



**Intergenerational
Learning Communities**
TOWARDS ENVIRONMENTAL
SUSTAINABILITY

IMPULSE HANDBOOK

Project N°:

2021-1-LV01-KA220-000026286-P2



**Co-funded by
the European Union**

Project N°: 2021-1-LV01-KA220-000026286-P2

This project has been funded with support from the European Commission. The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.



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INTRODUCTION

Handbook type: Interactive learning / teaching / training material.

Target audience:

- Individuals - adults age of 25 to 64 + willing to change their own mindset and to improve habits having impact on the environmental sustainability.
- Trainers in the field of adult education, who provide training at different target audiences, where thematic is directly related to environmental sustainability or other topics where environmental sustainability issues are linked.

Languages: English, Latvian, Italian, German and Croatian

Context and authors of the handbook: The handbook has been elaborated within the European Union Erasmus+ Programme co-funded project “Intergenerational Learning Communities towards Environmental Sustainability” (ILCES). The project goal is to strengthen intergenerational learning within the community to promote environmental awareness and change of behavior towards environmental sustainability. There are five partners in the consortium: Latvia University of Life Sciences and Technologies (lead partner), CESIE (Italy), Volkshochschule im Landkreis Cham EV (Germany), Redial Partnership CLG (Ireland), DIOPTER OTVORENO UCILISTE (Croatia). All partners have participated in elaboration of the training material, where offered solutions and approaches are illustrated by good practice examples identified in the involved countries.

The main objective of the handbook is to raise awareness and to provide to the learners a broader understanding of environmental sustainability issues and to change mindset in order each of us can take in everyday life actions, behavior in a way our community, environment and planet become more sustainable.

In the handbook we have considered the environmental challenges to which actions taken by individuals make the strongest impact and which, properly addressed by an individual, a family, community and country can make improvements towards reduction of negative impacts on sustainability and increase of environmental sustainability at European and global level. Each challenge described in the next chapter refers to a certain UN Sustainable Development goals, adopted by all United Nations Member States and to be achieved till 2030.

Each challenge can be viewed and considered as a separate theme in one or several training sessions, where participants go through all the materials and tasks, and at the very end assess himself/herself with regard to the environmental footprint - the effect that a person or his/her activity, etc. has created on the environment. In-class training sessions can be adjusted with group discussions, sharing of views, experiences.

Global environmental sustainability challenges addressed

5

In this chapter a short description of the most common global environmental challenges has been provided – what is the challenge, how it is viewed in the global community, what impact the challenge has on the lives of individuals, families, communities and countries. Pictograms provided demonstrate links of the challenges to the United Nations Sustainable Development Goals. Though each described challenge is supplemented with one particular pictogram, some are linked to several Goals



- **Food waste**

A third of the world's food intended for human consumption – around 1.3 billion tons – is wasted or lost. In developed countries, inter alia in European countries, 40 % of food waste occurs at the retail and consumer levels. At the retail level, a shocking amount of food is wasted because of aesthetic reasons - more than 50 % of all produce thrown away is done because it is deemed to be “too ugly” to be sold to consumers. This leads to food insecurity, another one of the biggest environmental problems on the list. In countries with higher levels of well-being, the inhabitants should take responsibility for global food security, thereby providing support to the societies of regions and countries lacking food.

<https://www.un.org/sustainabledevelopment/>



- **Household waste management**

Sustainable waste management aims to keep goods and materials in use for as long as possible and minimize the amount of solid waste that is disposed of in landfill or through incineration. However, in the existing economies, waste begins even before products are manufactured, and a more in-depth approach to sustainable waste management must focus on the entire lifecycle of a product to enable us to help reduce the negative environmental, social, and financial impacts of 21st-century consumption habits. Whether focusing on waste reduction at end-of-life or designing waste out of the production cycle at the conceptual stage, new waste management practices are required to effectively deal with existing waste streams while also reducing the amount of waste at the same time. <https://www.un.org/sustainabledevelopment/>



- **Fast fashion and textile waste**

The global demand for fashion and clothing has risen at an unprecedented rate that the fashion industry now accounts for 10% of global carbon emissions, becoming one of the biggest environmental problems of our time. Fashion alone produces more greenhouse gas emissions than both the aviation and shipping sectors combined, and nearly 20% of global wastewater, or around 93 billion cubic meters from textile dyeing, according to the UN Environment Programme. Discarded clothing and textile waste ends up in landfills,

most of which is non-biodegradable, while microplastics from clothing materials such as polyester, nylon, polyamide, acrylic and other synthetic materials, is leached into soil and nearby water sources.

<https://www.un.org/sustainabledevelopment/>



- **Global warming from fossil fuels**

The last time carbon dioxide levels on our planet were as high as today was more than 4 million years ago. Increased emissions of greenhouse gasses have led to a rapid and steady increase in global temperatures, which in turn is causing catastrophic events all over the world: tropical storms, hurricanes, heatwaves and flooding tend to be more intense and frequent than seen before.

<https://www.un.org/sustainabledevelopment/>



- **Plastic pollution**

In 1950, the world produced more than 2 million tons of plastic per year. By 2015, this annual production swelled to 419 million tons and exacerbated plastic waste in the environment. Considering that plastic takes 400 years to decompose, it will be many generations until it ceases to exist. There's no telling what the irreversible effects of plastic pollution will have on the environment in the long run. <https://www.un.org/sustainabledevelopment/>



- **Reduction/lack of natural resources**

Consumption and production relies on the input of natural resources, which are extracted from the environment and often processed or manufactured to form the final products and services that we produce and consume. The products and services we produce and consume also depend on burning fossil fuels such as coal, oil and gas to generate the energy that powers machinery, factories, processing plants, transportation and the use of many products and services. Even services like education, healthcare and telecommunications rely on infrastructure, technology and energy that are built and powered using natural resources. The amount of materials used in production and consumption continues to rise at the global level and the rate at which materials are being extracted globally is outpacing both population and economic growth, meaning we are using more materials and less efficiently. If business as usual continues, global resource extraction will increase 110% by 2060.

<https://www.un.org/sustainabledevelopment/>



- **Biodiversity loss**

The past 50 years the world have seen a rapid growth of human consumption, population, global trade and urbanization, resulting in humanity using more of the Earth's resources than it can replenish naturally. A recent WWF report attributes the biodiversity loss to a variety of factors, but mainly land-use change, particularly the conversion of habitats, like forests, grasslands into agricultural systems. <https://www.un.org/sustainabledevelopment/>

The handbook covers seven global environmental sustainability challenges, caused the most by habits used and actions taken by individuals, families and communities. They have been associated and addressed in the six training/learning modules as following:

Module 1 **Food waste**

Module 2 **Household waste**

Module 3 **Fast fashion and textile waste**

Module 4 **Global warming from fossil fuels**

Module 5 **Plastic pollution**

Module 6 **Reduction / lack of natural resources and biodiversity loss**

Modules' structure and scope

In order to provide users of the handbook a clear understanding of contents and methodology, the modules are structured in a uniform format. **Each module has a name (the same as in the previous section) and a short description** that specifies objective, main target audience, and expected results that the selected module user will achieve after exercising the tasks.

The tasks are grouped into eight units in total, where **six units include exercises** by types of actions to be applied for more efficient use of resources (we call them 6 Rs – these are units No.2-7), as well **introduction unit** (No.1) and **reflection unit** (No.8). Please see more detailed information below.

Unit No.1. Introduction – shortly describes existing problems of the particular environmental sustainability challenge (all six are listed in the section above), as well as their scale and the negative impacts. The chapter aims to give users an idea of the scope of the problem and the role of individuals and to encourage them to take actions to improve the situation.

Unit No.2. Rethinking - The unit calls on users to reconsider and evaluate their own as individuals and their family traditions and habits with regard to the use of the specific type of resources, and on the basis of findings to make reasonable conclusions as to whether existing habits are effective and environmentally friendly, or whether changes are necessary. Identified challenges will help to search for solutions and develop the action plan in the next units.



Unit No.3. Refusing - The unit calls for an action plan – planning and implementation of measures in order to avoid creation of waste of the specific type of resources or even to come to the zero-waste level. The result will be your statement to yourself and people in your social circle on willingness to use resources more efficiently, longer, and possibly to share your best practices with the family and the community.

Unit No.4. Reducing - Planning and implementation of measures in order to reduce the amount of waste of the specific type of resources or to decrease negative impacts of human actions are observed in the unit. Methods to be applied in order to encourage the creation of ideas and plans are proposed. The unit emphasizes the role of the group in finding creative and efficient approaches, especially with regard to the challenges having wider environmental impact. E.g., on biodiversity.

Unit No.5. Reusing – The unit encourages users to think about ways how different things and stuff can be repeatedly used, especially the one produced from non-degradable or slow-degradable ingredients. Tasks and creative ideas on how to give second life to the goods, how to plan efficient purchases and other aspects are provided in the chapter.

Unit No.6. Repairing – Tasks of the unit are leading towards identifying “what you do not need anymore” and to find creative ideas “what can be application or new functionality of the old stuff”. Good examples provided will help to look at stuff more creatively.

Unit No.7. Recycling – People are creating a lot of waste and are collecting a huge number of household items over their lifetime. Sometimes it is difficult to find good solutions for their reuse. The unit offers broad information, how and where different wastes can be recycled and where and by whom old stuff can be used. Based on new awareness, users will be more aware of environmentally friendly ways to dispose of unnecessary things.

Unit No.8. Reflection time – After completion of all tasks within the module, an individual participant or a group jointly review knowledge acquired, lessons learnt, and experiences gained. Exercises will help users to find out benefits if the consumption habits are improved as well to identify further actions needed to create positive impact towards environmental sustainability.



Module 1

Food waste

Objectives: Data and tasks included in the module provide knowledge of responsible consumption of food and develop skills to use food resources responsibly and more efficiently. You can choose one or multiple tasks to work on individually, in pairs, or organize a group discussion and share your experience.

Expected results: Participants will carefully review their grocery lists and plan the quantities of products needed for meals in order to minimize food waste as much as possible.

Unit 1

Introduction:

A significant amount of food is wasted globally. This problem is widespread and multifaceted, involving both food production, supply chains, restaurant and store operation, as well as consumer habits. The latest data indicates that each European Union resident throws away an average of over 130 kilograms of food waste annually while there are still people in the world suffering from hunger and inadequate nutrition. Creating shopping lists, organizing products in the refrigerator based on their expiry dates, and using measuring utensils are just a few methods to reduce food waste.

Visual illustration:



Rethinking

Questions, statements:

Analyze your food purchases and consumption habits! How often do you do food shopping?

What do you buy? How much food do you throw away per week and why?

The reasons can be many: not tasty food, forgetting that you have it, not eating it and throwing it away.

Tasks, activity:

Look in the list of products and tick the most often used!

Please check your answer! You can add other products that you use.

Product	Whenever	Sometime	Never	Product	Whenever	Sometime	Never
Rice				Broccoli			
Oatmeal				Lettuce			
Pearl barley				Parsley			
Semolina				Red beets			
Flour				Beef			
Pasta				Pork			
Millet				Chicken			
Couscous				Lamb			
Quinoa				Turkey			
Lenses				Fish			
Peas				Seafood			
Potatoes				Milk			
Carrots				Cream			
Sweet potatoes				Yogurt			
Cabbage				Butter			
Cucumbers				Fast food			
Tomatoes				Drinks			
Onions				Sweets			

Discuss what you can change in your habits! What can you do with products that you have bought too much and they begin to deteriorate?

Refusing

1. **Bring in 4 items from the fridge or pantry that you think could soon go bad.**
2. Discuss with participants why you think the item could go bad, and what you could do to make it last longer.
3. When everyone is done, have the group come up with creative ways to repurpose the items so they don't go to waste.
4. For example, if you bring in a bunch of bananas that are about to go bad, have the group think of ways they could use them: banana smoothies, banana bread, banana pancakes, etc.
5. After everyone is done brainstorming, have each person take a turn explaining how they could refuse food waste in the future.
6. Examples could include being mindful of portion sizes, eating leftovers, planning meals ahead of time, buying in bulk, and using up food before it goes bad.
7. Finally, have the group come up with a set of rules for the household or workplace to reduce food waste.

Unit 4

Reducing

Food Gathering: Organize a gathering between a group where participants take an inventory, with particular focus on food which is about to expire or is not planned to be eaten such as tins.

Take stock of pantry, refrigerator and freezer before attending the gathering - Create a meal plan as a group pooling each of the resources, and then utilize a pantry app such as 'supercook' or any from the list: <https://www.escoffieronline.com/top-apps-for-finding-recipes-for-ingredients-you-already-have/>

Prepare food in advance and in bulk, then eat together, save and eat leftovers safely. Store food appropriately, donate to food banks, compost or use leftovers creatively.

This can have a variety of effects, including showing the benefits of reducing food waste through pooling resources and making sure purchases are allocated effectively or disposed of creatively. This can also have the effect of aiding planning, community resourcing, highlighting recipe apps, and indicating where hardship funds are in the local community.

This should also have the effect of offering follow ups for individuals in the community, and can encourage further meetings such as:

Recipe Exchange: Encourage participants to share their family recipes and document them in a recipe book. This exchange of culinary knowledge promotes intergenerational learning and preserves cultural traditions for future generations.

Intergenerational Cooking Teams: Form intergenerational cooking teams comprising individuals from different age groups and cultural backgrounds. Assign each team the task of preparing a meal that combines elements from various European cuisines. This promotes collaboration, understanding, and the blending of cultural flavors.

Reflection and Discussion: Facilitate a reflection session. Encourage open dialogue on the importance of intergenerational connections and the value of cultural diversity within European communities.

Reusing

Exchange opinion:

How long does it take you to plan your menu?

How long does it take you to prepare food?

How often do you review the content of your refrigerator and inventory of your kitchen?

Spend some time researching creative recipes and ideas for reusing specific types of leftovers. You can use cookbooks, websites, or apps focused on reducing food waste. Discuss! Share your opinion/recipes in which way you can reuse different products for new meals.

Unit 6

Repairing

Exercise: Organize a community event to repair and repurpose food containers and kitchen appliances to reduce food waste. Encourage participants to bring in items that need repair, such as broken Tupperware containers or malfunctioning blenders, and provide tools and resources for repairing and repurposing them.

Example: A local community center hosts a Repair Café focused on food waste reduction. Participants bring in items such as damaged reusable food containers, dull knives, and broken kitchen appliances. The event provides repair tools and tutorials on how to fix and repurpose the items. As a result, many of the items are repaired and given a new life, reducing the amount of food waste and saving money for the participants.

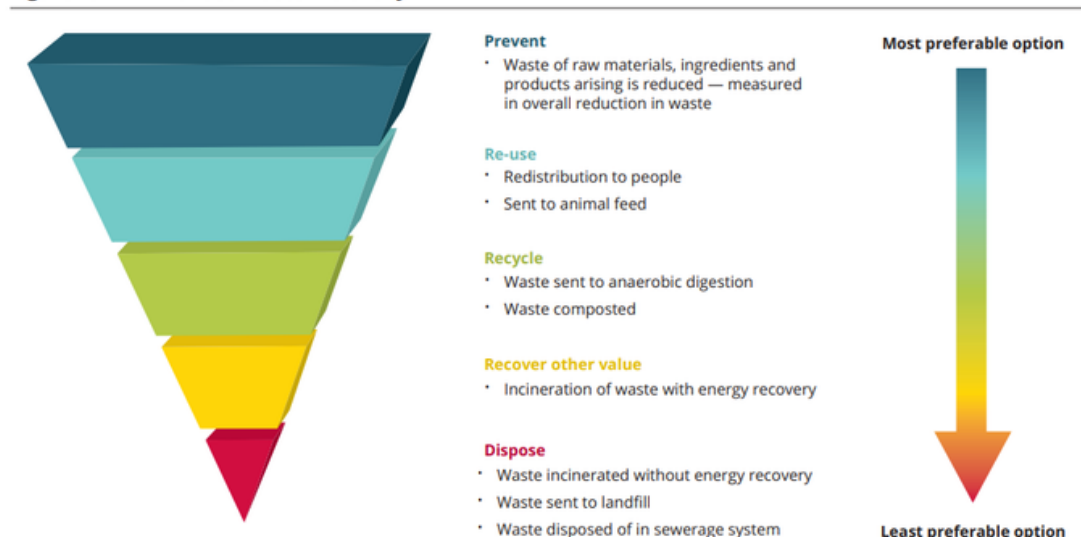
Unit 7

Recycling

Home Composting Challenge

The best approach to food waste is to avoid it at all; however, it is not always possible. There are also other ways of handling food waste – check out the chart below that lists all the possibilities in the order of their preferability:

Figure 4.1 The food waste hierarchy



Source: Modified with permission from SEPA (2016).

One of the ways to recycle food waste is **home composting**. Home composting might be beneficial for several reasons: it improves soil health and its ability to retain water; it reduces the need for artificial fertilizers and pesticides; it reduces the waste sent to landfill.

Part 1. Join the Home Composting Challenge!

Even if you do not have a big garden, you can still try out composting – home plants would also appreciate the enriched soil. Here is how it is done properly:

1. Food waste subject to composting

A compost full of nutrients requires four ingredients: the greens, the browns, air and water. The greens are vegetable peelings (please, no cooked vegetables!), fruit waste, tea bags, plant prunings and grass cuttings – these rot quickly and produce the needed nitrogen and moisture. The browns are: cardboard, egg boxes, crumpled up paper, twigs, fallen leaves, and also egg shells. The browns rot slower; they provide fiber, carbon and create important air pockets. Usually you are not supposed to put the following into your compost bin/heap: cooked vegetables, meat and dairy products, bones, fat, oils, diseased plants, pet droppings of baby nappies. These might attract rodents and other pests.

2. The right place and vessel

To compost at home, you have to pile up organic materials to form a compost heap; to do so, you can use simply constructed boxes. Alternatively, you can get a composting bin with air openings and a lid. The bin should be placed on a level well-drained spot so that the water can drain out easily and so that helpful creatures such as worms could get inside and help to break down the contents. To speed up the process a bit, you can put the bin in a sunny spot.

3. The procedure

The most common way of composting is a “slow-stack technique” where a user adds organic matter to the container regularly, and it decomposes naturally into a compost. Make sure to maintain the correct carbon to nitrogen ratio (25-30 to one); to do, so you have to mix carbon rich materials (straw, leaves, cardboard, etc.) with nitrogen rich materials such as grass cuttings, raw fruit and vegetables. Depending on weather conditions, you might have to add water to the heap. Stirring the contents regularly is also highly recommended to speed up the process. The compost is ready when it looks dark, rich and crumbly; it might take from 4 to 12 weeks. When ready, you can spread the compost over your flower beds.

[Source 1](#), [Source 2](#), [Source 3](#) to learn more about the home composting process.

Part 2. Take advantage of municipal recycling and composting

Many European countries now offer the services of collecting biowaste and composting or recycling it on a municipal level. Make small research to see if your municipality offers such services – if yes, check what type of bio-waste can be collected and download a waste collection calendar.

Part 3. Brainstorm

Think of other possible ways to manage your food waste, e.g. donate to animal shelters, local farmers, neighbors breeding certain animals (stale bread is good enough to feed chicken, who also need calcium that they can get from eggshells, etc.).

Reflection time

The mindful consumption of food products is a very important issue. Which of the tasks provided in this module encourages you to reconsider your daily food products acquisition and usage habits? What questions would you emphasize in conversations with family members, neighbors and friends?

Module 2

Household waste

Objectives: Raise learners' awareness about household waste and equip them with the skills needed to reduce the amount of it, use it for other purposes or recycle it correctly. Improved knowledge of different types of household waste and enhanced ability to handle it (find another usage or, if that's not possible, recycle it correctly).

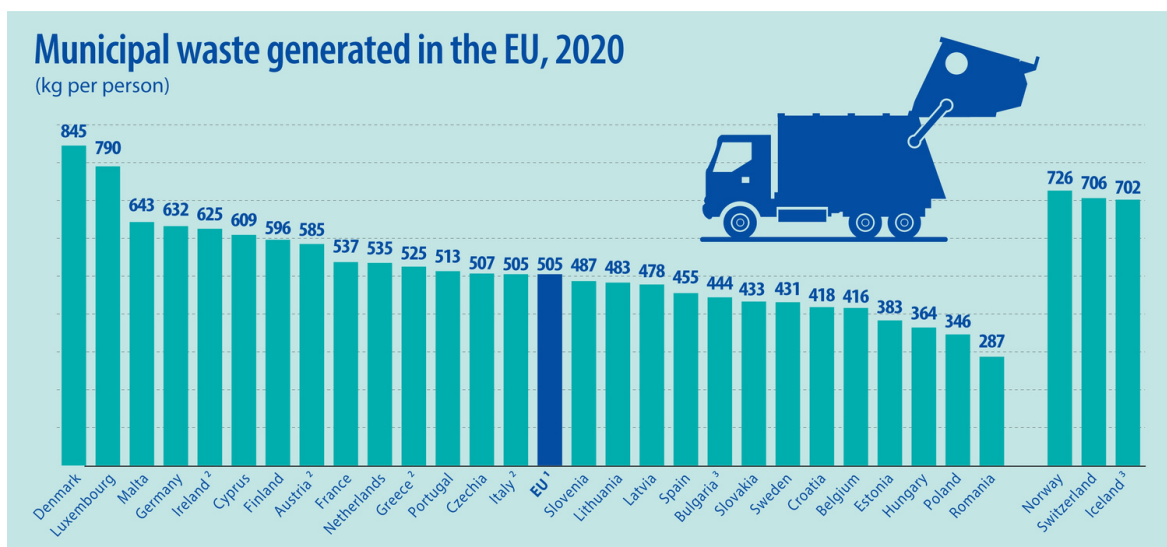
Expected results: Participants will reconsider before discarding household items whether it's possible to reuse these items.

Unit 1

Introduction

In 2020, 505 kilos of municipal waste were generated per person in the EU; it is 4 kilos more than in 2019 and 38 kilos more than in 1995 (municipal waste is the garbage that is collected by municipal authorities and disposed of through waste management systems, it includes waste from households but also the one produced by shops, offices and public institutions). At the same time, around 50% of municipal waste is recycled, which means that the rest most probably gets incinerated or ends up at a landfill. Household waste can include non-hazardous materials (such as food scraps, paper, bottles) and hazardous things such as batteries, detergents, old medicines and other chemicals. It is important to be aware of this difference and to know how to handle them appropriately.

Visual illustration:



⁽¹⁾ Estimated
⁽²⁾ Ireland, Austria, Greece, Italy: 2019 data
⁽³⁾ Bulgaria, Iceland: 2018 data

Rethinking

Every day the household waste heaps growing up.

Make a list of all the types of waste your household generates regularly this can include food waste, packaging materials, electronics, clothing and more.

Do you ever think about what happens to your household waste after you throw it out?

Write the notes below the heading.

Heading: Problems associated with household waste. Finish the sentences! Brainstorm, discussion, not finish the sentences with one or two words. Thinking deeper, try to see the risks (sentence 1 and 2).

- 1.The household waste generates risks
- 2.The chemistry used in everyday life affects
- 3.To solve the problem, we can

Unit 3

Refusing

Materials needed: Pen and paper; Waste items (empty bottles, cans, paper, plastic, etc.)

Instructions:

1. Do it with other participants.
2. Give each of them a waste item (empty bottles, cans, paper, plastic, etc.)
3. Ask each of them to come up with at least three different ways to refuse the waste item.
4. Have each team write their ideas down on the paper.
5. Go around the circle and have each of them share their ideas with the group.
6. Discuss the pros and cons of each idea, and decide which one is the most effective way to refuse the waste item.
7. At the end of the activity, have each of them create a slogan or a promise to remember their commitment to refusing waste.
8. Encourage each of them to help each other stick to their commitment.

Unit 4

Reducing

Awareness Session: Begin the activity with an interactive awareness session on household waste management. Present information on the importance of proper disposal of medicines and household chemicals, their environmental and health impacts, and available safe disposal methods.

Storytelling and Experience Sharing: Encourage participants, both young and old, to share personal stories and experiences related to waste management. Older adults can talk about how waste disposal practices have evolved over time, while younger participants can share their understanding of current challenges and concerns.

Hands-on Sorting and Identification: Set up a sorting station where participants can practice segregating waste items, including medicines and household chemicals. Provide guidance on identifying expired or unused medicines and chemicals and separating them from regular trash.

Safe Disposal Techniques: Demonstrate safe disposal techniques for medicines and household chemicals, such as contacting local pharmacies for medication take-back programs or using designated hazardous waste collection centers. Emphasize the importance of not flushing or pouring these substances down the drain.

Collaborative Projects: Divide participants into small groups consisting of members from different generations. Assign each group a project to create awareness materials, such as posters, brochures, or social media campaigns, to educate their communities about proper waste management, including the safe disposal of medicines and household chemicals.

Presentation and Exhibition: Allow each group to present their projects and showcase their awareness materials to the entire gathering. Encourage discussions and questions to foster intergenerational learning and exchange of ideas.

Follow-up Actions: Encourage participants to implement the knowledge gained from the activity in their daily lives. Provide resources and contact information for local recycling centers, take-back programs, or other disposal options for medicines and household chemicals.

Unit 5

Reusing

What things do you try to reuse, in which way?

Use the list of different household waste and modulate in which way you can reuse it.

Household waste:

- Water in which vegetables are washed.
- Wrapping paper.
- Broken furniture.
- Materials remaining after repair (ceramic tiles, pieces of linoleum, wooden curves, ect.).
- Used flower box land.
- Old electrical appliances.
- Ash.
- Glass bottles and jars.
- Perfume bottles.
- Old/broken toys.

Discuss in groups, exchange your opinion!

Unit 6

Repairing

1. Choose an item in your home that needs repair, such as a broken chair or a faulty appliance.
2. Research how to repair the item - look up online tutorials or repair books, and seek advice from friends or repair experts.
3. Obtain the necessary tools and materials for the repair.
4. Repair the item.
5. Reflect on how you felt while repairing the item and how you felt after successfully repairing the item. Consider how your household could reduce waste and save money by repairing rather than buying new items.

Example:

Households often rely on chemicals such as cleaning products, pesticides, and medications. However, these chemicals can be harmful to the environment and people if not disposed of properly. One way to manage household waste is to not throw away chemicals no longer needed in the trash or rinse them down the drain. Instead, you can dispose of them at a local hazardous waste collection center or a pharmacy that accepts expired medications. This helps prevent environmental pollution and preserve the safety of your community.

Unit 7

Recycling

Over life, we collect a huge number of household items. Whenever we want to move to another location or refurbish our interior, various household items require different types of handling (they cannot be simply thrown away as general waste). Quite often local authorities offer citizens the services that should help them recycle household waste in a more sustainable way:

Search for the telephone numbers you would need to call in order to get rid of/get instructed regarding the handling of the following:

Old washing machine	
Broken chair	
TV manufactured in 1956	
A table you no longer need	
A sofa that is no longer soft	
Old vacuum cleaner	
Grandma's cupboard	
Old refrigerator	
Cracked window	
Expired medicines	
Mercury thermometer	
Old tiles from your bathroom that you decided to renovate	
Paint that is left after painting your living room	
Old PC	

Here are some more tips that will help you manage your household waste in a more organized manner:

1. Make a Waste Pick-Up Calendar. Research the topic and enter the dates into the calendar when local services deal with different types of waste (in some countries, e.g., in Germany, such calendars are provided by the municipalities).

2. Organize a place in your household for different types of waste (you can also cooperate with neighbors) and separate your waste accordingly. This will help you get more disciplined about management of different types of waste and also provide an overview of how much waste your household actually generates.
3. Be proactive: contact your local authorities and ask them to provide containers for separate waste management in case you do not have them in a close proximity.
4. Think of different ways to recycle wooden items (e.g. use it to fire a stove, make sawdust and use in a garden, etc.).
5. Organize a place in your household for glass items of different colors (you can also cooperate with neighbors) and collect your glass waste accordingly for a month. Hand it over for processing.
6. Find apps developed to help people recycle their waste.

Unit 8

Reflection time

To summarize the outcomes of the conducted activities and encourage further reflection, ask the participants the following questions:

What is their general impression of the activities carried out? Which of the activities they found most useful?

What difficulties did they encounter when carrying out the activities? How did they overcome them (or how could they overcome them in the future)?

What other measures can they take to minimize the amount of household waste? (this question should foster creativity and peer learning)

Summarize the results of the discussion on a board or flipchart, take a picture of them and share it with all the learners.

Module 3

Fast fashion and textile waste

Objectives: This module on Fast fashion and textile waste seeks to address gaps in learning between generations and understand how to best exchange knowledge on this subject. This is for the purpose of both individual habits which may change over time and across life stages, and wider society changes which may require lobbying to decision makers within local, national and international in order to affect positive action in the fashion and textile industries.

Expected results: The results should be that particular decisions are made on a personal, organizational, and societal level. This will be the case within nuclear families as well as within businesses and through policy advocacy.

Rethinking

Do you follow fashion?

When you buy clothes, is price or quality decisive?

Are you considering the duration of use?

Do you look at the textile composition before buying?

Prepare a list of recommendations on what you should never do when buying fast fashion or textile products!! Why?

Which of your recommendations would reduce textile waste?

Discussion, share your opinion!

Unit 3

Refusing

1. Make a list of 5 of your favorite clothing stores or brands and research their environmental, economic and social impacts.
2. Choose 3 stores or brands from your list and create a plan for how you can reduce your textile waste from these stores or brands.
3. Write a blog post or social media post about your plan and share it with your friends and family.
4. Take a picture of yourself wearing an outfit that you already own and post it on social media with the hashtag [#RefuseFastFashion](#).
5. Make a commitment to yourself to reduce the amount of clothing you buy and the amount of textile waste you produce.
6. Go out and explore thrift stores and second-hand shops to find clothing items that you can wear that have already been produced.
7. Share your experiences with friends and family.

Unit 4

Reducing

The concepts of remaking, recycling, reusing, repurposing is key. This activity builds on the existing concepts participants have about their needs and help them think about in a more concrete way, and to take steps towards personal development.

In the first part (role-play) they are encouraged to articulate their wishes related to the group's goals like job seeking.

The second part (collage-making) they use existing materials (newspaper pictures) and reorganize these elements to create a new meaning from them (upcycling) to deepen their understanding of their needs.

Duration: 1h workshop + 30 min debriefing is suggested (1h 30 min in total to deliver your workshop during the training).

This process should take 1,5 hours without the debriefing part (intro, role-plays and collage-making), with the debriefing and reflection I calculate 2 hours.

Objective of the workshop: allowing participants to gain awareness about their needs. Concretizing these needs, take initial decisions on how to move towards them.

The activity can be used generally with self-knowledge purposes, or adapted to specific contexts (e.g. job search, facilitation, social skills etc).

Description of the activity.

Preparation: Setting up the scene for a shop. A table as a counter is enough, and any object that is around can be used as products, but it's not necessary. The group is sitting in a semi-circle, the shop is in front of them. Materials (magazines, scissors etc) are prepared on the side. After a warm up, the facilitator tells the group that she/he is opening a magical shop where they can buy anything they might need (to get a job or be a great facilitator etc). The price of the items in this shop is not paid with money, but with a barter. One volunteer is chosen for the demonstration, who is the customer, the facilitator is the shopkeepers.

Development:

STEP 1: demo roleplay.

The facilitator invites the customer into the shop, and asks questions about what they are interested in buying, paying attention to concretize further what the customer wants. E.g. the customer says they need self-confidence, the shopkeeper can say they have this product range, but needs to know what kind of self-confidence? When does the customer want to use it most? Etc.

After choosing the exact product (e.g. self-confidence when speaking in front of a group of strangers), time to come up with a price: what are you willing to give for it? The facilitator should negotiate, not accept the first answer if that's a too low price. In the above example the customer might pay this way: 'I will practice 2x a week in front of a mirror' and 'The next week I'll look for a group where I have the opportunity to speak, like a language exchange'.

STEP 2: role-play in pairs.

After the scene, the facilitator says that now they have seen this business model, they can open their own shops. Participants are put in pairs. One is the shopkeeper, the other is the customer. They repeat the scene, buying and selling skills, attitudes etc. After 5-10 minutes they reverse roles. After the second round everyone can share what they bought and at what price, this is optional. Group members can say if they already have items others bought (and shared it with the group), and how they acquired them.

STEP 3: collage making.

Every participant is given a blank paper, a pair of scissors and paper glue. There are a lot of magazines prepared with pictures on them they can use to create a collage.

The collage will show them, after having paid the price of their 'goods' and they are in full possession of them.

At the end, everyone can put their own artwork on the ground and the participants observe each other without commenting.

Closing round – what has been the most significant for you in this activity? Is there anything you are happy/unhappy about?

Materials: A4 sheets; paper glue; scissors; magazines, newspapers.

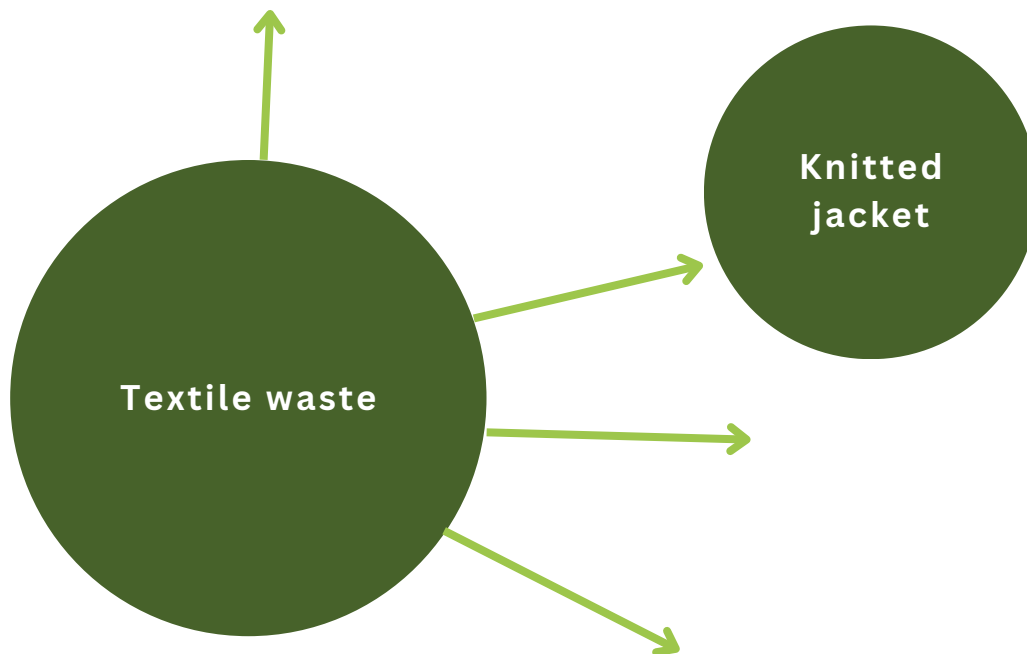


Reusing

Can all fast fashion and textile products be reused? How do you do that?

Work in pairs and draw/fill brainstorming web!

Please continue this brainstorming web! Add different kinds of textile waste and ways to reuse them!



After this exercise, collect all ideas in one brainstorming web!

Unit 6

Repairing

Exercise:

1. Go through your wardrobe and find three clothing items that you love but need repairing.
2. Learn how to repair them. You can find online tutorials or books about repairing, ask for advice from friends or textile repair experts.
3. Get the necessary materials for the repair, such as thread and needle, fabric patches, buttons or zippers.
4. Repair your clothing items. You can patch them, replace a button or a zipper, or modify them to better fit your body.
5. Wear your repaired clothing items and enjoy them, knowing that you saved them from being thrown away and reduced your impact on the environment.

Example:

If you have a shirt that you really like, but the buttons are starting to fall off, don't throw it away. Instead, get some new buttons and replace them. It's a simple repair that you can do at home by yourself. If you're not sure how to replace buttons, you can find online tutorials or ask a friend who has done a similar repair. This simple repair will extend the life of your shirt and help reduce the textile waste that ends up in landfills. You will also save money that you would have spent on buying a new shirt.

Recycling

In recent years, the world has been overwhelmed with fast fashion: certain companies introduce new collections of clothing and accessories almost every week. The value (both financial and moral) of fast fashion clothing has decreased significantly, so such items get thrown away much faster.

It is not that obvious at a first sight why fast fashion is so harmful. There are many different reasons: First, fast fashion clothing is usually produced in less well-off countries where people work in poor working conditions and receive extremely low wages. The production of such clothing requires a lot of resources (raw materials, water, electricity, etc.) and most often produces a highly negative impact on the environment. Finally, as mentioned above, fast fashion items get thrown away pretty quickly – in the best case, they can be recycled; in the worst case they end up in a landfill and stay there for ages.

It is not always obvious what our clothing is made of and what future awaits it. Have a look at the table below:

Nr.	Type of fabric	What is it? How is it produced?	Can it be recycled?
1.	Polyester	Polyester is a common name for “polyethylene terephthalate” (PET or PETE), so basically it’s plastic. This synthetic fiber is derived from petroleum; the whole process is very energy-intensive.	Synthetically produced polyester is not biodegradable. It can be recycled (certain types of polyester), but it could be difficult if it is blended with other fibers or materials.
2.	Recycled polyester	Recycled polyester (rPET) is made from recycled plastic bottles: either mechanically (by being melted into new yarn) or chemically (by breaking down plastic molecules). This process requires fewer resources and produces fewer CO2 emissions.	Recycled polyester fabric is not biodegradable and cannot be recycled again. It takes years to decompose after being thrown away.
3.	Nylon	Nylon is a synthetic type of plastic made of very strong polymers produced from crude oil. It is most commonly found in swimwear and underwear, socks, stockings and pantyhose.	Nylon is not biodegradable. Some forms of nylon can be recycled, but quite few companies do that because the process is more expensive than the actual production of nylon. Certain organizations are now looking into the possibility of reducing the costs of recycling.

4.	Cotton	Cotton is a water-intensive crop; traditional production of cotton requires a lot of insecticides and pesticides. Cotton production leads to the exhaustion of the soil and destruction of local habitats.	Cotton is completely biodegradable. It can also be recycled by being broken down into raw materials and spun into yarn and fibers.
5.	Organic cotton	Organic cotton is produced with less negative impact on the environment: no harmful substances are used, and ancestral farming methods are applied (crop rotation, mixed farming or no-till farming).	Organic cotton is biodegradable and can be recycled.
6..	Rayon/ viscose	Rayon is a semi-synthetic fiber produced from regenerated cellulose derived from wood pulp (mostly eucalyptus). The process requires a lot of chemicals (that can also be harmful to the people working with them), energy and water.	Rayon is biodegradable and can be recycled.

[Source 1](#), [Source 2](#), [Source 3](#), [Source 4](#), [Source 5](#)

Your task:

1. Pick three to five items of clothing, check their composition and decide how they can be recycled.
2. Research the localities around you that accept clothes/footwear for recycling. Make a post on social networks to let your followers know what you have found.

Unit 8

Reflection time

Answer the following questions to evaluate your knowledge:

- Which materials need to be purchased cautiously and where can clothes be recycled?
- Has this module alerted you to any potential methods of clothing re-use you hadn't previously considered? Which will you try or aim to use?
- What goals have you set or re-evaluated as a result of this module?
- Who do you intend to share your findings on this module to?
- Which recommendations can you share with a decision maker in supply lines based on the findings of the module?
- What did you like about this module?
- What was the most useful about the module?
- What did you learn about this module?

Global warming from fossil fuels

How can education encourage students to get involved in fighting global warming from fossil fuels?

Objective: Encourage participants to think about the importance of reducing the use of fossil fuels, promoting sustainable energy solutions and getting involved in global efforts to stop global warming.

Expected results: Education can overcome these challenges by providing clear and relevant information, encouraging critical thinking, promoting practical actions, and connecting individuals to global efforts.

Unit 1

Introduction

Sustainable mobility for students and staff: Encouraging the use of environmentally friendly modes of transportation for commuting to school, such as bicycles, public transport, or electric vehicles.

- Teaching about the impact of fossil Fuels: Promoting more educational programs about the impact of fossil fuels on the environment and climate change during school lessons.
- Promoting eco initiatives on school/campus: Encouraging the creation of environmental initiatives on the school campus, such as gardens, composting, and recycling.
- Construction and renovation of school buildings with energy efficient materials and technologies: Building and renovating school buildings using energy-efficient materials and technologies.
- Energy efficiency in educational institutions: Implementing energy efficiency measures in schools and universities to reduce the consumption of fossil fuels for heating, cooling, and lighting.

Visual illustration:

<https://www.nrdc.org/stories/are-effects-global-warming-really-bad>

<https://www.epa.gov/nutrientpollution/sources-and-solutions-fossil-fuels>

<https://www.youtube.com/watch?v=Oqdlbq1Y24g>

<https://www.clientearth.org/latest/latest-updates/stories/fossil-fuels-and-climate-change-the-facts/>



Rethinking

Questions, statements: There are three types of fossil fuel – coal, oil and gas. How big is fossil fuel's role in our life? What fossil fuel impact?

Tasks, activity: Take a list of facts and read.

Global warming

Global sea level has risen about 8 inches (0.2 meters) since reliable record-keeping began in 1880. By 2100, scientists project that it will rise at least another foot (0.3 meters), but possibly as high as 8 feet (2.4 meters), if we continue carbon emissions at our current rate. <https://climate.nasa.gov/effects>

Disappearing glaciers, early snowmelt, and severe droughts will cause more dramatic water shortages and continue to increase the risk of wildfires in the American West.

Rising sea levels will lead to even more coastal flooding on the Eastern Seaboard, especially in Florida, and in other areas such as the Gulf of Mexico.

Forests, farms, and cities will face troublesome new pests, heat waves, heavy downpours, and increased flooding. All of these can damage or destroy agriculture and fisheries.

Disruption of habitats such as coral reefs and alpine meadows could drive many plant and animal species to extinction.

Allergies, asthma, and infectious disease outbreaks will become more common due to increased growth of pollen-producing ragweed, higher levels of air pollution, and the spread of conditions favorable to pathogens and mosquitoes. <https://nrdc.org/global-warming>

The impacts of climate change on different sectors of society are interrelated. Drought can harm food production and human health. Flooding can lead to disease spread and damages to ecosystems and infrastructure. Human health issues can increase mortality, impact food availability, and limit worker productivity. Climate change impacts are seen throughout every aspect of the world we live in. However, climate change impacts are uneven across the country and the world – even within a single community, climate change impacts can differ between neighbourhoods or individuals. Long-standing socioeconomic inequities can make underserved groups, who often have the highest exposure to hazards and the fewest resources to respond, more vulnerable.

<https://noaa.gov/education>

Do you imagine that situation is so disturbing?

Have a look at ways to Stop Global Warming. Discuss – what you can do?

Ways to Stop Global Warming:

1. Change a light.
2. Drive less. ...
3. Recycle more. ...
4. Check your tires. ...
5. Use less hot water. ...
6. Avoid products with a lot of packaging. ...
7. Adjust your thermostat. ...
8. Plant a tree.

Refusing

In this challenge, you are asked to refuse the use of items that are derived from or produced using fossil fuels. You can choose the items you want to refuse for the challenge based on your individual lifestyle and preferences.

Examples of items to refuse include:

- ☐ Plastic bags
- ☐ Plastic straws or cutlery
- ☐ Single-use items like cups or plates
- ☐ Bottled drinks
- ☐ Fast food
- ☐ Processed food
- ☐ Unnecessary trips by car
- ☐ Air conditioning

At the end of the challenge, you can reflect on the impact this has had on your lifestyle and the environment. It is also important to discuss the need to find more sustainable alternatives.

Unit 4

Reducing

The main part of our activity will require a physical space to be delivered in. Although some parts of it are flexible and could be delivered through blended methods. Our activity is a full manifestation of Reduce at the local level through the initiative of communities. Through our activity the academic concept of circular strategies of production takes life through actions and initiatives at the consumer/local/community level.

Duration: 1h workshop + 30 min debriefing is suggested (1h 30 min in total to deliver your workshop during the training). We expect for the swap part to last approximately 30/40 minutes, after a reflection on possible swap parties in each of the participants' communities will follow which will last approximately 40/50 minutes at the end we'll do a 10/15 minutes debriefing.

Objective of the workshop: The objective of our workshop is to allow participants to familiarize with swap parties as one of the concepts and practices of Reduce, and how to apply it in their own community. It also aims at normalizing practices of exchange rather than dispose or keep unused. The key objective will be for participants to build confidence and skills for them to be able to imagine, project and deliver a swap party in their community.

Description of the activity: It will require people to bring a small object (e.g. a book) which they are aware that they don't use anymore but are unable to imagine another user to donate it to. We will provide a practical guide/toolkit for key aspects which need to be considered when organizing a swap party.

PHASE 1: Swap Party.

The workshop will begin with a swap party where all participants having followed our instruction will bring an object which they are willing to exchange. This first part will also involve people expressing feelings and emotions attached to the object and reasons for why they chose to exchange it. This is expected to help people soften their attachment to the object and be able to give it a new life by giving it to someone who will be able to make a better use of it.

PHASE 2: How to.

Once the participants have experienced the swap party they will have a clear idea of the experience and be able to imagine it in their own community. At this point facilitators will be delivering a guide with key steps on what to do in order to organize your own swap party.

Material needed to deliver your workshop during the training: Tables, chairs, boards, papers and laptops.

Unit 5

Reusing

Questions, statements: What type of fossil fuel you use, and can you see - what you can change in using fossil fuel in your life?

Tasks, activity: Read the statement and check: **True or false.**

Statement	True	False
Fossil fuels can be replenished within a generation.		
Fossil fuels are non-renewable because they take millions of years to form.		
Global demand for fossil fuels is decreasing.		
Nuclear energy is an example of fossil fuel.		
Fossil fuels can be made in the laboratory.		
Passenger cars are the main polluter.		
Fossil fuel reserves are evenly distributed between developed and developing countries.		
The United States is leading the way in minimizing reliance on fossil fuels.		

Repairing

Exercise:

1. Assess your use of fossil fuels, such as gasoline cars and fossil fuels used for heating your home.
2. Consider ways to reduce your use of fossil fuels. You can replace your gasoline car with an electric one, install solar panels or heat pumps for heating, or use public transportation and biking for commuting.
3. If transitioning to more sustainable energy sources is currently too much of a task for you, you can use fuels that are less harmful to the environment. For example, you can use bioethanol instead of gasoline for your car or use wood or pellets for heating.
4. Learn about how you can help promote the transition to more sustainable energy sources and how you can contribute to the community in reducing the use of fossil fuels.

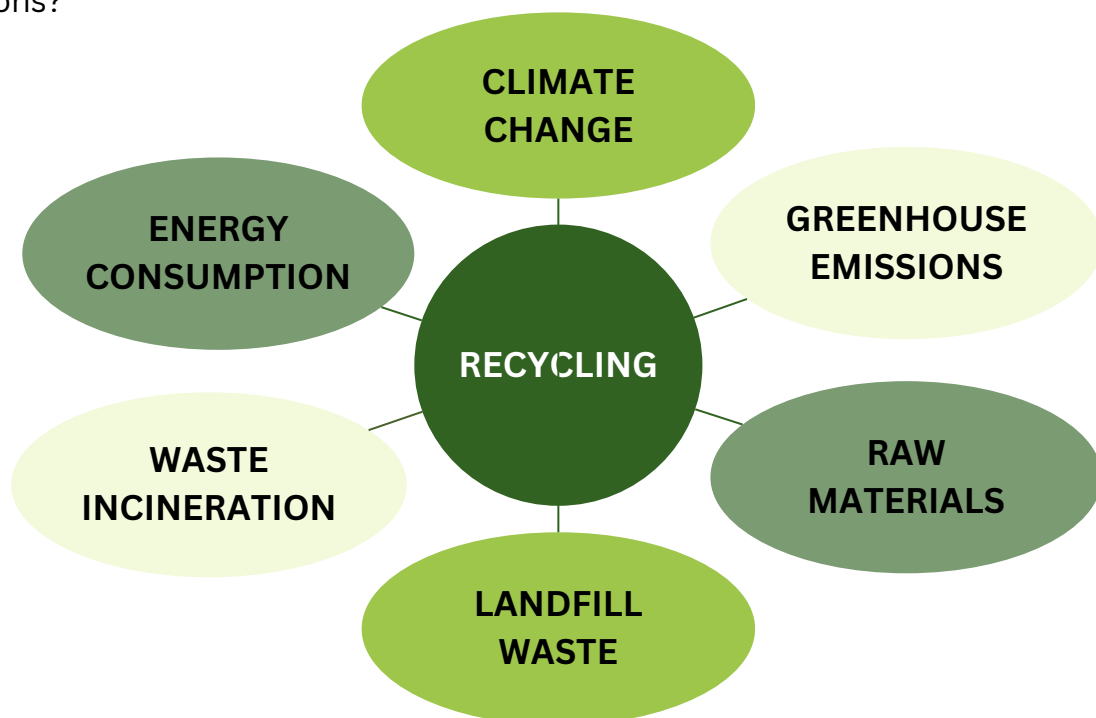
Example: If your car has an engine problem, before throwing it away and buying a new one, consider repairing it. Repairing your car's engine can reduce the need for new car production and thus reduce greenhouse gas emissions associated with that production. You will also save money and reduce your impact on the environment. Consider finding a local mechanic who can perform the repair instead of buying a new car.

Unit 7

Recycling

Fossil fuels are terminated and their extraction costs a lot of time, money and effort. Therefore, we must spend the resources available carefully and avoid waste. If the latter is not possible, correct recycling is of utter importance.

Look at the chart below and think and discuss how correct recycling or its absence is connected to the phenomena mentioned on the chart (e.g., Correct recycling can contribute to reducing the amount of waste that ends up at landfills). Example, if you recycle, can you make climate change? How does recycling influence greenhouse emissions?



Reflection time

Can you see some practical skills to reduce your own ecological footprint, such as reducing fossil fuel consumption and promoting sustainability?



Which of the given tasks made you think the most about the negative impact of global warming?



Plastic pollution

Objective: To provide useful tools to rethink the use of plastic in our daily lives, and to improve our own efforts to reduce, reuse and recycle the plastics we consume.

Expected results: Improved knowledge in order to reduce the use of plastic products; positive action taken to reduce plastic waste; developed skills on how to recycle plastic.

Unit 1

Introduction

Plastic reduction has finally entered the agenda of European governments and, to some extent, our lifestyles as well. But it is worth mentioning that plastic production has increased exponentially in just a few decades; in fact, it has risen from 1.5 million tons in 1950 to 359 million tons in 2018. Then, after a significant drop in production in the first half of 2020 due to Covid-19, production picked up again in the second half of the year.

If we really want to reduce this waste, we must be aware that its reduction cannot be delegated to national or supranational laws and fines. The morsel lies in our hands! It's up to us to give up and replace plastic, as for many sectors it remains a key material (automotive, construction, electronics) but in our daily and massive use of it, we can absolutely take action! In fact, 39.9% of plastic production in Europe is used for packaging and single-use items, which can be easily replaced or we can easily give up.

Visual illustration:



Video files:

POWERFUL VIDEO: Why We Need to Stop Plastic Pollution in Our Oceans FOR GOOD | Oceana <https://www.youtube.com/watch?v=Yomf5pBN8dY>

How We Can Keep Plastics Out of Our Ocean | National Geographic <https://www.youtube.com/watch?v=HQTUWK7CM-Y>

What really happens to the plastic you throw away - Emma Bryce <https://www.youtube.com/watch?v=6xlNyWPpB8>

External links:

TIPS TO REDUCE YOUR PLASTIC WASTE - WWF

<https://www.wwf.org.uk/updates/top-tips-reduce-your-plastic-footprint>

7 Solutions To Ocean Plastic Pollution

<https://www.oceanicsociety.org/resources/7-ways-to-reduce-ocean-plastic-pollution-today/>

10 Ways To Reduce Plastic Pollution – Greenpeace

<https://www.greenpeace.org/africa/en/blogs/53885/10-ways-to-reduce-plastic-pollution/>

How to reduce plastic waste | 20 tips to save the planet

<https://www.futurelearn.com/info/blog/how-to-reduce-plastic-waste>

Unit 2

Rethinking

Questions, statements: What do we use when we have not plastic things? Why is plastic so popular? Where do you use products made of plastic? Could you do without these things?

Tasks, activity: Read the text and make the list: What I know/What I do not know about plastic pollution.

Plastic pollution.

Can't imagine a morning without a cup of coffee grabbed at a gas station on the way to work or university? Are you planning a meeting of friends or going out to nature and buying disposable tableware? It is worth considering that nature pays for the short time you spend with yourself and your friends. Undoubtedly, disposable tableware is very convenient in today's fast-paced and evolving world. We all want to enjoy a clean environment, healthy food, a unique landscape and the opportunity to preserve and leave our children. Everyone's awareness and personal decisions have a major impact on the environment.

People are becoming more and more aware and in 10 years the unnecessary use of plastic in packaging has already begun to be noticed.

These single-use plastic products are everywhere. For many of us, they have become an integral part of our daily lives. Polyethylene terephthalate (PET): water bottles, dispensing containers, biscuit trays.

High-density polyethylene (HDPE): shampoo bottles, milk bottles, freezer bags, ice cream containers.

Low-density polyethylene (LDPE): bags, trays, containers, food packaging film.

Polypropylene (PP): potato chip bags, microwave dishes, ice cream tubs, bottle caps, single-use face masks.

Polystyrene (PS): cutlery, plates, cups.

Expanded polystyrene (EPS): protective packaging, hot drink cups.

Around the world, one million plastic bottles are purchased every minute, while up to five trillion plastic bags are used worldwide every year. In total, half of all plastic produced is designed for single-use purposes – used just once and then thrown away.

Plastics including microplastics are now ubiquitous in our natural environment. They are becoming part of the Earth's fossil record and a marker of the Anthropocene, our current geological era. They have even given their name to a new marine microbial habitat called the "plastisphere". So how did we get here? From the 1950s to the 1970s, only a small amount of plastic was produced, and as a result, plastic waste was relatively manageable. However, between the 1970s and the 1990s, plastic waste generation more than tripled, reflecting a similar rise in plastic production. In the early 2000s, the amount of plastic waste we generated rose more in a single decade than it had in the previous 40 years. Today, we produce about 400 million tons of plastic waste every year. Approximately 36 per cent of all plastics produced are used in packaging, including single-use plastic products for food and beverage containers, approximately 85 percent of which ends up in landfills or as unregulated waste. Despite current efforts, it is estimated that 75 to 199 million tons of plastic are currently found in our oceans.

Read the text and check facts!

What I know	What I do not know

What do you think about using plastic now?

Unit 3

Refusing

Search about the effects of plastic pollution on the environment and wildlife.

The challenge is to go an entire week (or longer) without using or buying any single-use plastic items. The goal is to raise awareness about the negative effects of plastic pollution and the importance of reducing our plastic consumption. To complete the challenge, you will need to refuse the following:

- ☐ Plastic straws
- ☐ Plastic bags
- ☐ Plastic water bottles
- ☐ Plastic cutlery
- ☐ Plastic cups
- ☐ Plastic take-out containers
- ☐ Plastic packaging

At the end of the challenge, you should reflect on your experience and share your findings with others. You should also encourage your family and friends to participate in the challenge and spread the word about plastic pollution.

Reducing

- 1- Start preparation in the room (they will learn how to make a short video and will debrief about the signs of reduce in the city) .
- 2- Participants will explore the city and capture the signs of reduction.
- 3- Back to their room, they will create a short video.

Duration: 1h workshop + 30 min debriefing is suggested (1h 30 min in total to deliver your workshop during the training)

Objective of the workshop: The participants will explore a part of the city which has helpful signs of reduction. They will capture these signs and will present them in a video.

Preparation:

1 hour session:

5 minutes long presentation of the session (5 minutes),

20 minutes long mini-training about the creation of a short video

30 minutes long group discussion in the room about:

- a) the different types of reduction they will be searching for;
- b) what are the “signs” of reduction (visual and other ways this can appear in the city)
- c) How to make these elements appear during their walk in the city (how reduction can be shown on a photo, on a video, on a voice recording, in visual or other means, symbolic meanings, visual elements etc.)

The discussion will be held in groups that will work together during the entire session. Each group will discuss the above topics and at the end they will share their thoughts in a short plenary section.

Development:

After the debriefing participants will go and explore the city. Ideally it should last a bit longer than one hour – we might put this activity on an afternoon so that participants can link the exploration activity with a small walk. If this is not possible, at least 2 hours would be needed for the walk and exploration.

During the exploration, participants will make photos and/or video and voice recordings about the signs of reduction in the city. They can capture images, voices, movements, but they can also collect objects, or can make short interviews with people – it is up to them how they can capture and express the topic. The exploration can be held in group or individually, as the group members decide.

After the walk, group members will share their photos and other captures and will prepare a 5 to 10 minutes long video about their vision of reduction in their city.

Material needed to deliver your workshop during the training: Map on the city (or neighbourhood). At least one smartphone/group.

Option:

Alternatively, if the video creation is too complicated or time consuming, participants can also be asked to create a poster, or just show photos and small video recordings in a PPP presentation. They can also use the map for this presentation.

Reusing

Questions, statements: It may seem like an enormous task, but there are things you can do to reduce plastic use. Even small actions add up over time and make a big impact. Getting plastic waste out of the environment is one way to help, another is to use less plastic, so it stays out of our oceans and the environment in the first place.

Tasks, activity: Mention at least 6 examples in which way you can reuse plastic items. After - have a look for new ideas: <https://www.fairharborclothing.com/blogs/news/30-ways-to-reuse-plastic>.

Unit 6

Repairing

Evaluate how much plastic you use in your daily life. Try to track the amount of plastic you dispose of or recycle every day.

Consider ways to reduce your plastic consumption. You can use reusable cloth bags, avoid buying products with excessive packaging, and use glass or metal containers for food. Consider the possibility of repairing damaged items instead of disposing of them and replacing them with new ones.

For example, if your favorite plastic food container breaks, consider repairing it instead of throwing it away and buying a new one. Educate yourself on how to properly recycle plastic and how to help reduce the amount of plastic that ends up in the environment.

Unit 7

Recycling

There are various types of plastic, so it is important to understand which of them are recyclable and which are not. Here are the most common types of plastic that can be recycled in Europe (they are marked with a Mobius loop):

Nr.	Label	Definition	Where it can be found
1.		Polyethylene Terephthalate	Cosmetic containers, plastic bottles, mouthwash bottles, prepared food trays, etc.
2.		High Density Polyethylene	Detergent bottles, grocery bags, mild bottles, shampoo bottles, etc.
3.		Poly Vinyl Chloride	Garden hose, window frames, blood bags, blister packs, etc.

Nr.	Label	Definition	Where it can be found
4.		Low Density Polyethylene	Cling film, bread bags, squeezable bottles, etc.
5.		Polypropylene	Yogurt containers, medicine bottles, caps, straws
6.		Polystyrene	Disposable plates and cups, egg cartons, meat trays, take-out containers

Your task:

1. Pick three to five plastic items in your household and see whether they can be recycled.
2. Organize a place in your household for plastic items. Remain diligent and collect plastics for a month. Look at the results to know how much plastic your household generates and recycle your evidence.

Challenge yourself and try to avoid using plastics for a week. Stay creative and let your family, friends, relatives and followers know about your struggle and brainstorm ideas with them! See if you can manage longer than a week. [Source 1](#), [Source 2](#)

Unit 8

Reflection time

Reducing plastic consumption in our daily lives is a difficult but not impossible challenge.

- What did you learn from these activities? Provide feedback on the activities and describe the lesson you learned.
- Which of the tasks provided in this module would encourage you to reconsider your daily habits of buying and consuming products that involve plastic packaging? Briefly describe the activities that helped you understand the importance of this challenge.
- What choices have you reconsidered in your personal life to avoid plastic consumption? Briefly describe your conscious choices in reducing plastic use and consumption.
- What advice would you give to your friends and family to reduce plastic consumption?
- What materials have you noticed replace the use of plastic in your daily life?
- Which symbols did you know and which ones did you not know about plastic recycling?

Reduction / lack of natural resources/Biodiversity loss

Objective: by performing different tasks , discussing and practicing , it will be possible for participants to reflect, where the disappearance of natural diversity and the thoughtless use of natural resources can lead us. There are many ways to ensure the long-term preservation of our environment.

Expected results: Participants will better understand the significance of conserving natural resources and environmental biodiversity in the long term, their role and involvement in addressing the issue.

Unit 1

Introduction

The lack of natural resources is of paramount importance in today's world. Natural resources, such as freshwater, minerals, fossil fuels, arable land and biodiversity are the lifeblood of human civilization. The significance of the lack of natural resources lies in several key aspects: economic impact, energy crisis, environmental consequences, food security, geopolitical tensions, sustainability and future generations. Addressing this challenge requires sustainable resource management, conservation efforts, and the development of alternative technologies and practices to reduce our reliance on finite resources.

Visual illustration:



Rethinking

By provision, natural resources are divided into renewable and non-renewable. Do you name renewable and non-renewable resources? Or any of the renewable resources can become non-renewable?

Discuss in groups. You can use only one or all proposed options.

What will happen when we allow any of the following:

- Hunt any animal at any time.
- Do not limit the use of pesticides.
- To set up as much agricultural land as possible.
- Do not limit catches.
- Do not require permission to cut down trees.
- Destroy predatory beasts and birds.
- Pour out petroleum products where it comes to mind.

Unit 3

Refusing

1. Set the Context: search about the reduction/lack of natural resources.
2. Brainstorm: Brainstorm with other participants ideas on how to refuse to do or purchase things to fight against reduction/lack of natural resources.
3. Discuss and decide on one or two strategies you would like to implement.
4. Role Play: Divide yourselves into groups of 2 people to role-play a scenario in which you must refuse to do something or to purchase something and they explain why. Have each group present their scenario to the rest of the groups.
5. Debrief: After the role-plays, discuss what strategies worked and what strategies could be improved upon.

Challenge yourself, your friends and/or family to a game of "No Buying": Take turns challenging each other to refuse to buy something that contributes to Biodiversity Loss. The person who is able to go the longest without buying anything that contributes to Biodiversity Loss wins!

Start a "No Buying" Movement: Use your social media accounts to encourage your friends and followers to join you in a challenge to refuse to buy anything that contributes to Biodiversity Loss. Have a hashtag and use it to track and share your progress.

Unit 4

Reducing

Description: "Conserving Nature: Preserving Our Natural Heritage" is an interactive activity that aims to bring together different generations to learn, share knowledge, and work towards the conservation of natural resources and biodiversity.

Knowledge Sharing: Begin the activity with an informative session on the importance of natural resources and biodiversity. Discuss the current challenges, including resource depletion and biodiversity loss, and their impact on ecosystems and human well-being. Encourage participants to share their personal experiences and observations.

Interactive Discussions: Facilitate group discussions where participants, both young and old, can exchange ideas and perspectives on the causes and consequences of resource reduction and biodiversity loss. Encourage open dialogue to foster intergenerational learning. Depending on the context and assets in your community, you can then decide whether to organize a trip, to collaborate, to conserve or to present one of the activities below:

Nature Walk or Field Trip: Organize a nature walk or field trip to a local park, nature reserve, or botanical garden. During the excursion, guide participants in observing and appreciating the diverse flora and fauna, highlighting the significance of preserving these natural treasures.

Hands-on Conservation Activities: Engage participants in hands-on conservation activities, such as tree planting, habitat restoration, or wildlife monitoring. Provide guidance on sustainable practices and the importance of individual and collective efforts in conserving natural resources and biodiversity.

Unit 5

Reusing

Take the white paper list and crumple it. Now try to align it. That happens with natural resources – we use them, but we cannot renew them fully.

Please all participants together make a list of suggestions – what we can do together for reusing natural resources.

Unit 6

Repairing

Example: In the city, there has been the destruction of wild meadows that served as natural habitats for many species of insects, birds, and small mammals. The local community organizes a volunteer action to restore these meadows through the planting of native plants and the removal of invasive species. As a result, animal and plant life begins to recover, and the ecosystem becomes stable again.

Exercise: Organize a volunteer effort to restore local ecosystems. Gather a group of people and work together to plant trees and clean up natural habitats.

Unit 7

Recycling

Correct recycling is important for many different reasons, one of which is the prevention of biodiversity loss. When synthetic materials land into nature, they do not only take ages to decompose, but can also harm animals, birds, fish and other living beings. Here are some facts describing how plastic waste impacts the marine environment ([source](#)):

1. Pathogenic vector

Floating plastics can carry life-threatening bacteria and transport pharmaceuticals into coastal areas.

2.Raft for non-indigenous species

Plastic debris can transport non-indigenous species to new locations where they could become invasive.

3.Smothering

Plastic litter can smother marine life, preventing oxygen and nutrient flow and blocking light, dramatically reducing the numbers of organisms and compromising the ecosystem services they provide.

4.Damage to coral reefs

Marine litter deprives reefs of oxygen and light, causes physical damage and increases risks of coral diseases.

5.Harmful toxic effects

Plastics can contain many chemicals, some of which are hazardous. Chemicals are added during production (e.g., additives) and leach out rapidly upon arrival in the marine environment. Some will accumulate as a result of sorbing, while plastics reside in the water.

6.Ecosystem disruption by microplastics

Microplastics can disrupt biological processes in marine organisms and may cause genetic mutations, decreases in reproduction, disruptions in feeding, decreased growth and decreased survival.

7.Ingestion of marine litter

Ingestion of plastic can cause physiological stress, toxicological and starvation in plankton, shellfish, fish, seabirds, turtles, and marine mammals.

8.Effect on the benthic environment

Micro plastics affect species living in bottom environments, such as lugworms, that function as a source of food for wader birds and fish and bait for fisheries.

9.Entanglement of animals

Entanglement of birds, fish, turtles and mammals in abandoned fishing gear and plastic packaging can result in reduced fitness and impaired mobility, leading to starvation and drowning.

Here is your task:

1. On the eve of a national holiday when many people would go for a picnic on a beach/shore, make a post on your preferred platform reminding your followers of mindful and careful waste treatment and its importance, and attach a powerful image to it, e.g.:



2. Organize an activity (through your preferred social network) that includes going to the nearest beach/shore/forest/park and picking up all the garbage you find there (and recycling it accordingly afterwards). Be careful about personal protection though! You can also start a challenge and find out who collects more waste.

3. Check out if the nearby recreation area has the necessary containers for different types of waste as well as the (numerous) noticeable signs informing the visitors about that. If not, contact the responsible service and inform them / ask to settle the issue.

Unit 8

Reflection time

Please answer 3 questions:

1. What did you like best about working in this module? These can be tasks, discussions, working methods, etc.
2. What would you recommend to change in the content of this module?
3. What could you do in practice to preserve natural resources and natural diversity?

ABOUT ILCES PROJECT

The project „Intergenerational Learning Communities towards Environmental Sustainability“ (shortly referred to as ILCES) aims to contribute to achieving the goals set in the European Green Deal by introducing innovative learning approaches to educate all community members (students, parents and community, in general) on sustainability matters.

The project's overall goal is to strengthen intergenerational learning within community to promote environmental awareness and change of behaviour towards environmental sustainability through 6 R's of sustainability – *rethinking, refusing, reducing, reusing, repairing, recycling*.

Specifically, the project pursues the following objectives:

- To increase environmental awareness through an active, critical approach involving people of different age groups.
- To increase digital competence of the involved target groups while boosting their awareness on environmental issues.
- To support local community intergenerational learning providers with tools and resources on environmental sustainability.
- To highlight innovative and effective models and approaches of intergenerational learning in local communities through environmental education activities using 6 R's of sustainability: rethinking, refusing, reducing, reusing, repairing, recycling.
- To discover and identify core principles, different structures and approaches of sustainable local community involvement in intergenerational learning to raise environmental awareness through experience exchange and best practices.
- To present challenges to implementing intergenerational learning in local community and forward recommendations for supporting work in this area.

ABOUT ILCES PROJECT



In particular, the project will produce three innovative results:

- a) **Impulse handbook** containing training materials, quizzes and self-assessment tests divided into 6 units according to the 6 R's of sustainability: rethinking, refusing, reducing, reusing, repairing, and recycling.
- b) **Recommendations and guidelines for forward-looking community learning centres**
- c) **E-learning platform** that will incorporate the previous results, provide adult trainers and learners with information, tools and resources to support and enhance education delivery on environmental sustainability in online environments.

The project results and activities aim at the following target groups:

- intergenerational learning providers (non-formal learning institutions, NGOs, etc.),
- adult learners,
- policy makers (local authorities, trade associations, etc.).



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