

PRACTICAL ACTIVITY 1 - Part 2 (Agrifood sector)

Title	Food waste management in businesses
Part of the training course referred to in this lesson	<ul style="list-style-type: none"> ○ Part 1 General information about sustainability and CE Part 2 Specific Information about: <ul style="list-style-type: none"> <input type="checkbox"/> Wood sector <input type="checkbox"/> Plastic sector X Agrifood sector
Duration	<ul style="list-style-type: none"> - 1 week for preparatory work – dividing the class into groups, choosing the topic/s - Up to 3 weeks for the research and the development of the work - 2 or 3 days (depending on the number of groups) for the presentation
Location	<p>X Outside</p> <p>X Inside</p>
Specific location requirement	No
Equipment needed	<ul style="list-style-type: none"> - Computer - Internet connection - Projector (Optional)
General Learning objective(s) according to the Bloom Taxonomy https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/	<p><input type="checkbox"/> Create Produce new or original work (design, assemble, construct, investigate, formulate)</p> <p>X Evaluate Justify a stand or decision (appraise, argue, defend, critique, select, support)</p> <p>X Analyze Draw connections among ideas (differentiate, organize, relate, compare, distinguish, test, experiment)</p> <p>X Apply Use information in new situations (execute, implement, solve, use, demonstrate, operate)</p> <p>X Understand Explain ideas or concepts (classify, discuss, describe, identify, locate, translate)</p> <p><input type="checkbox"/> Remember Recall facts and basic concepts (define, duplicate, list,</p>

	memorize, repeat)
<p>Specific learning objective(s)</p>	<ul style="list-style-type: none"> ● <i>To learn more about the Food waste management in local businesses;</i> ● <i>To collaborate with others in order to reach a common goals;</i> ● <i>To look for and propose sustainable solutions</i> ● <i>To research and elaborate information acquired;</i> ● <i>Develop communication skills.</i> ● <i>Team work</i>
<p>Cognitive, socioemotional and behavioural outcomes based on https://www.unesco.org/sites/default/files/2018-08/unesco_education_for_sustainable_development_goals.pdf</p>	<ul style="list-style-type: none"> ● SDG 2 Zero Hunger <ul style="list-style-type: none"> – Cognitive learning objectives: The learner understands the need for sustainable agriculture to combat hunger and malnutrition worldwide and knows about other strategies to combat hunger, malnutrition and poor diets, involving sustainable agriculture that does not pollute the environment and put human and environmental health in danger. – Socio-emotional learning objectives: The learner is able to communicate on the issues and connections between combating hunger and promoting sustainable agriculture and improved nutrition. – Behavioural learning objectives: The learner is able to change their production and consumption practices in order to contribute to the combat against hunger and the promotion of sustainable agriculture. – SDG 4 “Quality Education” <ul style="list-style-type: none"> – Cognitive learning objectives: the learner understands the important role of culture in achieving sustainability; the learner understands that education can help create a more sustainable, equitable and peaceful world. – Socio-emotional learning objectives: the learner is able to recognize the importance of their own skills for improving their life, in particular for employment and entrepreneurship; the learner is able to engage personally with ESD. – Behavioural learning objectives: The learner is able to use all opportunities for their own education throughout their life, and to apply the acquired knowledge in everyday situations to promote sustainable development. ● SDG 12 “Responsible Consumption and Production” <ul style="list-style-type: none"> – Cognitive learning objectives: The learner understands production and consumption patterns and value chains and the interrelatedness of production and consumption (supply and demand, toxics, CO2 emissions, waste generation, health, working conditions, poverty, etc.); the learner knows roles, rights and duties of different actors in production and consumption (media and advertising, enterprises, municipalities, legislation, consumers, etc.); the learner knows about strategies and practices of sustainable production and consumption. – Socio-emotional learning objectives: the learner is able to

	<p>communicate the need for sustainable practices in production and consumption; the learner is able to encourage others to engage in sustainable practices in consumption and production.</p> <ul style="list-style-type: none"> - Behavioural learning objectives: the learner is able to promote sustainable production patterns; the learner is able to take on critically on their role as an active stakeholder in the market. <ul style="list-style-type: none"> ● SDG 13 “Climate Action” <ul style="list-style-type: none"> - Cognitive learning objectives: the learner knows which human activities – on a global, national, local and individual level – contribute most to climate change; the learner knows about prevention, mitigation and adaptation strategies at different levels (global to individual) and for different contexts and their connections with disaster response and disaster risk reduction. - Socio-emotional learning objectives: the learner is able to collaborate with others and to develop commonly agreed-upon strategies to deal with climate change - Behavioural learning objectives: the learner is able to support climate-friendly economic activities; the learner is able to anticipate, estimate and assess the impact of personal, local and national decisions or activities on other people and world regions. ● SDG 15 “Life on Land” <ul style="list-style-type: none"> - Cognitive learning objectives: The learner understands that realistic conservation strategies work outside pure nature reserves to also improve legislation, restore degraded habitats and soils, connect wildlife corridors, sustainable agriculture and forestry, and redress humanity’s relationship to wildlife. 	
<p>Green skill(s) addressed</p>	<p>X Creative problem-solving</p> <p><input type="checkbox"/> Forward-thinking</p> <p>X Monitoring skills</p> <p>X Analytical skills</p> <p><input type="checkbox"/> Lean production</p> <p><input type="checkbox"/> Maintenance and repair skills</p> <p>X Pollution prevention</p> <p><input type="checkbox"/> Eco-design</p>	<p>X Management skills</p> <p><input type="checkbox"/> Impact quantification</p> <p>X Life-cycle management</p> <p><input type="checkbox"/> Science skills</p> <p>X Waste management</p> <p><input type="checkbox"/> Environmental auditing</p> <p><input type="checkbox"/> Ecosystem management</p> <p><input type="checkbox"/> Other _____</p>

**Step by step
instructions to
implement the activity**

Please, consider this description as guidelines you can follow to implement the activity but feel free to adapt it to your own needs.

Step 1: Preparatory work – dividing the class into groups

The class should be divided into groups of 3 - 5 students. Each group should appoint a group leader who is responsible for coordinating the work of their peers and being in contact with the teacher. The teacher monitors the grouping process and the entire study, supporting students where necessary.

Step 2: Preparatory work – choosing the topic/s

The distribution of the topics to the groups can be done by the teacher or the students can draw lots to decide on the topics they will work on.

The choice of topics to be covered during this activity depends on the opportunities and location of the training organisation:

- Generation and management of food waste in local supermarkets
- Generation and management of food waste in local hotels/ restaurants/fast food places
- Generation and management of food waste at home

Step 3: Topic research and development

Once each group has a topic to work on, they should begin the research phase. Initially, each group in the class makes a plan of their work, where they will study, what they will observe, what information they will collect. At the discretion of the team, they can also prepare a questionnaire aimed at the people they plan to meet. The research is done outside the school, depending on the possibilities of the locality, the students can do research in the relevant companies, meeting the manager of the company or the store and having a discussion, gathering information on the topic.

Research can be done in multiple sites, with the students distributing the tasks among themselves /if the locality allows/.

Time to collect the information - 1 week.

If it is not possible to visit local supermarkets/hotels etc. the students can research within a week what amount and what kind of food waste they generate at home and suggest methods to reduce and process it. Working in class, the teams summarise the information gathered. They draw conclusions about the sustainable management of food waste in the site/sites. They make suggestions and generate ideas for a possible increase in the efficiency of sustainable waste management.

The results of the research should be organised in a report (maximum limit of 10 pages recommended) and a presentation.

	<p>Step 4: Presentation of the research</p> <p>Each team presents their research and the conclusions and proposals made. The remaining teams formulate and ask questions.</p>
<p>Assessment tool / methodology</p>	<p>At the end of the activity, it is important that the students have a general reflection on what resulted from this activity and what they learned. Reflection can be guided by the teacher with questions such as:</p> <ul style="list-style-type: none"> - What did you appreciate most about this activity? Why? - What did you least enjoy about this activity? Why? - Was there teamwork and distribution of tasks? - Do you think this activity helped you improve some environmental skills? Which ones? - Do you think this activity helped you improve some soft skills? Which ones? <p>The teacher can then assess students' final work and presentation by considering, among others, the following factors:</p> <ul style="list-style-type: none"> - correctness and completeness of the survey - teamwork and cooperation - participation of each member in group work - clarity of presentation
<p>Additional resources</p>	<p>//</p>
<p>Source</p>	<p>//</p>