behaviour in restaurant services</li> </ul> |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilingualism</li> <li><input type="checkbox"/> Numerical, scientific and engineering skills</li> <li>X Digital and technology-based competences</li> <li>X Interpersonal skills and the ability to adopt new competences</li> <li>X Active citizenship</li> <li>X Entrepreneurship</li> </ul>  |

|                          |   |
|--------------------------|---|
|                          | <input type="checkbox"/> Cultural awareness and expression<br><input checked="" type="checkbox"/> Green skills  |
| <b>Subjects involved</b> | Management in the restaurant industry<br>Restaurant service<br>Serving and bar tending<br>Economy of tourism  |
| <b>Methodology</b>       | <ul style="list-style-type: none"> <li>– online training</li> <li>– from practice to theory</li> <li>– self-work – viewing video demonstrations, self-reading, self-reflection; self-exercise; self-assessment; self-work with technical sheets</li> <li>– formal education in VET schools and VET centers</li> <li>– WBL</li> <li>– dual form of education</li> </ul> Tools: <ul style="list-style-type: none"> <li>– video</li> <li>– case studies</li> <li>– Quizzes</li> <li>– Scrambled words</li> <li>– Test</li> </ul> |

### 3.2. Training delivery guidelines

|                                  |  |
|----------------------------------|--|
|                                  | <b>Theory of the lesson 3</b>  |
| <b>E-learning resource (H5P)</b> | <b>Interactive Book</b>  |
| <b>Introduction</b>              | <p>In this section you have to write 2-3 sentences to introduce the topic of the lesson.</p> <p>To make it more attractive for learners, we suggest using a short introductory video - 2-3 minutes or photos or interesting testimonial. The video must have an open use license. You can also use your own video if you have one.</p> <p><b>For example:</b><br/> <i>Plastic has been all around us since the middle of the last century, when its mass production began. The new material is quickly establishing itself in everyday life as a good alternative to, for example, glass and porcelain.</i></p> <p><i>Gradually, plastic is becoming more and more preferred in various production fields due to its main advantages such as lightness, resistance and the ability to take various forms. Thus, in just a few decades, the production of plastic in the world reaches levels of 400 million tons per year.</i></p> |

|                                 |   |
|---------------------------------|---|
|                                 | <p><i>What are the benefits of reducing plastic waste?<br/>Today, however, we all know that plastic's durability is far from its biggest environmental advantage. Moreover, its recycling is extremely insufficient and reaches only 10%. Environmentalists are adamant that if the use of plastic products is not limited, they will literally "flood" us.</i></p>   |
| <p><b>Main presentation</b></p> | <p>In this section you have to present detailed information about the topic of the lesson.<br/>The main presentation should have at least three key points that corresponding to the defined specific learning objectives of the lesson.<br/>The volume of the content depends on the topic of the lesson. But it should not be more than 2 pages.</p> <p><b>Important!</b><br/>Indicate in the description that there are self-tasks (self-exercises, self-reflection). Completing these tasks will help students to supplement new knowledge and further develop new skills.</p> <p><b>For example:</b><br/><i>Why is plastic waste dangerous?<br/>The lesson will focus on two key points.<br/>Once you become familiar with them, you will be able to implement eco-practices in hotel services.</i></p> <p><i>The key points are:</i></p> <ol style="list-style-type: none"> <li><i>1. What does the EC do and What can we do in catering to contribute to EU efforts?</i></li> <li><i>2. Eco-practices to reduce the use of plastic in organizing catering events.</i></li> </ol> <p><i>(and a detailed description of the key points follows...)</i></p> <p><b>Important!</b><br/><i>There is no single solution to limiting plastic. The changes that can be made can vary depending on the type of restaurant, the amenities that are offered and the guests who visit the restaurant.</i></p> <p><i>In order to consolidate the acquired new knowledge and develop the new skills, it is necessary to do exercises and self-reflection.</i></p> |

|   |  |
|---|--|
|   | <p><b>EXAMPLES FOR EXERCISES and/or QUESTIONS FOR SELF-REFLECTION</b></p>  |
| <p><b>E-learning resource (H5P)</b></p> | <p>When creating self-exercises, you can use various tools that are offered by HP5.<br/>Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> |



|   |  |
|---|--|
|   | <p><b>For example:</b><br/> <i>For the purposes of the lesson are suitable:</i></p> <ul style="list-style-type: none"> <li>- <i>Drag and drop.</i></li> </ul>  |
| <p><b>Exercise</b></p>                  | <p>In this section you have to write 1 - 3 exercises to supplement the learners' knowledge and skills.</p> <p><b>For example:</b><br/> <b>Exercise 1</b><br/> <i>Drag and drop the single-use plastic products which are restricted for production and use in the EU.</i></p> <p><i>Cotton bud sticks; Cutlery (forks, knives, spoons, chopsticks); Plates; Straws; Beverage stirrers; Sticks to be attached to and to support balloons; Food containers made of expanded polystyrene; Beverage containers made of expanded polystyrene, including their caps and lids; Cups for beverages made of expanded polystyrene, including their covers and lids; glass or metal beverage containers that have caps and lids made from plastic; beverage containers intended and used for food for special medical purposes; Wet wipes.</i></p> <p><b>Exercise 2</b><br/> <i>Each student should make an info board by himself. The words for the sign will be pre-given and scrambled. The learner must arrange the words into a meaningful text.</i></p> |
| <p><b>E-learning resource (H5P)</b></p> | <p>When creating self-reflection tasks, you can use various tools that are offered by HP5.<br/> Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p><b>For example:</b><br/> <i>Self – reading/watching by external links</i></p>  |
| <p><b>Self-reflection</b></p>           | <p>In this section you have to write 1 - 3 task to supplement the learners' knowledge and skills.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. <i>Study case</i><br/> <i>Read more about Plastics in a circular economy and consider the personal contribution to this process.</i><br/> <a href="https://www.europarl.europa.eu/ReqData/etudes/ATAG/2018/625163/EPRS_ATA(2018)625163_EN.pdf">https://www.europarl.europa.eu/ReqData/etudes/ATAG/2018/625163/EPRS_ATA(2018)625163_EN.pdf</a></li> <li>2. <i>Watch the video:</i><br/> <a href="https://yt.europarl.europa.eu/embed.min.html?id=6311&amp;lang=bq#">https://yt.europarl.europa.eu/embed.min.html?id=6311&amp;lang=bq#</a><br/> <i>Consider the importance of reducing plastic waste.</i></li> </ol>  |

|                                  |  |
|----------------------------------|--|
|                                  | <b>Evaluation</b>  |
| <b>E-learning resource (H5P)</b> | Interactive Book   |
| <b>Evaluation elements</b>       | <ul style="list-style-type: none"> <li>- Knowledge about EU policies on reducing plastic waste</li> <li>- Knowledge about eco practices for reduction of plastic waste in catering services;</li> <li>- Skills for design plastic waste reduction practices depending on the needs of the restaurant</li> <li>- Skills for arrange and demonstrate plastic waste reduction practices in catering services</li> <li>- Awareness of the importance of plastic waste reduction for mankind;</li> <li>- Awareness of eco-responsible behaviour in catering services</li> </ul>   |
| <b>E-learning resource (H5P)</b> | Test   |
| <b>Evaluation tools</b>          | <p>In this section you have to write a self-assessment test. The test should include 5 questions. You can choose between a true/false test or a multiple choice test (three possible answers).</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. <i>Is the EU making efforts to reduce plastic waste?</i><br/>Yes/no</li> <li>2. <i>Do all EU member states have policies in place to reduce plastic waste?</i><br/>Yes/no</li> <li>3. <i>Can microplastics end up in the soil and water and from there pass into the foodstuffs from which meals are prepared??</i><br/>Yes/no</li> <li>4. <i>Does it meet restaurant food storage standards if plastic wrap is replaced with beeswax wrap?</i><br/>Yes/no</li> <li>5. <i>Do the popular tea bags contain plastic?</i><br/>Yes/no</li> </ol> |

## Further reading

| <b>E-learning resource (H5P)    Interactive Book</b>  |  |
|---|--|
| To supplement trainees' knowledge and skills, you have to offer them additional materials. Please indicate appropriate sources of information in languages accessible to learners. Arrange the sources for each lesson separately.                                    |  |
| For example:  |  |
| <i>Lesson 1</i>   |  |
| <a href="https://www.allianceforwaterefficiency.org">https://www.allianceforwaterefficiency.org</a>   |  |
| <a href="https://www.researchgate.net/publication/314596764">https://www.researchgate.net/publication/314596764</a> <i>Water consumption tourism</i>  |  |
| <i>Lesson 2</i>   |  |
| <a href="http://ec.europa.eu/food/safety/food_waste_en">http://ec.europa.eu/food/safety/food_waste_en</a>   |  |
| <a href="https://foodobox.com/">https://foodobox.com/</a>   |  |
| <a href="https://www.mzh.government.bg">https://www.mzh.government.bg</a>   |  |
| <i>Lesson 3</i>   |  |
| <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019L0904">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019L0904</a>   |  |
| <a href="https://www.europarl.europa.eu/news/en/headlines/society/20180830STO11347/how-to-reduce-plastic-waste-eu-strategy-explained">https://www.europarl.europa.eu/news/en/headlines/society/20180830STO11347/how-to-reduce-plastic-waste-eu-strategy-explained</a> |  |
| <a href="https://environment.ec.europa.eu/strategy/plastics-strategy_en">https://environment.ec.europa.eu/strategy/plastics-strategy_en</a>   |  |

## Bibliographical references

| <b>E-learning resource (H5P)    Interactive Book</b>  |  |
|---|--|
| Please indicate the Bibliographical references that you used in developing the learning content.    |  |
| For example:  |  |
| <a href="https://www.allianceforwaterefficiency.org">https://www.allianceforwaterefficiency.org</a> |  |
| <a href="http://ec.europa.eu">http://ec.europa.eu</a>   |  |
| <a href="https://eur-lex.europa.eu">https://eur-lex.europa.eu</a>                                   |  |
| <a href="https://www.europarl.europa.eu">https://www.europarl.europa.eu</a>                         |  |
| <a href="https://environment.ec.europa.eu">https://environment.ec.europa.eu</a>                     |  |

## Glossary

| <b>E-learning resource (H5P)    Interactive Book</b>  |   |
|---|---|
| List the main terms that are related to the lessons in the module. Give a brief description of each term. |   |
| For example:  |   |
| <i>eco practice in hotel service</i>  | IT is an environmentally sustainable hotel or accommodation that has made important |

|  |  |
|--|--|
|  | environmental improvements to its structure in order to minimize its impact on the natural environment.  |
| <i>food waste</i>  | Food “waste” refers to food that is fit for consumption but consciously discarded at the retail or consumption phases  |
| <i>disposable plastic products / single-use plastic products</i> | Single-use plastic, or disposable plastic, is any plastic item that is used once, and then thrown in the trash.  |
| <i>microplastic</i>  | Microplastics, as the name implies, are tiny plastic particles. Officially, they are defined as plastics less than five millimeters (0.2 inches) in diameter |

## Technical sheet 1

|  |  |
|--|--|
| <b>E-learning resource (H5P)</b>           | <b>Pdf file</b>  |
| <b>Name of the technical specification</b> | <b>Laundry re-use programs and laundry minimization</b>  |
| <b>Aim</b>                                 | The aim of this technical sheet is to describe the sequential steps that must be followed in order to implement the eco-practice of laundry reduction in hospitality in a real work environment.   |
| <b>Step by step implementation</b>         | <p>In this section, you should describe the sequential steps for implementing this eco-practice. The steps must be logically connected.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. <i>analysing the current state of the laundry process in the hotel</i></li> <li>2. <i>survey of hotel guests' attitudes</i></li> <li>3. <i>survey of staff attitudes</i></li> <li>4. <i>creating conditions for implementing the practice of reducing laundry</i></li> <li>5. <i>adaptation of bathrooms for reuse of towels</i></li> <li>6. <i>elaboration of information boards</i></li> <li>7. <i>staff training</i></li> <li>8. <i>Sharing the eco-practice with the guests and the environmental benefits</i></li> </ol> |
| <b>Link to good practices/ Example</b>     | <p>In this section, indicate the name of specific practical examples of Outcome 1 with which this technical sheet corresponds.</p> <p><b>For example:</b><br/><i>Laundry reuse programmes and laundry minimisation</i></p>   |
| <b>Link to EU green priorities</b>         | <p>In this section, indicate specific EU priorities with which this technical sheet corresponds. Provide an internet link.</p> <p><b>For example:</b><br/> <a href="https://ec.europa.eu/environment/water/news.html">https://ec.europa.eu/environment/water/news.html</a><br/> <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32000L0060">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32000L0060</a></p>  |

## Technical sheet 2

|  |   |
|--|---|
| <b>E-learning resource (H5P)</b>           | <b>Pdf file</b>   |
| <b>Name of the technical specification</b> | <b>Too good to Go</b>   |
| <b>Aim</b>                                 | The purpose of this sheet is to describe the sequential steps for implementing an eco-practice to reduce food waste from cooked but unsold meals in the restaurant service.   |
| <b>Step by step implementation</b>         | <p>In this section, you should describe the sequential steps for implementing this eco-practice. The steps must be logically connected.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. Analysis of the lunch menu/dinner menu</li> <li>2. Determining the expiration date of cooked meals</li> <li>3. Provision of conditions for packaging and storage of cooked but unsold food</li> <li>4. Asking customers about their willingness to buy food cooked the day before, but at a lower price;</li> <li>5. Polling the staff about their willingness to support this eco-practice in the restaurant</li> <li>6. Researching the possibilities for online offering of food cooked the day before</li> <li>7. Implementation of measures to popularize the eco practice among the restaurant's customers and in social media</li> <li>8. Making contacts with existing online food delivery platforms from the previous day;</li> <li>9. Making contacts with school canteens, retirement homes, social services to offer food at a lower price</li> <li>10. Preparation of information boards to inform about the benefits of the application of the eco practice.</li> </ol> |
| <b>Link to good practices/ Example</b>     | <p>In this section, indicate the name of specific practical examples of Outcome 1 with which this technical sheet corresponds.</p> <p><b>For example:</b></p> <ul style="list-style-type: none"> <li>- Too good to Go</li> <li>- 12 O'Clock Box</li> </ul>  |
| <b>Link to EU green priorities</b>         | <p>In this section, indicate specific EU priorities with which this technical sheet corresponds. Provide an internet link.</p> <p><b>For example:</b></p> <p><a href="https://www.consilium.europa.eu/en/policies/food-losses-waste/">https://www.consilium.europa.eu/en/policies/food-losses-waste/</a><br/> <a href="https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A02008L0098-20180705">https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A02008L0098-20180705</a></p>   |

## Technical sheet 3

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|--|--|
| <b>E-learning resource (H5P)</b>           | <b>Pdf file</b>  |
| <b>Name of the technical specification</b> | <b>Reducing single use plastics at a catering event</b>  |
| <b>Aim</b>                                 | The purpose of this sheet is to describe the sequential steps for implementing an eco-practice to reduce the use of single-use plastics in catering services.  |
| <b>Step by step implementation</b>         | <p>In this section, you should describe the sequential steps for implementing this eco-practice. The steps must be logically connected.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li>1. Analysis of used plastic products during the organization of catering services;</li> <li>2. Studying the possibilities of replacing plastic products with biodegradable or reusable ones;</li> <li>3. Survey of customer attitudes;</li> <li>4. Survey of staff attitudes;</li> <li>5. Personnel training;</li> <li>6. Implementing measures to inform customers about the applied eco practice and the benefits for the environment;</li> <li>7. Creation of conditions for separate collection of waste.</li> </ol> |
| <b>Link to good practices/ Example</b>     | <p>In this section, indicate the name of specific practical examples of Outcome 1 with which this technical sheet corresponds.</p> <p><b>For example:</b><br/><i>Limiting disposability</i></p>  |
| <b>Link to EU green priorities</b>         | <p>In this section, indicate specific EU priorities with which this technical sheet corresponds. Provide an internet link.</p> <p><b>For example:</b><br/> <a href="https://www.europarl.europa.eu/news/en/headlines/society/20181212STO21610/plastic-waste-and-recycling-in-the-eu-facts-and-figures">https://www.europarl.europa.eu/news/en/headlines/society/20181212STO21610/plastic-waste-and-recycling-in-the-eu-facts-and-figures</a><br/><br/> <a href="https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=LEGISSUM%3A4393034">https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=LEGISSUM%3A4393034</a></p>   |

## 9.5. Module 5. Waste handling

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|--|--|
| <b>E-learning resource (H5P)</b>             | Interactive book   |
| <b>Aim of the module</b>                     | This module aims to assist the learners of the clearer, easiest & most accurate way of waste handling in a Hotel & Catering unit   |
| <b>Key points of the module</b>              | The main key points of this module are: <ol style="list-style-type: none"> <li>1. Research identification of waste handling</li> <li>2. Measurement and evaluation of the outcome</li> <li>3. Communication with the sources of waste production</li> </ol>  |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience in hotel and catering</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom up learning from the field trough examples</li> </ul>   |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>1. Bottom-up learning from the field through examples.</li> <li>2. Presentation of tools that will easy the waste handling process.</li> <li>3. Identification of the types of waste.</li> <li>4. Elaborate means to monitor the waste traffic.</li> <li>5. Establish a communication with all sources of waste trafficking.</li> </ol>   |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>- Verify&amp; describe the diversity of waste in a hotel &amp; catering unit</li> <li>- Recommend the ways to source waste</li> <li>- Apply practises in a hotel &amp; catering unit</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>- Adopt technics that acquire numerical, scientific &amp; engineering skills along with green skills</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>- providethe media tools to a successful outcome in the waste handling</li> <li>- awareness of the right communication to sources that produce waste</li> </ul> |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilinguism</li> <li>X Numerical, scientific and engineering skills</li> <li><input type="checkbox"/> Digital and technology-based competences</li> <li><input type="checkbox"/> Interpersonal skills and the ability to adopt new competences</li> <li>X Active citizenship</li> <li><input type="checkbox"/> Entrepreneurship</li> <li><input type="checkbox"/> Cultural awareness and expression</li> <li>X Green skills</li> </ul>  |
| <b>Grade/VET group</b>                       | <ul style="list-style-type: none"> <li>- Students – 11 – 12 grades in VET School</li> <li>- Students – 9-12 grades in VET School with dual form</li> <li>- Trainees in VET Canters</li> </ul>  |



|                         |  |
|-------------------------|--|
|                         | - Trainees (new employees, reassigned employees, workers) included in WBL  |
| <b>Technical sheets</b> | <ol style="list-style-type: none"><li>1. Good practices</li><li>2. Everyday gestures</li><li>3. Technical monitor report</li></ol> |

## Lesson 1. Research identification and waste handling

### 1.1. Aim, Learning objectives and outcomes

|                                     |  |
|-------------------------------------|--|
| <b>E-learning resource (H5P)</b>    | Interactive Book   |
| <b>Aim of the lesson</b>            | In the first lesson of the waste handling it is essential to have as parameter that all that is taught in the previous modules are accomplished and that an already established action plan in preventing and diminishing waste exists. The aim of this lesson is to provide to trainees all valuable information in order to define the waste at each department of the hotel & Catering unit and to establish ways to handle waste & to monitor the outcome.   |
| <b>Key points of the lesson</b>     | <ol style="list-style-type: none"> <li>1. Define the types of waste</li> <li>2. Plan the right spots where waste litter units can be placed</li> <li>3. Provide graphs to monitor waste</li> </ol>   |
| <b>Main Learning objectives</b>     | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience in hotel and catering</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom up learning from the field trough examples</li> <li>➤ Trace the spots where waste is produced</li> <li>➤ Provide means and tools to monitor waste</li> </ul>  |
| <b>Specific learning objectives</b> | <ol style="list-style-type: none"> <li>1. Understanding the diversity of waste in a hotel &amp; Catering unit.</li> <li>2. Learning the way to plan the field through examples.</li> <li>3. Presentation of tools that will easy the waste monitoring process.</li> </ol>  |
| <b>Learning outcomes</b>            | <p><b>Knowledge:</b></p> <ul style="list-style-type: none"> <li>– Verifying &amp;describing the types of waste in a hotel or catering unit.</li> <li>– Recommend the ways to source waste by mapping and tracing a hotel &amp; catering unit</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>– Define the parameters in monitoring the different types of waste</li> <li>– Present graphs &amp; media to enhance numerical, scientific &amp; green skills</li> </ul> <p><b>Competencies:</b></p> <ul style="list-style-type: none"> <li>– Elaborate through different waste types</li> <li>– Monitor each source of waste daily with technics</li> </ul> |

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| <b>Key competences for lifelong learning</b> | <input type="checkbox"/> Literacy<br><input type="checkbox"/> Multilingualism<br><input checked="" type="checkbox"/> Numerical, scientific and engineering skills<br><input checked="" type="checkbox"/> Digital and technology-based competences<br><input type="checkbox"/> Interpersonal skills and the ability to adopt new competences<br><input checked="" type="checkbox"/> Active citizenship<br><input type="checkbox"/> Entrepreneurship<br><input type="checkbox"/> Cultural awareness and expression<br><input checked="" type="checkbox"/> Green skills |
| <b>Subjects involved</b>                     | <ul style="list-style-type: none"> <li>- Administrators in hotel &amp; Catering industry</li> <li>- Hotel Managers,</li> <li>- Chefs,</li> <li>- Cooks,</li> <li>- Food &amp; Beverage Managers,</li> <li>- Housekeepers,</li> <li>- Maintenance Mgrs.,</li> <li>- Purchase Managers,</li> <li>- Inventory Controllers</li> <li>- Agrotourism VET students</li> <li>- Sustainability VET students</li> <li>- Tourism marketing students</li> </ul>   |
| <b>Methodology</b>                           | <p>As this is an online lesson, it is advised that the subjects taking the lesson have enough learning material to read , and some exercises in the middle of the lesson that could be answered as Multiple choice or True &amp; False.</p> <p>In the end of the lesson subjects should take a test again with questions of the same type.</p> <p>The tutor should provide the lesson through the following media:</p> <ul style="list-style-type: none"> <li>- Reading</li> <li>- Videos</li> <li>- Case studies</li> <li>- Quizzes</li> <li>- Tests</li> </ul>     |

## 1.2. Training delivery guidelines

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|                                  | <b>Theory of the lesson 1</b>  |
| <b>E-learning resource (H5P)</b> | <b>Interactive Book</b>  |
| <b>Introduction</b>              | The way to identify the types of waste, the means to track the waste sources, the tools to monitor waste in the different departments of the hotel & in a catering unit is the basis of this lesson. |
| <b>Main presentation</b>         | <p>The lesson will focus on three key points.</p> <p>The key points are:</p> <ol style="list-style-type: none"> <li>1. Define the types of waste</li> </ol>  |

2. Plan the right spots where waste litter units can be placed
3. Provide graphs to monitor waste

In order to accomplish the above it is important and vital to create exercises and also a self-reflection.

In the first lesson of the waste handling it is essential to have as parameter that the teachers should present a hypothetical model of a hotel & Catering unit.

In this unit the teacher should have in mind that the first four modules are already being processed in the hypothetical model of this hotel & catering unit.

In other words established actions already exist in preventing and diminishing waste through the administration and the purchase department, the Cooks & Chefs, the Housekeeping, the back office employees & Maintenance Managers.

From there on it is important to find first the sources of waste in each hotel or catering unit, to identify the various types of waste and to categorise them.

The common ground in both hotel & catering enterprises is the Food Waste and the Kitchen facilities.

There are various sources of waste and these should be defined to students.

Wastes that are produced from the Purchased raw materials and the way they are packaged so that finally come at the storage rooms.

Waste in the food preparation from the kitchen staff, in the way that materials are sorted, cleaned, peeled, cut in pieces.

Waste in the food presentation by Chefs when it comes in the final presentation to the guests. Usually Chefs estimate 20% additional covers to the final number of guests that will eat the specific food.

Waste in food that comes from the finished servings of the guests' dishes.

Waste of cooked food that cannot be re used

Waste of food that is spoiled.

Here the teachers should present to the students some tables regarding the special food categories and how they can be used to avoid high amount of food waste.

The wastebaskets that should be placed inside a kitchen and a restaurant, along with the way they should be sorted will be demonstrated in this particular paragraph with plans and examples that will be submitted.

The other departments that a hotel consist from and have various types of waste are:

The laundry, The Rooms, The Reception & all the Front Office department, the Back Office departments, the maintenance areas, the surrounded areas (gardens, beaches, parks, alleys e.g.).

At this point, the teachers will present plans from a basic floor plan and where different types of wastebaskets should be placed.

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|  | <p>The staff that is responsible for the sourcing and auditing of the waste handling should have this responsibility added to their daily duties &amp; tasks and the added time for this project should be estimated.</p> <p>The waste in the rooms and laundry comes from various sources:</p> <p>The cleaning materials &amp; tools that are used for the cleaning.</p> <p>The utilities that are offered in the guests rooms</p> <p>The guests waste</p> <p>The linen materials that are used in the rooms.</p> <p>Teachers should present checklists that should be used by the experienced in waste management staff in order to implement the right procedure of waste management into their daily routine.</p> <p>The students should develop Green skills, Cultural awareness &amp; expression, interpersonal skills and the ability to adapt to new competences.</p> <p>Numerical, scientific and engineering skills are required along with green skills.</p> <p>They will research the waste in categories and the source that are produced from.</p> <p>Here teachers should present with charts how we can sort the waste and how to reuse / recycle them.</p> <p>Technical sheets in excel form for daily/ weekly/monthly and yearly data in waste handling must be provided</p> <p>Check lists for the daily operation will be presented for each department at this hypothetical hotel &amp; catering unit.</p> <p>A virtual waste management tour is also suggested, done by all areas of interest, so that every vital corner of the hotel &amp; catering unit is facilitated with the right baskets for the waste management.</p> <p>Active entrepreneurship and citizenship will be focused in the extent that both employees and high management feel active and responsible and rewarded in contributing both to the better standing of the company in terms of costs and expenses and also to the community in decreasing and limiting the waste.</p> <p>The students should have knowledge of the field and the various parameters that construct a hotel or Catering unit in order to be able to understand the actions that will be taken.</p> <p>Posters and communication material to further investigate and sort the waste will be provided in the curriculum.</p> |
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|   | <p>EXAMPLES FOR EXERCISES and/or QUESTIONS FOR SELF-REFLECTION</p>  |
| <p><b>E-learning resource (H5P)</b></p> | <p>When creating self-exercises, teachers can use various tools that are offered by HP5.</p> <p><b>For example:</b></p> |

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|                           | <p>For the purposes of the lesson are suitable:</p> <ul style="list-style-type: none"> <li>- Multiple choices</li> <li>- True/False questions</li> </ul>  |
| Exercise                  | <p>In this section 1-3 exercises should be written in order to supplement the subjects knowledge and skills.</p> <p><b>For example:</b></p> <p><b>Exercise 1:</b> Define the visible costs of waste (Multiple choice)</p> <p>Answers : a. Cost of product<br/> b. Cost of human resources<br/> c. Cost of energy<br/> d. Cost of product, human resources &amp; energy<br/> d is the right answer</p> <p><b>Exercise 2:</b> In which frequency should waste be measured (Multiple choice)</p> <ul style="list-style-type: none"> <li>a. Hourly measures</li> <li>b. Daily measures</li> <li>c. Monthly measures</li> <li>d. Daily, monthly &amp; yearly measures</li> </ul> <p>d. is the right answer</p>   |
| E-learning resource (H5P) | <p>When creating self-reflection tasks, you can use various tools that are offered by HP5.</p> <p>Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p><b>For example:</b></p> <p><i>Self – reading/watching by external links</i></p>   |
| Self-reflection           | <p>In this section you have to write 1 - 3 task to supplement the learners' knowledge and skills.</p> <p><b>For example:</b></p> <p><b>A hotel &amp; a catering unit have common ground in terms of waste handling. True or False?</b></p> <p><b>False is the right answer</b></p> <p>4. <b>Study case</b> – reading of specific section of “Waste Mapping Guidance for Hotels in Cyprus: Saving money and improving the environment”, Nia Owen, Sarahjane Widdowson and Lucy Shields, pg. 8, <a href="https://csti-cyprus.org/wp-content/uploads/2013/01/Cyprus-Hotel-Waste-Mapping-Guide_final.pdf">https://csti-cyprus.org/wp-content/uploads/2013/01/Cyprus-Hotel-Waste-Mapping-Guide_final.pdf</a></p> <p>5. <b>Interesting reading</b> &gt;&gt; <b>Composting, Guide for guide for reduction food waste in hotels, WWF, pg. 39,</b></p> |

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|                                  | <a href="https://www.contentarchive.wwf.gr/images/pdfs/Hotel-Kitchen-Greek.pdf">https://www.contentarchive.wwf.gr/images/pdfs/Hotel-Kitchen-Greek.pdf</a>   |
|                                  | Evaluation  |
| <b>E-learning resource (H5P)</b> | Interactive Book  |
| <b>Evaluation elements</b>       | <ul style="list-style-type: none"> <li>- Knowledge in verifying &amp; describing the types of waste in a hotel or catering unit.</li> <li>- Knowledge of the recommended ways to source waste by mapping and tracing a hotel &amp; catering unit</li> <li>- Skills in defining the parameters in monitoring the different types of waste</li> <li>- Skills in presenting graphs &amp; media to enhance numerical, scientific &amp; green skills</li> <li>- Skills to elaborate through different waste types</li> <li>- Skills to monitor each source of waste daily with technics</li> </ul> |
| <b>E-learning resource (H5P)</b> | Test  |

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| <b>Evaluation tools</b> | <p>In this section teachers have to write a self-assessment test. The test should include 5 questions. They can choose between a true/false test or a multiple choice test with three possible answers. For example:</p> <p style="padding-left: 40px;"><b>1. According to the technical tool provided in this lesson, please calculate the volume of waste in this example: A wastebasket of plastic half full, how much of plastic waste does it have (Multiple choice)</b></p> <p style="padding-left: 80px;"><b>2. Is occupancy rate in a hotel important to the waste management? (T/F)</b></p> <p><b>True is the right answer</b></p> <p><b>6. In the identification of waste, check the following if they are essential to be measured (T/F)</b></p> <p style="padding-left: 20px;"><b>a. Non recyclable waste (True is the right answer)</b></p> <p style="padding-left: 20px;"><b>b. Glass (True is the right answer)</b></p> <p style="padding-left: 20px;"><b>c. Furniture (True is the right answer)</b></p> <p style="padding-left: 20px;"><b>d. Garden waste (True is the right answer)</b></p> <p><b>7. Choose the right steps for a complete waste mapping of the hotel &amp; Catering unit:</b></p> <p style="padding-left: 20px;"><b>a. Place liter cans outside each department</b></p> <p style="padding-left: 20px;"><b>b. Develop a site plan, map the waste types &amp; locations</b></p> |
|-------------------------|--|

- c. Develop a site plan, map the waste types & locations, and complete an action plan with everyone involved.
- d. Produce a site plan

C is the right answer

8. Convert a tone of waste in kilograms:

- a. 100
- b. 0,7646
- c. 2,2
- d. 1000

d. Is the right answer



## Lesson 2. Measurement and evaluation of the outcome

### 2.1. Aim, Learning objectives and outcomes

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|--|---|
| <b>E-learning resource (H5P)</b>             | Interactive Book  |
| <b>Aim of the lesson</b>                     | This lesson aims to provide the easiest technics and measurement tools for waste handling.  |
| <b>Key points of the lesson</b>              | <ol style="list-style-type: none"> <li>1. Provide graphs to monitor waste accurately</li> <li>2. Educate the human resources with the measurements</li> <li>3. Prepare measurement graphs to communicate the results</li> <li>4. Prepare evaluation tools for the outcome</li> </ol>  |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience in hotel and catering</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom up learning from the field trough examples</li> <li>➤ Measure waste accurately</li> <li>➤ Evaluate the outcome</li> </ul>  |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>1. Presentation of tools that will easy the waste monitoring process.</li> <li>2. Development of the awareness of the measurement in human resources</li> <li>3. Presentation of the outcomes</li> <li>4. Evaluation of the outcomes</li> </ol>  |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>-Verifying &amp; describing the types of waste in a hotel or catering unit.</li> <li>- Recommend the ways to source waste by mapping and tracing a hotel &amp; catering unit</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>-Define the parameters in monitoring the different types of waste</li> <li>-Present graphs &amp; media to enhance numerical, scientific &amp; green skills</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>-Elaborate through different waste types</li> <li>-Monitor each source of waste daily with technics</li> </ul> |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilinguism</li> <li>X Numerical, scientific and engineering skills</li> <li>X Digital and technology-based competences</li> <li><input type="checkbox"/> Interpersonal skills and the ability to adopt new competences</li> <li>X Active citizenship</li> <li><input type="checkbox"/> Entrepreneurship</li> <li><input type="checkbox"/> Cultural awareness and expression</li> <li>X Green skills</li> </ul>  |

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|--------------------------|--|
| <b>Subjects involved</b> | <ul style="list-style-type: none"> <li>- Administrators in hotel &amp; Catering industry</li> <li>- Hotel Managers,</li> <li>- Chefs,</li> <li>- Cooks,</li> <li>- Food &amp; Beverage Managers,</li> <li>- Housekeepers,</li> <li>- Maintenance Mgrs.,</li> <li>- Purchase Managers,</li> <li>- Inventory Controllers</li> <li>- Agrotourism VET students</li> <li>- Sustainability VET students</li> <li>- Tourism marketing students</li> </ul> |
| <b>Methodology</b>       | <p>The tutor should provide the lesson through the following media:</p> <ul style="list-style-type: none"> <li>– Reading</li> <li>– Videos</li> <li>– Case studies</li> <li>– Tests</li> </ul>   |

## 2.2 Training delivery guidelines

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|                                  | <b>Theory of the lesson 2</b>   |
| <b>E-learning resource (H5P)</b> | <b>Interactive Book</b>   |
| <b>Introduction</b>              | This is the practical part of zero waste , where students learn to deal with the measurement & evaluation of the outcomes of waste handling in a hotel & catering unit.   |
| <b>Main presentation</b>         | <p>In this lesson, the teachers should show to students the way to read and interpret the daily/monthly charts that we monitor the waste with, transform them to cost effective numbers with parameters and find ways to further elaborate them.</p> <p>It is suggested that a daily and later monthly database of this waste handling should be kept, in files and communicated by the administration to the higher management and the rest of the staff involved in the waste handling at this hypothetical model of hotel &amp; Catering unit.</p> <p>The teacher should emphasize to the fact that the waste handling is a daily on going and non-stop project. Additionally the outcomes of the entire project should be presented monthly to all involved.</p> <p>The teachers will suggest that communication and alliances play a major role in the effective outcome of the project; thus they should present to students the means to communicate the outcomes to the higher administrators in order to further develop the waste handling.</p> |

Evaluation of each individual who takes part on the project should be available by the Human Resources Department. The teachers should point to the factor that waste handling should be incorporated into the daily duties of each person involved in hospitality & catering and that the best way to have a positive outcome, effectiveness and development is to implement the factor of participation in the waste handling in each persons evaluation form.

The cost of the time consumed in waste handling by each individual should also be monitored and the results should be communicated to both the Human Resources Department and the Management for further analysis.

The employer's awareness of this sustainability friendly project should be evaluated and noted. The employee with the best outcome should be mentioned and acknowledged.

A safe and competitive environment in this sense helps the company to build a motivated team, with value added aims and goals.

Evaluation forms will be presented as examples in the session.

After starting monitoring the waste, the administration along with the management should set further goals in the process of time, for the waste reduction.

Here, the major role is the standing of the company in the local community and its social responsibility towards the goals of waste reduction.

Good practices and further examples of the Industry should be presented in this session.

The teachers have to pay attention at this point and emphasize to the fact that each hotels and catering unit communication with the authorities, the associations and the social bond with the rest of the community should be strengthened.

The frequency of waste handling along with the way the waste is distributed by the local municipality should be negotiated together by the hotel's and Catering's managers.

If there are extra facilities to use for further limiting the waste, these should be offered by the municipality to the company in order to further develop the project.

|  |   |
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|  | <p>If there are any composters around the area of the company that the waste can be transferred to, by the Cleaning authority of the municipality, this is very important information to be communicated with the company's management.</p> <p>The usage of any cartridges press machines that can be provided by the municipality will further enhance the project.</p> <p>Recycling Companies for oil waste can also play an important role.</p> <p>Sewage systems that transform the human waste in clean water that could be used in the gardens instead of any other water is an important element.</p> <p>Fresh Food could be donated by the company on a daily basis to the shelters in the municipality's jurisdiction.</p> <p>Moreover Food waste could be a great food resource in farming.</p> <p>These goals assist to the hotels&amp; catering unit goal and build up the awareness of the local communities.</p> <p>These actions help the image and the brand name of the company and have a positive influence in the bond between the company and the community.</p> |
|--|---|

|                                  | EXAMPLES FOR EXERCISES and/or QUESTIONS FOR SELF-REFLECTION  |
|----------------------------------|--|
| <b>E-learning resource (H5P)</b> | <p>When creating self-exercises, teachers can use various tools that are offered by HP5.</p> <p><b>For example:</b><br/> <i>For the purposes of the lesson are suitable:</i></p> <ul style="list-style-type: none"> <li>- <i>Multiple choices</i></li> <li>- <i>True/False questions</i></li> </ul>  |
| <b>Exercise</b>                  | <p><b>For example:</b></p> <p><b>Exercise 1</b> Is there a first and second step in the measurement of the waste? (Y/N)<br/> <b>Yes is the right answer</b></p> <p><b>Exercise 2</b> The role of the local municipalities is insignificant in the waste handling of a hotel and catering unit. (T/F)<br/> <b>False is the right answer</b></p> <p><b>Exercise 3</b> The daily measurement of waste in the kitchen of a hotel or a catering unit has the same parameters (T/F)<br/> <b>True is the right answer</b></p> |
| <b>E-learning resource (H5P)</b> | <p>When creating self-reflection tasks, you can use various tools that are offered by HP5.</p>   |

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|------------------------|---|
|                        | <p>Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p><b>For example:</b><br/> <i>Self – reading by external links</i><br/> <i>Videos by external links</i></p>  |
| <b>Self-reflection</b> | <p>In this section you have to write 1 - 3 tasks to supplement the learners' knowledge and skills.</p> <p><b>For example:</b></p> <p><b>Study case</b> – reading of specific section of “Waste Mapping Guidance for Hotels in Cyprus: Saving money and improving the environment”, Nia Owen, Sarahjane Widdowson and Lucy Shields, pg. 21 , <a href="https://csti-cyprus.org/wp-content/uploads/2013/01/Cyprus-Hotel-Waste-Mapping-Guide_final.pdf">https://csti-cyprus.org/wp-content/uploads/2013/01/Cyprus-Hotel-Waste-Mapping-Guide_final.pdf</a></p> <p><b>Interesting reading</b> &gt;&gt; “Waste Mapping Guidance for Hotels in Cyprus: Saving money and improving the environment”, Nia Owen, Sarahjane Widdowson and Lucy Shields, pg. 54, <a href="https://csti-cyprus.org/wp-content/uploads/2013/01/Cyprus-Hotel-Waste-Mapping-Guide_final.pdf">https://csti-cyprus.org/wp-content/uploads/2013/01/Cyprus-Hotel-Waste-Mapping-Guide_final.pdf</a></p> |

|                                  |   |
|----------------------------------|---|
|                                  | Evaluation  |
| <b>E-learning resource (H5P)</b> | Interactive Book  |
| <b>Evaluation elements</b>       | <ul style="list-style-type: none"> <li>- Knowledge in the measurement of all types of waste</li> <li>- Knowledge of the recommended ways to source waste by mapping and tracing a hotel &amp; catering unit</li> <li>- Skills in defining the parameters in monitoring the different types of waste</li> <li>- Skills in presenting graphs &amp; media to enhance numerical, scientific &amp; green skills</li> <li>- Skills to elaborate through different waste types</li> <li>- Skills to monitor each source of waste daily with technics</li> <li>- Skills in communicating the outcomes of waste handling</li> <li>- Skills in evaluating the human resources that take part</li> </ul> |
| <b>E-learning resource (H5P)</b> | Test  |

**Evaluation tools**

In this section teachers have to write a self-assessment test. The test should include 5 questions. They can choose between a true/false test or a multiple choice test with three possible answers.

For example:

- 1. It is important to have wastebaskets in various halls of the hotel/catering according to the usage? (T/F)**

**True is the right answer**

- 2. The checklist of the daily actions is not important in the housekeeping department. (T/F)**

**False is the right answer**

- 3. Does a waiter play a significant role in the waste handling? (Y/N)**

**Yes is the right answer**

- 4. The hotel and catering units are allowed to use their own composters next to the kitchen facilities (T/F)**

**False is the right answer**

- 5. The participants in the waste handling are subjects of cost estimation of the project (T/F)**

**True is the right answer**

## Lesson 3. Communication with the sources of waste production

### 3.1. Aim, Learning objectives and outcomes

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| <b>E-learning resource (H5P)</b>             | Interactive Book  |
| <b>Aim of the lesson</b>                     | The lesson aims to develop a further understanding of the parameters that produce waste and to communicate all the aspects of the zero waste policy to guests and clients in a hotel and catering unit.   |
| <b>Key points of the lesson</b>              | <ol style="list-style-type: none"> <li>1. Finding the new rules of operation</li> <li>2. Adopt new communication means to develop efficiency with the guests/clients for waste handling.</li> <li>3. Direct clear and honest guest relation messages for zero waste.</li> <li>4. Teaching the students the way to develop zero waste communication skills.</li> </ol>   |
| <b>Main Learning objectives</b>              | <ul style="list-style-type: none"> <li>➤ «Zero-Waste» conscience in hotel and catering</li> <li>➤ Preparation for ecological change and change of habits</li> <li>➤ Bottom up learning from the field through examples</li> <li>➤ Teach the zero waste behavior codes</li> <li>➤ Communicate with the guests in a zero waste policy</li> </ul>  |
| <b>Specific learning objective(s)</b>        | <ol style="list-style-type: none"> <li>1. Presentation of tools that will ease the communication process</li> <li>2. Development of the awareness of the clientele</li> <li>3. Presentation of the outcomes to the clientele</li> <li>4. Evaluation of the clientele reviews</li> </ol>   |
| <b>Learning outcomes</b>                     | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>-Verifying &amp; describing the rules of waste handling in a hotel &amp; Catering unit.</li> <li>- Recommend the ways to communicate the zero waste rules to guests/clients.</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>-Define the alternative ways of operation in a hotel &amp; Catering unit</li> <li>-Estimate the effect that zero waste rules have to guests/client satisfaction</li> <li>-Present media to communicate zero waste messages to guests/clients.</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>- Elaborate communication for the guests satisfaction in zero waste</li> <li>- Evaluate the guests reactions in zero waste</li> </ul> |
| <b>Key competences for lifelong learning</b> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Literacy</li> <li><input type="checkbox"/> Multilingualism</li> <li><input checked="" type="checkbox"/> Numerical, scientific and engineering skills</li> <li><input checked="" type="checkbox"/> Digital and technology-based competences</li> </ul>   |

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|                          | <input type="checkbox"/> Interpersonal skills and the ability to adopt new competences<br>X Active citizenship<br><input type="checkbox"/> Entrepreneurship<br><input type="checkbox"/> Cultural awareness and expression<br>X Green skills  |
| <b>Subjects involved</b> | - Administrators in hotel & Catering industry<br>- Hotel Managers,<br>- Chefs,<br>- Cooks,<br>- Food & Beverage Managers,<br>- Housekeepers,<br>- Maintenance Mgrs.,<br>- Purchase Managers,<br>- Inventory Controllers<br>- Agro tourism VET students<br>- Sustainability VET students<br>-Tourism marketing students |
| <b>Methodology</b>       | The tutor should provide the lesson through the following media: <ul style="list-style-type: none"> <li>- Reading from links</li> <li>- Videos</li> <li>- Case studies from links</li> <li>- Tests with either Multiple Choice or True &amp; False questions.</li> </ul>   |

### 3.2 Training delivery guidelines

|                                  |   |
|----------------------------------|---|
|                                  | <b>Theory of the lesson 3</b>   |
| <b>E-learning resource (H5P)</b> | <b>Interactive Book</b>   |
| <b>Introduction</b>              | Setting the zero strategy and evaluating the outcomes is not an independent action in a hotel and catering unit. As the main source of waste production are the guests / clients, a clear and efficient communication between them and the unit is essential  |
| <b>Main presentation</b>         | <p>In order to better understand the outcomes and the objectives, a very close communication with the guests/clients should be established. The rules for the waste reduction should be well known to all the people who are involved.</p> <p>Both in a Hotel and a Catering company, the involvement of the guests play a significant role.</p> <p>Starting from the common area of interest to both Hotels and catering, the Restaurant must introduce new rules and codes in food serving. These rules should be in alliance with the guests/clients. The more aware they are about the reason of these rules, the better they will justify the actions, the results and they will participate with free will.</p> |



Here we will present a chart with new alternatives codes for the food serving for better waste handling.

It is important that these codes will be communicated in the most positive and effective way to further engagement of the guest list.

The main actions, the goals, and some of the results should be communicate to guests to show them that all this waste management project along with their participation matters.

New ways of presenting menus in Hotels/Catering will be presented.

In terms of the hotel, there are additional codes and actions that do have a change in the already established guest habits and these actions should be displaced for some cases even before the booking procedure. Therefor a communication strategy should be developed.

The rest of the actions should be communicated to the guests in various ways that will be presented in this session.

Examples of posters will be presented in the session.

The actions involved for the zero waste management should be defined to the guests in order to raise the brand awareness and the valuable position of the company.

Loyalty and appreciation by the guests is important.

The teacher in this lesson should find examples of good practices that have positive results in the past and despite the new rules and codes in operation, the client satisfaction did not alter to the negative.

The zero waste codes in a hotel and catering operation have a great impact on the guests.

It is important that the teacher should show the ways to communicate with guests and show that

1. The hotel cares for the planet
2. The guests show voluntarism and acts that matter when they respect the new operation rules
3. Habits that are no longer good are not healthy habits
4. It is important that this zero waste is not a single persons project but a community of individuals that act as one.
5. A zero waste policy is a value added policy
6. Tourism and entertainment should be responsible to the local communities

The administration and marketing division of the hypothetical unit of hotel/ catering that we hereby describe, should execute a survey among the guests to see how the guests' satisfaction altered with the zero waste policy.

|                           | EXAMPLES FOR EXERCISES and/or QUESTIONS FOR SELF-REFLECTION  |
|---------------------------|--|
| E-learning resource (H5P) | <p>When creating self-exercises, teachers can use various tools that are offered by HP5.</p> <p><b>For example:</b><br/> <i>For the purposes of the lesson are suitable:</i></p> <ul style="list-style-type: none"> <li>- Multiple choices</li> <li>- True/False questions</li> </ul>  |
| Exercise                  | <p><b>For example:</b><br/> <b>Exercise 1</b> In a hotel reservation and before check in guests should be aware of the waste handling and zero waste policies (T/F)<br/> <b>True is the right answer</b></p> <p><b>Exercise 2</b> Messages that state the zero policies should target only to the cost efficiency of the zero waste result (T/F)<br/> <b>False is the right answer</b></p> <p><b>Exercise 3</b> Name the best ways to communicate with guests for zero waste policies:(Multiple choice)</p> <ol style="list-style-type: none"> <li>a. Leaflets upon check in</li> <li>b. E mails before arrival</li> <li>c. Digital posters around the lobby</li> <li>d. Digital communication before, during and after the guests stay</li> </ol> <p><b>D is the right answer</b></p> |
| E-learning resource (H5P) | <p>When creating self-reflection tasks, you can use various tools that are offered by HP5.<br/> Choose those tools that best match the topic of the lesson and the knowledge and skills you want to develop.</p> <p><b>For example:</b><br/> <i>Self – reading/watching by external links</i></p>  |
| Self-reflection           | <p>In this section you have to write 1 - 3 tasks to supplement the learners' knowledge and skills.</p> <p><b>9. Study case</b> – reading of specific section of <i>Composting, Guide for guide for reduction food waste in hotels, WWF, pg. 44,</i><br/> <a href="https://www.contentarchive.wwf.gr/images/pdfs/Hotel-Kitchen-Greek.pdf">https://www.contentarchive.wwf.gr/images/pdfs/Hotel-Kitchen-Greek.pdf</a></p> <p><b>Interesting reading</b> &gt;&gt; <i>A Methodology for Sustainable Management of Food Waste, <u>Guillermo Garcia-Garcia, Elliot Woolley, Shahin Rahimifard, James Colwill, Rod White &amp; Louise</u></i></p>  |

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|  | <i>Needham Waste and Biomass Valorization volume 8, 2017, pages2209–2227</i> |
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|                                  | Evaluation  |
| <b>E-learning resource (H5P)</b> | Interactive Book  |
| <b>Evaluation elements</b>       | <p>Knowledge:</p> <ul style="list-style-type: none"> <li>-Verifying &amp; describing the rules of waste handling in a hotel &amp; Catering unit.</li> <li>- Recommend the ways to communicate the zero waste rules to guests/clients.</li> </ul> <p>Skills:</p> <ul style="list-style-type: none"> <li>-Define the alternative ways of operation in a hotel &amp; Catering unit</li> <li>-Estimate the effect that zero waste rules have to guests/client satisfaction</li> <li>-Present media to communicate zero waste messages to guests/clients.</li> </ul> <p>Competencies:</p> <ul style="list-style-type: none"> <li>- Elaborate communication for the guests satisfaction in zero waste</li> <li>- Evaluate the guests reactions in zero waste</li> </ul> |
| <b>E-learning resource (H5P)</b> | Test  |

|                         |   |
|-------------------------|---|
| <b>Evaluation tools</b> | <p>In this section teachers have to write a self-assessment test. The test should include 3 questions. They can choose between a true/false test or a multiple choice test with three possible answers.</p> <p><b>For example:</b></p> <ol style="list-style-type: none"> <li><b>1. Defining the new rules of operation is essential both for the operation as to the guest relations. (T/F)</b><br/>True is the right answer</li> <li><b>2. Adopt new communication means to develop efficiency with the guests/clients for waste handling is not important (T/F)</b><br/>False is the right answer</li> <li><b>3. Direct clear and honest guest relation messages for zero waste must be created by the guest relation department (T/F)</b><br/>True is the right answer</li> </ol> |
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|  | <p><b>4. Teaching the students the way to develop zero waste communication skills is of the same importance as showing the know how of waste handling (T/F)</b><br/> <b>True is the right answer</b></p> <p><b>5. Posters to regulate food consumption in a buffet are not good for the image of the hotel / catering unit (T/F)</b><br/> <b>False is the right answer</b></p> |
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## Further reading

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| <p>Determinants of consumer food waste behavior: Two routes to food waste, <i>Appetite</i>, Volume 96, 2016, pp. 7-17</p>  |
| <p>The food waste hierarchy as a framework for the management of food surplus and food waste, <i>Journal of Cleaner Production</i>, Volume 76, 2014, Pages 106-115</p>   |
| <p>The Progressive Increase of Food Waste in America and Its Environmental Impact, Kevin D. Hall, JuenGuo, Michael Dore, Carson C. Chow, 2009</p>  |
| <p>On the Measurement of Food Waste, <u>Marc F. Bellemare, MetinÇakir, HikaruHanawaPeterson, LindseyNovak, Jeta Rudi</u>, Volume 99, 2017, pp 1148-1158</p>  |
| <p>Food waste within food supply chains: quantification and potential for change to 2050, <u>Julian Parfitt, Mark Barthel and Sarah Macnaughton</u>, Volume 365, 2010</p>  |
| <p>Drivers of food waste and their implications for sustainable policy development, <u>Resources, Conservation and Recycling</u>, Krista L.ThybergDavidJ.Tonjes, Volume 106, 2016, Pages 110-123</p>   |
| <p>Global Food Losses and Food Waste, Jenny Gustavsson, ChristelCederberg&amp; Ulf Sonesson SIK – The Swedish Institute for Food and Biotechnology Save Food Congress, Düsseldorf, 2011</p>  |
| <p>A Methodology for Sustainable Management of Food Waste, <u>Guillermo Garcia-Garcia, Elliot Woolley, ShahinRahimifard, JamesColwill, Rod White &amp; Louise Needham</u> <u>Waste and Biomass Valorization</u> volume 8, 2017, pages2209–2227</p> |
| <p>Food Waste to Energy: An Overview of Sustainable Approaches for Food Waste Management and Nutrient Recycling, KunwarParitosh, Sandeep K. Kushwaha, Monika Yadav, NidhiPareek, AakashChawade, and VivekanandVivekanand, 2017</p>                 |

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| <a href="https://www.wwf.gr/">https://www.wwf.gr/</a>           |
| <a href="https://www.ab.gr/">https://www.ab.gr/</a>             |
| <a href="https://frutafeia.pt/en">https://frutafeia.pt/en</a>   |
| <a href="https://eepf.gr/el/">https://eepf.gr/el/</a>           |
| <a href="https://www.herrco.gr/">https://www.herrco.gr/</a>     |
| <a href="https://www.wri.org/">https://www.wri.org/</a>         |
| <a href="https://csti-cyprus.org/">https://csti-cyprus.org/</a> |

## Glossary

|                                     |  |
|-------------------------------------|--|
| <b>Spoilage</b>                     | Food that is out of due time   |
| <b>Waste in preparation of food</b> | Cutting and cleaning and sorting raw material  |
| <b>Overproduced Food</b>            | Food that is being cooked more than the estimated number of guests                         |
| <b>Food waste from guests</b>       | What remains on the guests dishes after eating   |
| <b>Covers</b>                       | The dishes served  |
| <b>Utility usage</b>                | Heating, lighting, refrigeration, water  |
| <b>Staff cost</b>                   | The labor cost per hour per person in average rate   |
| <b>Refillable glasses</b>           | Glasses that can be used more than one   |
| <b>Back office</b>                  | Offices in the hotel and catering where no guests are access                               |
| <b>Front office</b>                 | Offices where the guests have full access  |
| <b>Containers</b>                   | The bins where the hotel or catering waste is gathered for collection from the authorities |
| <b>Biodegradable kitchen waste</b>  | Waste that can be absorbed by the soil   |
| <b>Composter</b>                    | The outlet where food waste can be biologically converted in nutrition for the soil        |

## Technical sheet 1

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|--|--|
| <b>E-learning resource (H5P)</b>           | <b>Pdf file</b>  |
| <b>Name of the technical specification</b> | <b>Best practices PAP Hotels</b>   |
| <b>Aim</b>                                 | The technical sheets give precise indications of how to do and how to implement zero-waste in catering and hotels  |
| <b>Step by step implementation</b>         | <ol style="list-style-type: none"> <li>1. Identify the sources of waste in hotel/ catering</li> <li>2. Identify the types of waste</li> <li>3. Sort the types of waste and place the bins on spot</li> <li>4. Create templates in order to monitor waste daily</li> <li>5. Create check lists for the staff that participates in the project</li> <li>6. Make statistics/ reports from each department monthly</li> <li>7. Meet with all the participants in order to exchange outcomes</li> <li>8. Communicate the results to the local authorities/ municipalities</li> <li>9. Communicate the results to clients/ guests</li> <li>10. Evaluate the outcome of each employees/ department</li> </ol> |
| <b>Link to good practices/ Example</b>     | Outcome 1: <a href="#">ZERO WASTE by P.A.P hotels</a>  |
| <b>Link to EU green priorities</b>         | <a href="https://environment.ec.europa.eu/topics/waste-and-recycling/waste-framework-directive_en">https://environment.ec.europa.eu/topics/waste-and-recycling/waste-framework-directive_en</a>  |

## Technical sheet 2

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|--|--|
| <b>E-learning resource (H5P)</b>           | <b>Pdf file</b>  |
| <b>Name of the technical specification</b> | <b>Best practices WWF</b>  |
| <b>Aim</b>                                 | The technical sheets give precise indications of how to do and how to implement zero-waste in catering and hotels  |
| <b>Step by step implementation</b>         | <ol style="list-style-type: none"> <li>1. Investigate actions that can be done on a daily basis that help the waste handling</li> <li>2. Make a list with the most effective ones</li> <li>3. Discuss this list with the rest of the team</li> <li>4. Find the most accurate phrases that will depict the action and motivate the individuals</li> <li>5. Create communicational tools so that these actions are communicated further</li> </ol> |
| <b>Link to good practices/ Example</b>     | Outcome 1: <a href="#">WWF Hotel Kitchen</a><br><a href="#">Managing unavoidable losses through donating meals</a>   |

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|-----------------------------|---|
| Link to EU green priorities | <a href="https://environment.ec.europa.eu/topics/waste-and-recycling/waste-framework-directive_en">https://environment.ec.europa.eu/topics/waste-and-recycling/waste-framework-directive_en</a> |
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### Technical sheet 3

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|--|--|
| <b>E-learning resource (H5P)</b>           | <b>Pdf file</b>  |
| <b>Name of the technical specification</b> | <b>Best practice FZONE-Catering</b>  |
| <b>Aim</b>                                 | The technical sheets give precise indications of how to do and how to implement zero-waste in catering and hotels  |
| <b>Step by step implementation</b>         | <ol style="list-style-type: none"> <li>1. Communicating the project with associations of hoteliers, Cooks, Catering companies, Vet Institutions</li> <li>2. Communicating the project to local authorities to find the way waste is handled by them.</li> <li>3. Communicating the project to various food &amp; products suppliers that work with Hotel/ Catering companies</li> <li>4. Presenting the research of waste handling to a team of employees in a company</li> <li>5. Start working on technical tools required for the waste handling</li> </ol> |
| <b>Link to good practices/ Example</b>     | Outcome 1: <a href="#">FOOD ZERO WASTE @ FZONE- P.A.P Corp. GREECE</a>   |
| Link to EU green priorities                | <a href="https://environment.ec.europa.eu/topics/waste-and-recycling/waste-framework-directive_en">https://environment.ec.europa.eu/topics/waste-and-recycling/waste-framework-directive_en</a>  |

## Annex 1. Template for creation of curricular activity

### **GENERAL GUIDELINES**

1. **Suggested length of each lesson:** *4 pages excluding exercises and evaluation elements.*
2. **Front page:** standardised for all Modules.
3. **Declaration:** based on a standardised text (provided below).
4. **Table of contents:** already generated, shall be updated upon completion of all module's sections.
5. **Structure and content:**
  - The module's structure includes:
    - an outline;
    - a number of lessons;
    - resources for further reading;
    - bibliographical references;
    - Glossary;
    - Technical sheets.
  - The lesson section shall be:
    - structured in the form of a training delivery guideline;
  - Regarding content, the partners shall make sure that it satisfies the following criteria:
    - practical orientation and inclusion of ready-to-use resources;
    - concise presentation and non-technical language which would make it possible for VET teachers/trainers to engage in self-training without exceptional efforts;
    - adaptable to different forms of learning;
    - possibility to expand into more ambitious programs due to the connection with additional knowledge resources;



## Module Outline

**Suggested length: about 1 page**

**Interactive Book or Presentation.**

In the module outline, the following issues shall be covered:

|  |  |
|--|--|
| <b>Aim of the module</b>                     | Focus and aim of the module.   |
| <b>Key points of the module</b>              | Key points of the module's content.  |
| <b>Main Learning objectives</b>              | <input type="checkbox"/> «Zero-Waste» conscience in hotel and catering<br><input type="checkbox"/> Preparation for ecological change and change of habits<br><input type="checkbox"/> Bottom up learning from the field trough examples  |
| <b>Specific learning objective(s)</b>        | Identification of learning objectives which must be linked to the subjects involved in the learning path with particular reference to knowledge, skills and objectives for the development of skills.  |
| <b>Learning outcomes</b>                     | Knowledge:<br>Skills:<br>Competencies:<br>A reference framework indicating the knowledge, skills and competencies that will be improved through the training.  |
| <b>Key competences for lifelong learning</b> | <input type="checkbox"/> Literacy<br><input type="checkbox"/> Multilinguism<br><input type="checkbox"/> Numerical, scientific and engineering skills<br><input type="checkbox"/> Digital and technology-based competences<br><input type="checkbox"/> Interpersonal skills and the ability to adopt new competences<br><input type="checkbox"/> Active citizenship<br><input type="checkbox"/> Entrepreneurship<br><input type="checkbox"/> Cultural awareness and expression<br><input type="checkbox"/> Green skills |
| <b>Grade/VET group</b>                       | Specify the grade in VET school or the group of VET center   |
| <b>Technical sheets</b>                      | Name of the technical sheets.  |

1..... [Name of lesson] .....

1.1. Aim, Learning objectives and outcomes

**Suggested length: about 1-2 pages**

**Interactive Book or Presentation.**

|  |  |
|--|--|
| <b>Aim of the lesson</b>                     | A short overview of the theoretical concepts in the field of the learning objectives and outcomes addressed.   |
| <b>Key points of the lesson</b>              | Key points of the lesson's content.  |
| <b>Main Learning objectives</b>              | <input type="checkbox"/> «Zero-Waste» conscience in hotel and catering<br><input type="checkbox"/> Preparation for ecological change and change of habits<br><input type="checkbox"/> Bottom up learning from the field through examples   |
| <b>Specific learning objective(s)</b>        | They are outlined in clear and specific terms in order to subsequently evaluate the results.   |
| <b>Learning outcomes</b>                     | Knowledge:<br>Skills:<br>Competencies:<br>A reference framework indicating the knowledge, skills and competencies that will be improved through the curricular activity.   |
| <b>Key competences for lifelong learning</b> | <input type="checkbox"/> Literacy<br><input type="checkbox"/> Multilingualism<br><input type="checkbox"/> Numerical, scientific and engineering skills<br><input type="checkbox"/> Digital and technology-based competences<br><input type="checkbox"/> Interpersonal skills and the ability to adopt new competences<br><input type="checkbox"/> Active citizenship<br><input type="checkbox"/> Entrepreneurship<br><input type="checkbox"/> Cultural awareness and expression<br><input type="checkbox"/> Green skills   |
| <b>Subjects involved</b>                     | Specify the curricular subjects involved in carrying out the activity (integrated or connected)  |
| <b>Methodology</b>                           | Describe the methodology adopted during the activity implementation (Examples of asynchronous learning: <ul style="list-style-type: none"> <li>– Watching pre-recorded lecture videos or lessons</li> <li>– Viewing video demonstrations</li> <li>– Reading and writing assignments</li> <li>– Research projects</li> <li>– Student presentations</li> <li>– Online class discussions via course discussion boards</li> <li>– Individual or group projects</li> <li>– Learning activities such as quizzes, problem solving, and games).</li> <li>– Students have more time to reflect because the sender does not expect an immediate answer.</li> </ul> |

1.2. Training delivery guidelines

In this section, guidelines for the delivery of the lesson as curricular activity shall be provided in the table below.

|                          | <b>Theory of the lesson 1</b>  |
|--------------------------|--|
| <b>Introduction</b>      | Key words<br><i>Interactive Book or Presentation.</i><br><i>Half page</i>  |
| <b>Main presentation</b> | Explanation of terms, new knowledge - an Interactive Book or Presentation.<br><i>next to the text you can also include YouTube videos, cases, inspirational/educational videos in line with the context, short readings, illustrations, graphs, photos, etc) related to the topic which provides the learners enough information concerning the subject, and it is also triggering their curiosity and get them engaged in the learning process. Please present a <b>detailed explanation of the topic with as clear and simple sentences as possible.</b></i><br><i>Interactive Book or Presentation.</i><br><i>(max 2 pages + illustrations)</i> |

|                        | <b>EXERCISES and/or QUESTIONS FOR SELF-REFLECTION</b>  |
|------------------------|--|
| <b>Exercise</b>        | Exercises available on H5P. <i>(see list below)</i><br><i>1-3 numbers of exercises</i>   |
| <b>Self-reflection</b> | Questions/exercises that trigger user's self-reflection process.<br>Exercises available on H5P.<br><i>1-3 numbers of exercises</i> |

|                            | <b>Evaluation</b>  |
|----------------------------|--|
| <b>Evaluation elements</b> | List the learning activity elements you want to assess.<br><i>Interactive Book or Presentation.</i><br><i>Half page</i>    |
| <b>Evaluation tools</b>    | List the evaluation tools you want to use.<br>Evaluation tools available on H5P.<br><i>1-3 numbers of evaluation tools</i> |

|                          |  |
|--------------------------|--|
|                          | <b>Theory of the lesson 2 ..... next lessons</b>   |
| <b>Introduction</b>      | Key words<br><i>Interactive Book or Presentation.</i><br><i>Half page</i>  |
| <b>Main presentation</b> | Explanation of terms, new knowledge - an Interactive Book or Presentation.<br><i>next to the text you can also include YouTube videos, cases, inspirational/educational videos in line with the context, short readings, illustrations, graphs, photos, etc) related to the topic which provides the learners enough information concerning the subject, and it is also triggering their curiosity and get them engaged in the learning process. Please present a <b>detailed explanation of the topic with as clear and simple sentences as possible.</b></i><br><i>Interactive Book or Presentation.</i><br><i>(max 2 pages + illustrations)</i> |

|                        |  |
|------------------------|--|
|                        | <b>EXERCISES and/or QUESTIONS FOR SELF-REFLECTION</b>  |
| <b>Exercise</b>        | Exercises available on H5P. <i>(see list below)</i><br><i>1-3 numbers of exercises</i>   |
| <b>Self-reflection</b> | Questions/exercises that trigger user's self-reflection process.<br>Exercises available on H5P.<br><i>1-3 numbers of exercises</i> |

|                            |  |
|----------------------------|--|
|                            | <b>Evaluation</b>  |
| <b>Evaluation elements</b> | List the learning activity elements you want to assess.<br><i>Interactive Book or Presentation.</i><br><i>Half page</i>    |
| <b>Evaluation tools</b>    | List the evaluation tools you want to use.<br>Evaluation tools available on H5P.<br><i>1-3 numbers of evaluation tools</i> |

### Further reading

**Suggested length: about 1/2 page**

List of further training resources or sources of information or materials on the topic – useful web links for further reading & short information on their contents (between 5 and 10 titles).

*Interactive Book or Presentation.*

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### Bibliographical references

**Suggested length: about 1/2 page**

References to sources of information used in the content of the respective module. Between 5 and 10 references. Follow APA style (<https://libguides.murdoch.edu.au/APA>).

*Interactive Book or Presentation.*

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### Glossary

**Suggested length: about 1/2 page**

Most important terms, specific for the topic of the respective module. Two or three lines per term.

*Interactive Book or Presentation.*

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H5P allows to create various exercises such as :

|                         |   |
|-------------------------|---|
| Accordion               | Reduce the amount of text presented to readers by using this responsive accordion. Readers decide which headlines to take a closer look at by expanding the title. Excellent for providing an overview with optional in-depth explanations.   |
| Agamotto                | Allows users to compare and explore a sequence of images interactively. Authors can decide to add a short explanatory text for each image.  |
| Arithmetic Quiz         | This content type generates random arithmetic quizzes in a flash. As an author, all you have to do is decide the type and length of the quiz. Users keep track of score and time spent when solving the quiz.   |
| Audio Recorder          | Audio Recorder allows you to record your voice and play it back immediately or download a .wav file for future use. A fitting content type for open-ended questions and language courses.   |
| Branching Scenario      | Allowing users to create dilemmas, self-paced learning scenarios and other types of adaptive learning.  |
| Chart                   | Need to present simple statistical data graphically without creating the artwork manually? Chart is your answer.  |
| Column                  | Multiple choice, fill in the blanks, texts and other types of interactions and group them in a column layout.   |
| Complex fill the blanks | Creating fill in the blanks tasks with advanced feedback and 'drop-down' mode.  |
| Crossword               |   |
| Dialog Cards            | Dialog cards can be used as a drill to help learners memorize words, expressions or sentences. On the front of the card, there's a hint for a word or expression. By turning the card the learner reveals a corresponding word or expression.   |
| Documentation Tool      | Aims to make it easy to create assessment wizards for goal driven activities. It can also be used as a form wizard.   |
| Drag and Drop           | Enable the learner to associate two or more elements and to make logical connections in a visual way.   |
| Drag the Words          | Challenges where users are to drag words into blanks in sentences.  |
| Essay                   | Allows students to receive instant feedback to a text that they have composed. Authors can define a set of keywords that will trigger individual responses if they are found or missing in the text. Authors can restrict the number of characters that the students may use to cover all the important aspects of a given topic. |
| Fill in the Blanks      | Learners fill in the missing words in a text.   |
| Find Multiple Hotspots  | Create an image based test where the learner is to find the correct spots on an image.  |
| Find the words          | Create a list of words that will be drawn in a grid.  |

|                     |   |
|---------------------|---|
| Flashcards          | Allows authors to create a single flash card or a set of flashcards that have both questions and answers.   |
| Guess the Answer    | Create challenges where the user is to guess an answer based on a picture.  |
| Iframe Embedder     | Makes it easy to make an H5P of already existing JavaScript applications.   |
| Image Choice        | Build beautiful multiple or single choice questions where the alternatives are images.  |
| Image Hotspots      | Makes it possible to create an image with interactive hotspots. When the user presses a hotspot, a popup containing a header and text or video is displayed.                  |
| Image Juxtaposition | To compare two images interactively.  |
| Image pairing       | To test the understanding of a relation between two different images.   |
| Image Sequencing    | Challenges the learner to order a randomized set of images according to a task description.   |
| Image Slider        | Create responsive image sliders with a full-screen mode in a user-friendly way.   |
| Interactive Book    | It allows users to put together large amounts of interactive content like interactive videos, questions, course presentations and more on multiple pages.                     |
| KewAr Code          | Those QR codes can encode URLs, but also contact information, events, geo-locations, etc. People can scan them with a QR code reader in order to trigger the selected action. |
| Mark the Words      | Create textual expressions with a defined set of correct words.   |
| Memory Game         |   |
| Multiple Choice     |   |
| Questionnaire       | Questionnaires can be used as surveys or open ended questions. You may use multiple choice questions or text input questions.   |
| Quiz (Question Set) | To solve a sequence of various question types.  |
| Single Choice Set   |   |
| Sort the Paragraphs | Type or paste in a list of paragraphs that will be randomized. You may for instance let each paragraph be a part of a song, a block of code or steps in a recipe.             |
| Speak the Words Set | Allowing authors to create sets of questions answered by a user's own voice.  |
| Structure Strip     | Provides students with a scaffold for a text and helps them keep the lengths of the different text segments in good proportion.   |
| Summary             | Allows to create challenges where the user has to choose between statements and build the correct summary.  |
| Timeline            | Create interactive timelines.   |

True/False  
Question

Virtual Tour (360)

Allowing users to add questions, texts and interactions to multiple 360 environments using only a web browser.

Technical sheets

**Suggested length: about 1-2 page**

The technical sheets give precise indications of how to do and how to implement zero-waste in catering and hotels. They are developed on the basis of collected good practices in Result 1. Each technical sheet contains examples for real working environment implementation.

*Technical sheets should be prepared with resources available on H5P.*

|  |   |
|--|---|
| <b>Name of the technical specification</b> |   |
| <b>Aim</b>                                 | <b>aim of the technical specification</b>           |
| <b>Step by step implementation</b>         | 1.<br>2.<br>3.<br>4.<br>5.<br>N.                    |
| <b>Link to good practices/ Example</b>     | <b>Link to collected good practices in Result 1</b> |
| <b>Link to EU green priorities</b>         |   |