

A COLLECTION OF TOOLS, METHODS, GAMES, AND INSPIRING IDEAS...

CREATED BY PARTICIPANTS OF THE ERASMUS+ PROJECT



Funded by the European Union

YOUTH PROGRESS



TOOLS FOR ADDRESSING SUSTAINABILITY IN YOUTH WORK

The 'Green Guide' is a collection of non-formal learning tools, methods, games, and inspiring ideas that were created by the participants of the Erasmus+ project 'Sustainable ImPACT 2' during the session called 'Green Guide' aimed at the creation of new tools to address environmental sustainability in youth work.

The guide contains a set of exercises that can be used to either introduce or address different topics of environmental sustainability **in different settings of formal** and **non-formal education**.

Each tool has a short description, including its **aim**, **skills** it can help **to practice** and develop, instructions on **how to use the tool**, and **reflection questions** that can be used after completing the exercise. Each tool (except for the ones that were originally developed in digital format, e.g., in the ActionBound app) contains **printable worksheets** and an additional **info sheet** with basic complementary information on the topic to start with (if needed).

The exercises do not have to be printed *per se* (if you are concerned about creating paper waste) but can also simply serve as an inspiration for developing your own activities focused on addressing environmental sustainability.

ABOUT THE SUSTANAPLE PROJECT

'Sustainable ImPACT 2' was a 9-day Erasmus+ training course that took place in Jizbice pod Blaníkem, Czech Republic, from 25th August to 2nd September, 2024. The training course gathered **35 dedicated youth workers** from Armenia, Bosnia and Herzegovina, France, Italy, **Portugal, Romania,** and the Czech Republic. The goal of the training course was to equip youth workers with the skills and tools to promote sustainability in their communities through knowledge exchange, practical training, and innovative non-formal education methods.

During the 9 days of the training course, the participants engaged in different theoretical and practical workshops, i.e. reviewed European and global environmental policies and regulations, learned more about environmental challenges in participating countries, shared their different field expertise and experiences in sustainability, explored in-depth topics of waste, sustainability of food, carbon footprint, sustainable fashion, learned and practiced their skills in marketing and creating online campaigns, tried out upcycling, created new tools to address sustainability in youth work, prepared and performed workshops, met inspiring local sustainability actors - businesses '<u>Vobrousek</u>' and '<u>V Papíru</u>', and the representative of '<u>Fashion Revolution</u>' movement, visited <u>ParaZOO</u> in Vlašim and <u>Water House</u> in Hulice, and much more...



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Sustainability Word Soup (the tool and printable worksheet)	1
Sustainability and Challenges: Connecting the Dots (infosheet)	2
Sustainability Cubes (the tool and printable worksheets)	2-4
Sustainability Cubes (infosheet)	5
Animal Welfare: What happens to Disabled Animals? (infosheet)	6
ParaZoo: Meet Jack, the Duck (the tool)	6
Fashion Industry and Sustainability (infosheet)	7
11 Steps Towards Having a more Sustainable Closet (the tool and printable wo	rksheet)8
Know Your 'Foodprint': Carbon Footprint of Your Diet (infosheet)	9
Carbon Foodprint (the tool and printable worksheets)	9-12
The Journey of Food (the tool and printable worksheets)	13-16
Sustainability and Waste: Let's talk Waste! (infosheet)	17
15 Ways to avoid Creating Waste (the tool and printable worksheets)	18-20
Sustainability and Recycling (inforsheet)	21
Eco Heroes: Recycling Challenge (the tool)	22
Waste Free Planning: Zero Waste and the Magic of 5Rs (infosheet)	23
Sustainable and Waste Free Planning (the tool and worksheets)	23-26
Information Sources & Other Interesting Reads	27



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THANK YOU!



YOUTH PROGRESS

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'Sustainability word soup'

FIND THE FOLLOWING WORDS:

NATURE	Planet	Zero Waste
Forest	Environment	Reduce
Tree	Pollution	Reuse
Soil	Fashion	Recycling
WATER	Tourism	Circular
Life	Animals	Footprint

REFLECTION QUESTIONS:

- Which words did you find, and what do you think about each of the terms in the 'Word Soup'?
- Which words do you personally associate with sustainability? Why?
- Why is it important to address these topics?

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Ι	R	E	D	U	С	E	L	Т	w	Α	R	R	U	v
F	Α	S	Н	Ι	0	Ν	Α	Ι	Ν	Т	0	E	R	I
S	ο	Ι	L	Μ	F	F	0	0	D	U	W	S	I	R
Т	R	E	E	Р	L	Α	Ν	E	Т	R	Α	Т	S	0
S	U	S	Т	Α	Ι	N	Α	В	L	E	S	S	м	И
D	С	Ι	R	С	U	L	Α	R	S	Ν	Т	E	Α	м
Α	F	0	0	Т	Р	R	Ι	Ν	Т	G	E	0	R	E
w	Α	Т	E	R	С	Y	С	L	Ι	F	E	Р	Μ	Ν
R	E	U	S	E	Р	Ν	Α	Ν	I	Μ	Α	L	S	Т

AIM: The 'Sustainability Word Soup' tool can be used to introduce different topics of environmental sustainability. The facilitator can reflect on each of the words, draw connections, and discuss with the group why it is important to speak about them. The tool can be used as an introductory team task before the main workshop on different topics related to *Environmental Sustainability*, e.g. Circular *Economy*, Nature Preservation, Waste Issues, and other topics. **SKILLS TO BE PRACTICED:** Critical Thinking, Creativity, Teamwork, Brainstorming

HOW TO USE THE TOOL: Print out and hand out the 'Sustainability Word Soup' to the participants of your workshop. The task can be completed individually or in small groups. You can combine the tool with letting participants reflect in small groups on specific terms they found and the impact/importance of these concepts in sustainability.





INFOSHEET & THE TOOL

SUSTAINABILITY AND CHALLENGES: CONNECTING THE DOTS

WHAT IS SUSTAINABILITY?

Sustainability is defined as 'a social goal for people to co-exist on Earth over a long time' (Purvis et al. 2019) or 'meeting the needs of the present without compromising the ability of future generations to meet their own needs' (UN Brundtland Report, 1987). Although more frequently referred to its **environmental** dimension, sustainability also includes **social** and **economic** dimensions. All three of these dimensions are co-dependent on each other, and when one or more of them are failing, it creates strong implications for the other ones. As a result, sustainable practices support ecological, human, and economic health and viability.

Climate change, food waste, biodiversity loss, carbon footprint, resource depletion, water scarcity, deforestation, overfishing, ocean acidification, erosion of soil, air pollution, poverty, and inequality are just some of the issues that we are warned about regularly in our daily news briefs. It seems impossible to grasp and reflect on all the issues at once, yet if we try to review them one by one and build connections between them, we will be better equipped to see the bigger picture and have more grounded ideas of what we can do and how we can change our own behaviours, habits, and choices to more sustainable ones.



SUSTAINABILITY CUBES

AIM: The 'Sustainability Cubes' tool is intended to create a better understanding and awareness about environmental challenges we face today as a humanity and the crucial importance of pursuing more sustainable practices. It is achieved by drawing connections between different frequently affected areas of the natural environment (i.e., plants, air, water, soil, animals, climate changes) and human-managed or mismanaged areas causing the (sometimes irreversible) changes in the environment (i.e., waste management, agriculture, tourism, fashion industry, deforestation, CO2 emissions). The tool allows its users to research and construct a more detailed picture of the environmental impacts created, as well as to review and discuss causes and current effects on the affected areas of the environment. The 'Sustainability cubes' can also be used separately to review all the covered issues in detail.

SKILLS TO BE PRACTICED: Analytical Skills, Problem-solving, Creative Thinking, Research and Information Gathering, Teamwork.

USTANANLITY 🤈

HOW TO USE THE TOOL: The tool set includes printable worksheets with 2 cube templates that can be printed, cut out, folded, and glued together. The tool can be used individually or as a part of group activities. It can be used as the main practical activity when introducing the sustainability or topic of environmental challenges, followed by a thorough reflection and a more comprehensive review of the topics covered by the cubes. In a group setting, you can divide the group into 4-6 teams and let each team roll the 2 cubes and get their own combinations of keywords to work with. Give the groups 5-10 minutes to find the connections between the different areas of the natural environment human-managed and (environmentally problematic) areas. You can start off by asking to provide the answer to the question: 'How [the specific area of natural environment] is affected by [the specific humanmanaged area]?'

REFLECTION QUESTIONS:

- Was there something new or surprising that you found out while researching the connections?
- Did you find any good developments related to the researched sustainability areas?
- What can be done differently to lessen the negative effects between the connections you found?
- Which environmental challenges do you care about personally? Why?
- What you could personally do to lessen the negative impacts of environmental challenges we face today?

WHERE TO START CONNECTING?

A few examples to start off the generation of ideas and researching the connections. If the two keywords drawn would be '**Agriculture**' and '**Water**', the questions you could ask could be, for example, 'What role does water play in agriculture?', 'How does agriculture affect global water resources?', 'How water-intense is the agricultural industry?', 'Which branches of agriculture are most water-intense?', 'What are the current solutions in place to help make agriculture less water-intense?' etc.

Or if, for example, the two keywords drawn would be '**Fashion**' and '**Soil**', the questions you could ask to start off building connections could be, for example, 'What role does soil play in the fashion industry?' or 'How and to what extent is soil affected by the fashion industry?' (e.g., contamination with chemicals while dyeing textiles, soil depletion from growing monocultures (i.e. cotton) extensively, fabric shedding micro-plastics etc.)









ENVIRONMENTAL POLLUTION

Pollution is the introduction of contaminants into the natural environment that cause adverse change. Pollution can take the form adverse change. Pollution can take the form of any substance (solid, liquid, or gas) or energy (such as radioactivity, heat, sound, or light). Pollutants can be either foreign substances/energies or naturally occurring contaminants. The world pollution generally implies that the contaminants have an anthronogenic source - a source created by anthropogenic source - a source created by human activities, such as manufacturing, extractive industries, poor waste management, transportation, or agriculture. Major forms of pollution include Air, Water, Soil (land), Noise, Electromagnetic, Plastic, Radioactive, Thermal, Light and Visual pollution (Wikipedia).

DEFORESTATION

Deforestation is the decrease in forest areas across the world that are lost for other uses such as agricultural farming, urbanisation, or mining activities. According to the UN Food and Agriculture Organisation (FAO) currently about 31% of Earth's land surface is covered by forests.

The main driver of forest loss is conversion of forests into farming lands. According to

the UN FAO, it causes at least 50% of global deforestation, mainly for oil palm and soybean production. Livestock grazing is responsible for almost 40% of global deforestation (European Parliament, 2022).

TOURISM INDUSTRY

Tourism is a comprehensive industry (one of the largest), providing around 10% of all jobs globally (WTO World Trade Report, 2013) that involves many industries such as hospitality, transportation, tourist destinations, travel companies, etc. The tourism industry, as part of the service sector, has become an important source of income for many regions and even for entire countries in some cases.

Tourism puts pressure on natural resources through overconsumption and enormous stress on local land use that can lead to soil erosion, increased pollution, natural habitat loss, and more pressure on endangered

WASTE

INFOSHEET

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Waste is 'materials that are not prime products (that is, products produced for the market) for which the generator has no further use in terms of his/her own purposes of production, transformation, or consumption, and of which he/she wants to dispose. Wastes may be generated during the extraction of raw materials, the processing of raw materials intermediate and final products, into consumption of final products, the consumption of final products, and other human activities. Residuals recycled or reused at the place of generation are excluded' (UNSD, 1997).

FASHION INDUSTRY

The fashion industry is one of the world's biggest manufacturing industries, employing more than 300 million people along its value chain (Ellen MacArthur Foundation, 2017).

According to several studies, fashion is considered one of the most polluting industries in the world. Key pressures include water usage, chemicals waterways contamination, waste pollution including microplastics, and energy and greenhouse gas emissions. The and fashion industry accounts for about 10% of global carbon emissions (BBC, 2020) and nearly 20% of wastewater (European Parliament, 2020a; Kant, 2012).

AGRICULTURE

Agriculture entails the cultivation of plants and animals for use as food (and in some cases, other industrial products like fibre, e.g., cotton). The industry of agriculture includes cotton). The industry of agriculture includes everyone, starting from small local farmers growing organic produce to massive grain and livestock businesses producing food for the export market. 27% of the world's labour force works in agriculture (UN FAO, 2023). Agriculture causes deforestation, water overuse, and greenhouse gas emissions. Agriculture, marine farming, and the food system are also key drivers of biodiversity and habitat loss through land conversion, soil

habitat loss through land conversion, soil degradation, overfishing, water extraction, and chemical and nutrient pollution (*Climate Focus*

INFOSHEET & THE TOOL

WHAT HAPPENS TO DISABLED ANIMALS?

WHAT IS ANIMAL WELFARE?

Animal welfare, according to the World Organisation for Animal Health (WOAH), refers to the physical and psychological well-being of an animal. 'An animal experiences good welfare if the animal is healthy, comfortable, wellnourished, safe, is not suffering from unpleasant states such as pain, fear, and distress, and is able to express behaviours that are important for its physical and mental state' (ibid.). As follows, the concept of animal welfare revolves around three factors: (1) the animal's ability to lead a natural life through development and use of their natural capabilities, (2) the animal's ability to feel well, e.g., by not encountering negative emotions like fear or pain and to experience normal pleasures, and (3) the animal's ability to function well, i.e., have good health, growth, and normal functioning of physiological and behavioural systems (Fraser et al. 1997).

David J. Mellor, the Professor of Animal Welfare Science and Bioethics, developed a scientific framework called the **Five Domains Model** to assess the quality of life of individual animals and identify practices that contribute to a good quality of life for the animals. The Five Domains Model was originally formulated in 1994 and subsequently updated many times to the one used now. The model includes assessment of:

- 1.**Nutrition:** whether the animal has unrestricted access to clean water and varied, yet balanced, nutritious, and speciesspecific food;
- 2. **Physical** *Environment*: whether the animal is comfortable and safe in its environment and has opportunities to engage in natural and rewarding behaviours;
- 3. **Health:** whether the animal is fit and in good health, given that illnesses and injuries are prevented or immediately and appropriately treated;
- 4. **Behavioural Interactions:** whether the animal is able to express natural and rewarding behaviour, e.g., free movement, forming social bonds, play, exploration, retreat, etc.;
- 5. **Mental State:** whether and how the actual nutrition, environment, health, and opportunity for expression of natural behaviour contribute to an animal's mental state. More positive experiences strengthen the overall mental state of the animal.

REFLECTION QUESTIONS:

- What is the state of animal welfare in your town/city/country?
- Are there places in your town/city/country that take care of disabled animals? Have you ever been to one of those places?
- Why is it important to take care of animals and ensure that they have a good quality of life?
- What can you personally do to improve the quality of life of animals?

'PARAZOO': MEET JACK, THE DUCK

AIM: The interactive game '*ParaZOO*' is intended to raise awareness about animals, especially in critical situations, and their welfare by completing different missions developed in the **ActionBound** online app. By completing different tasks, the players gradually assess different aspects of *animal welfare* and learn more about actions one can perform to help an animal in need based on more well-informed decisions in critical situations.

SKILLS TO BE PRACTICED: Critical Thinking, Teamwork, Awareness and Knowledge Building, Problem-solving.

HOW TO USE THE TOOL: The presented example of missions revolves around a duck named Jack that gets injured through interaction with human-generated circumstances. The game provides an opportunity to follow the animal's story through answering situational questions. The game can be made more complex by inserting different scenarios that lead to different outcomes before the actual end of the game. The questions and animals can be easily adapted to country-specific contexts and the available emergency help infrastructures.

MISSIONS OF THE GAME: ***

MISSION 1: You're walking in nature when you suddenly encounter **a duck that has been hit by a car.** We will call it Jack.

Question 1: What do you do when you find Jack? a) Search for wildlife ambulance and call for help b) Leave him

c) Pretend like you did not see anything

Question 2: Where will Jack stay?

a) At a paraZOO

b) At someone's home

c) In the forest

Depending on the answers to the two questions, players can be directed to different outcomes/ scenarios. Reflecting on the answers and what can be done in the particular situation is strongly recommended.

MISSION 2: Share at least one example or story of how disabled animals could be useful!

MISSION 3: How would you act if you found an injured animal?

MISSION 4: Research and write about a local paraZOO/animal sanctuary in your country!

MISSION 5: Write about an animal of your choice and its lifestyle and life requirements! (You can provide additional sites where to look for information.)

MISSION 6: What are the benefits of including animals in educational programs?



FASHION INDUSTRY AND SUSTAINABILITY

Why is there a need to speak about the fashion industry in terms of sustainability, one may ask? Even though significant progress has been made in regard to public demand for more transparency of production processes and more responsibility from fashion brands, and in regard to awareness and knowledge building among consumers resulting in more informed fashion choices, the battle is not over yet. Despite all the noble efforts of the activists in the field (e.g., Fashion Revolution being one of the most visible ones) and more strict regulations requiring circularity in product design, the industry continues to struggle with issues caused by fast fashion, the overall wastefulness of the textile industry, and unsustainable consumer practices, among many.

WHAT IS FAST FASHION?

Fast fashion is a business model of replicating recent high-fashion designs, mass-producing them at a low cost, and bringing them to retail quickly while demand is at its highest. Fast fashion is characterised by cheap, trendy, and mass-produced clothing that generates large amounts of waste and carbon emissions (*Wikipedia*). The fashion industry accounts for about 10% of global carbon emissions (BBC, 2020) and nearly 20% of wastewater (*European Parliament*, 2020a; Kant, 2012).

Fast fashion has devastating *impacts on the environment*, e.g., habitat degradation, rapid increase of chemicals and microplastics in waterways. A global research study on microfibres in tap water found that the particles were present in 83% of the samples (*The Guardian*, 2017), which is partially connected to the shedding of synthetic textile materials. Moreover, the global share of textile-based microplastics in the oceans is estimated at 16% (UNEP, 2018). Fast fashion is also often linked to the *use of cheap labour* sourced in countries where workers often have to work long hours in bad working conditions, being exposed to toxic chemicals, and not being paid fairly.

FASHION CONSUMPTION & THE AFTERMATH

Globally, less than 1% of clothes are recycled as clothing (European Parliament, 2020a).

On average, Europeans use nearly 26 kilos of textiles per year and discard about 11 kilos of them every year. Used clothes can be exported outside the EU but are mostly (87%) incinerated or landfilled (*ibid.*). *Textile recycling* is the process of recovering fibre, yarn, or fabric and reprocessing the textile material into useful new products. The recyclability of textiles highly depends on the quality of the material and its composition (Hawley, 2009).

- What else can be done with textile/fashion products besides recycling?
- How can you creatively repurpose your textile/fashion products, for example, an *umbrella*, *a pair of jeans*, *a woollen sweater*, *a T-shirt*, or boots?

REFLECTION QUESTIONS:

- How would you describe your fashion consumption? How do you pick your fashion items? What is important for you when you choose your clothing/footwear?
- What would encourage you to make more sustainable fashion choices?
- What can you personally do to avoid supporting fast fashion?
- How can you take better care of the clothes you already own?

A FEW IDEAS TO MAKE YOUR UNIQUE STYLE MORE SUSTAINABLE



WHAT ELSE CAN YOU DO TO MAKE YOUR WARDROBE MORE SUSTAINABLE?

LEARN MORE, EXPLORE EDUCATIONAL MATERIALS & GET INSPIRED:

- <u>www.fashionrevolution.org</u>
- <u>www.fashionforchange.eu</u>



THE TOOL & PRINTABLE WORKSHEET

11 STEPS TOWARDS HAVING A MORE SUSTAINABLE CLOSET



AIM: The self-assessment form '11 Steps towards having a more Sustainable Closet' is a tool to assess the sustainability of individual fashion choices. The tool can be used in different ways. For example, as an introduction to a workshop about sustainable fashion, speaking specifically about the effects of consumerism or fashion consumption habits, allowing the participants to individually assess their own fashion-consuming habits.

HOW TO USE THE TOOL: Print the selfassessment forms and hand them to participants to fill out. Ask the participants to share their insights after completing the task.

REFLECTION QUESTIONS:

- Do you follow any personal criteria when choosing your clothing/footwear items?
- Why is it important to carefully assess your potential purchases, especially when choosing fashion items?
- What other ways do you know of and/or pursue to make your closet more sustainable? Please share!

EXPLORE MORE EDUCATIONAL MATERIALS & GET INSPIRED:

<u> https://www.fashionrevolution.org</u>



KNOW YOUR 'FOODPRINT': CARBON FOOTPRINT OF YOUR DIET

WHAT IS CARBON FOOTPRINT?

Carbon footprint (or greenhouse gas footprint) is the amount of carbon dioxide (CO2) and methane (CH4) emissions released into the atmosphere of a particular individual, organisation, or community. A carbon footprint is a calculated value or index that makes it possible to compare the total amount of greenhouse gases that an activity, product, company, individual, or country adds to the atmosphere. Carbon footprints are usually reported in tonnes of emissions per unit of comparison (Wikipedia).

A product's carbon footprint includes the emissions for the entire life cycle, that is, from the production along the supply chain to its final consumption and disposal. Carbon footprints are usually reported in tonnes of emissions (CO2equivalent) per unit of comparison, for example, CO2-eq per year, per kilogram of protein for consumption, per kilometre travelled, per piece of clothing, etc. (*ibid.*).

CARBON FOOTPRINT OF FOOD

The carbon footprint of food at the moment is calculated by counting all the emissions created throughout the whole supply chain, i.e., from using the land to grow the food to packaging and food to transporting the your nearest supermarket, where you can purchase it. It includes factors such as land use, farming activities, production of animal feed (if it's an animal product), processing of food items into final products, packaging, transportation, and retail. According to Poore and Nemecek (2018), food production accounts for as much as a quarter of all the world's greenhouse gas emissions.

HOW TO CALCULATE THE ESTIMATE CARBON FOOTPRINT OF YOUR DIET?

There are several tools available online that allow you to calculate carbon footprint or provide average estimates of a wide variety of consumer items, for example:

- <u>CO2 Everything</u> A database of carbon footprint calculations of everyday products and activities
- <u>My Emissions Food Calculator</u>





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'CARBON FOODPRINT'

INFOSHEET & THE TOOL

AIM: The '*Carbon Foodprint*' tool is intended to create a greater awareness and knowledge about carbon footprint in the context of food based on individual diet choices, as well as provide an overview of the advantages and disadvantages of certain commonly used foods in regard to their environmental impact and create a wider discussion on whether and how diets could be changed to contribute to creating and pursuing more environmentally sustainable lifestyles.

SKILLS TO BE PRACTICED: Research and Information Gathering, Teamwork, Critical Thinking, Awareness and Knowledge Building on the Topic

HOW TO USE THE TOOL: The set includes **18 cards** that can be used as part of the introduction of a session on Footprint of Food, or as the main practical team activity during a workshop on knowledge building about *Carbon* Footprint.The tool can be used individually or in groups. You can print the tool and hand it out in the form of three A4 sheets, or you can print the tool and cut the cards out and let participants randomly pick a card and look for the information about the CO2 of the selected food item.

REFLECTION QUESTIONS:

- Which products do you consume daily in your diet, and what is their carbon footprint?
- Why could it be important to know the CO2eq emissions of a food, product, or activity?
- Would you consider changing your diet to lower your carbon footprint? If yes, what would you change in your diet?
- What defines a low-carbon-footprint diet?
- Which other ways do you know that would help you to address the environmental impacts more effectively?



*Data calculated using My Emissions Calculator













YOUTH PROGRESS

EXPLORE THE ADVENTUROUS VOYAGE OF YOUR FOOD!

'The journey of food'

AIM: The 'Journey of Food' tool is intended to create a greater awareness and more in-depth knowledge about the origin of food through exploring the production, packaging, transportation, and other processes included in the journey of the food from its place of origin to your plate.

SKILLS TO BE PRACTICED: Research and Information Gathering, Teamwork, Critical Thinking, Awareness and Knowledge Building on the Topic

HOW TO USE THE TOOL: The tool includes 2 filled-in cards (as examples) with 2 common dishes consumed in France and a worksheet with 2 blank cards that can be printed and filled in a similar manner for the foods applicable to the specific geographical context you're working in. The tool is suitable for groups and for individual work and can be used as the main practical activity during sessions that address the sustainability of food or as part of awareness building on sustainable consumption with a focus on food. The cards include the following sections: Recipe (of a dish), Ingredients (and their country of origin), Production of the Ingredients, Packaging, and Exportation. The tool As accompanied by a world map that can be used to portray the actual distances of the journeys different food items travel to their final destinations.

QUESTIONS TO START WITH:

Think of your most typical and/or your favourite daily recipes!

- Where do you get the ingredients for your chosen dishes?
- How and where are these ingredients being produced?
- What it takes to produce these ingredients and who is involved?
- Are these ingredients made in your country or imported from elsewhere?



REFLECTION QUESTIONS:

Coffee

Buckwheat

Pasta

Cocoa

• What is a typical cuisine in your country? Are the ingredients usually local or imported?

THE TOOL и

- How would you describe your own diet and the origin of its ingredients?
- What interesting facts did you learn about your favourite/ typical food on its journey to your plate?
- What was the most interesting thing you learnt about food production processes, packaging, or exportation?
- Is it better for the environment to have locally sourced ingredients? Why yes or no?









INGREDIENTS:

- Hard wheat Semolina (Italy)
- Wholemeal flour (Italy)
- Legume flour (India, Canada, Australia)
- Tomatoes (France)
- Basil (France) Garlic (France)
- Olive Oil (Italy)
- Salt (France)
- Black Pepper (India)

RECIPE:

Pasta

For the sauce: Tomatoes

- Basil
- Garlic
- Olive Oil
- Salt
- **Black** Pepper

PRODUCTION OF THE INGREDIENTS:

The ingredients for PASTA are imported and shipped to factories in Parma (Italy), where they are milled and treated with tonnes of water. Finally the product is industrially finished.

TOMATOES, GARLIC, and BASIL are grown and harvested locally in France. OLIVE OIL is produced in Italy (olives are grown, harvested, and pressed into oil). SALT is produced using the evaporation of seawater method in France. BLACK PEPPER is grown, harvested, and dried in India.

PACKAGING:

Pasta - the final product - is sent to packaging in *Emilio* Romagna (Italy). Producers are trying to switch to materials sustainable for packaging, but most of them still use plastic. Tomatoes and garlie are usually packaged in carton boxes and further either sold loose or prepackaged in plastic, or carton and plastic packaging (tomatoes) or in net bags (garlic). Basil is sold in pots covered in plastic or pre-cut and packaged in transparent plastic.

EXPORTATION:

Pasta is shipped to France and other countries all around the world. Tomatoes, garlic, and basil are locally grown; similarly salt is produced in the country. Black pepper is shipped from India to Europe and elsewhere in the world.

THE OURNEY OF FOOD



GALETTE BRETONNE

INGREDIENTS:

- Buckwheat flour (Eastern Europe/China)
- Salt (France)
- Water (France)
- Egg (France)
- Cheese Gruyere (France)
- Ham (France) Butter (France)

RECIPE:

For batter (8 pieces):

- 250 g buckwheat flour
- 1 tsp sea salt
- 1/2 litre water
- 1 large egg
- 20 g melted butter

For the filling (per pancake): 1 slice of ham •

- 1 egg
- 20 g grated Gruyere .
- Butter

PRODUCTION OF THE INGREDIENTS:

BUCKWHEAT is grown, harvested, and stored in Eastern Europe (e.g., Lithuania, Ukraine, Poland). Eggs, ham, butter, cheese, and salt are locally produced in France. EGGS are a product coming from poultry farms; HAM (pig meat) is farmed, produced, and processed locally into the final product. BUTTER production includes the collection of milk, the separation of cream from milk, and the transformation of cream into butterfat. production CHEESE includes the collection of milk and multiple transformation processes of milk: curdling, draining, pressing, and ripening. SALT is produced using the evaporation of seawater method in France.

PACKAGING:

Buckwheat usually comes in either paper or plastic packaging. Eggs come in recycled paper packaging carton). Cheese (egg is packed in wax coating or waxed paper. Butter is packaged in waxed paper (or foil paper). Ham usually comes in hang netting bags bone-guard vacuum or plastic packaging.

EXPORTATION:

The products grown (and further prepared to their final state) in France are shipped to the retail, and further to the place of the delivery, e.g., a restaurant or a supermarket, and have significantly shorter delivery distances. Buckwheat, sourced in Eastern Europe, has a considerably shorter transportation journey than if sourced from China.









LET'S TALK WASTE!

WHAT IS WASTE?

UNSD (1997) defines waste as 'materials that are not prime products (that is, products produced for the market) for which the generator has no further use in terms of his/her own purposes of production, transformation, or consumption, and of which he/she wants to dispose. Wastes may be generated during the extraction of raw materials, the processing of raw materials into intermediate and final products, the consumption of final products, and other human activities. Residuals recycled or reused at the place of generation are excluded.' The way people buy, use, and discard materials determines the amount of energy and raw materials used and how much waste is generated (UNEP, 2024).

THE MOST COMMON CONSUMER WASTES

PLASTIC WASTE

Plastics have transformed the modern world, and without the use of plastics, life would be unimaginable. A throwaway culture has been established in the use of plastics, as about 40% of the annual consumption of plastics is of single-use (BBC, 2022). Global plastic waste generation more than doubled from 2000 to 2019 to 353 million tonnes. Nearly two-thirds of plastic waste comes from plastics with lifetimes of under five years, with 40% coming from packaging, 12% from consumer goods, and 11% from clothing and textiles (OECD, 2022).

Plastic can be recycled **7-9 times** before it is no longer recyclable. Globally, only 9% of plastic waste is recycled while 22% is mismanaged (OECD, 2022). Most plastic pollution comes from inadequate collection and disposal.

FOOD WASTE

Food loss and waste is food that is not eaten. According to the UN, one-third of the world's food is thrown away. The causes of food waste or loss are numerous and occur throughout the entire food system: during Production, Processing, Distribution, Retail and Food Service Sales, and Consumption. Globally, households waste the most food, followed by food service and retail (UNEP, 2024).



Glass is 100% recyclable and can be recycled endlessly without loss in quality or purity. Producing glass from recycled glass requires less energy (up to 30%) than making glass from virgin materials (EPA, 2012).

There are 3 types of glass: container glass, flat glass, and glass fiber. Global recycling volumes are estimated at 27 million tonnes. The highest recycling rates are achieved for container glass (32%), while the recycling rate for flat glass is only 11% (Harder, 2018).



TEXTILE WASTE

Textile waste can be distinguished in preconsumer and post-consumer waste. Preconsumer waste, or post-industrial waste, consists of textile waste produced at the industrial stage of the production of textile material. Typically, these by-products are produced by the textile, garment, cotton, and fibre industries and are repurposed by the furniture, home building, automotive, and other industries. Post-consumer waste consists of discarded garments or household articles made from manufactured textiles. These unwanted articles are typically worn out or damaged. Some post-consumer waste is directed towards second-hand retailers to be sold again. Some of this waste is collected in municipal collection bins, but the majority of this waste is found in landfills (Hawley, 2006).

According to Kerr and Landry (2017), we produce around 92 million tonnes of textile waste annually. Globally, less than 1% of clothes are recycled as clothing, partly due to inadequate technology (European Parliament, 2020a).

PAPER WASTE

Paper is the most recycled packaging material in the EU countries (BBC, 2019), and Europe is leading the way in paper recycling globally. In 2022, 70.5% of all paper and board consumed in Europe was recycled (EPRC, 2022). Paper cannot be recycled indefinitely – **just 4-6 times**, because the fibres lose their paper-making qualities. The demand for paper products has grown, especially as an alternative replacement for single-use plastics. Most commonly, paper is used in the manufacturing of packaging together with other types of materials, whose recycling process is more complicated or completely different from the paper recycling process. All in all, as one of the largest industrial sectors in the world, the pulp and paper industry has an enormous influence on global forests (i.e., deforestation).



Electronic or e-waste contains valuable materials and hazardous toxins. Over 1,000 materials, including chlorinated solvents, brominated flame retardants, PVC, heavy metals, plastics, and gases, are used to make electronic products and their components. About 40% of the heavy metals in landfills, including lead, mercury, cadmium, arsenic, thallium, beryllium, and indium, come from electronic equipment discards. Asia generates almost half of the world's e-waste, and since 2010 the amount of ewaste generated globally is 5 times quicker than its formal collection and recycling efforts (The Global E-waste Monitor 2024). E-waste is also the fastest-growing waste stream in the EU, and less than 40% is recycled (European Parliament, 2020b). Recycled metals are 2-10 times more energy efficient than metals smelted from virgin ore.











'15 WAYS TO AVOID CREATING WASTE'

AIM: The '15 ways to avoid creating waste' tool is intended to create a greater awareness about the ways we generate waste (sometimes unintentionally) and a wider discussion on how waste can be managed and reduced more effectively on an individual level in the context of everyday situations.

SKILLS TO BE PRACTICED: Teamwork, Critical Thinking, Research and Information Gathering, Awareness and Knowledge Building on the Topic of Waste

HOW TO USE THE TOOL: The tool set includes **15 cards** that represent 15 practices that could contribute to less wasteful behaviours. The tool is well suited for group work and can be used as a discussion starter or a brainstorming session on the topic of *waste* or *awareness assessment of wasteful behaviours*. Each card suggests an option that can be reviewed in terms of relevance, i.e., doing research on if, why, and how the suggested option would contribute to creating less waste. You can print and cut out the cards and let the participants randomly pick a card and reflect on its content (as individually as in groups).

REFLECTION QUESTIONS:

- Which of these activities do you pursue already?
- Why is it important to eliminate wasteful habits/behaviours?
- Which of the presented options are relevant to you and which are not? Why?
- What constraints (if any) stop you from implementing less wasteful practices in your daily life?
- What other practices do you know/perform that contribute to lesser generation of waste, e.g., bringing reusable/cotton bags when grocery shopping?







WASTE AND RECYCLING

WHAT IS RECYCLING?

Recycling is the process of processing (breaking down) and reusing waste materials to create new materials and objects. The recyclability of a material highly depends on its ability to reacquire the properties it had in its original state (Villalba et al. 2002). Individuals and communities usually do not do recycling by themselves but contribute sorted waste material for it to be recycled (broken down) and made into new products in specialised facilities, i.e., recycling plants.

HOW CAN YOU ENCOURAGE YOUR **COMMUNITY TO DO MORE RECYCLING?**

- Request more recycling bins in your area so that the waste disposal facilities are easily accessible!
- Advocate for adding a financial aspect to recycling efforts (e.g., suggest implementing a deposit system for plastic and glass bottles in your area)!
- Educate your community about recycling and its benefits (i.e., a cleaner environment, less air pollution, and less waste going to landfills)!
- Work together with your local government/ municipality (e.g., join the forces for promoting the importance and benefits of recycling in the community)!
- Support local businesses that work with recycled/waste materials and/or circular design principles!
- Set your own recycling goals and follow them!
- Explore other ideas for what can be done with waste!
- Organise a workshop for your community about the importance of recycling!
- Inspire people around you by your own example!



UPCYCLING

Upcycling is a creative reuse of discarded objects and materials (without breaking them down) resulting in a new product of greater quality or value than the original. In other words, upcycling is a process of transforming by-products, waste materials, useless, or unwanted products into new materials/objects/products (Wikipedia).

It also greatly contributes to minimising the amount of waste sent to landfill, the need for new products, and damaging environmental impacts. damaging

INFOSHEET 堡 PLASTIC GLASS

used plastics into new Products

-melting down glass to create new glass production

REFLECTION QUESTIONS:

What is the state of recycling in your town/city/country?

-reprocessing

Paper into

new paper

products

- Can you name any consumer items that are made from recycled materials (e.g., plastic, paper, textile, etc.)?
- What could be the possible obstacles to recycling?
- Do all 'donated' waste materials get recycled in your area?
- Why using recycled material could be beneficial for the environment?
- Do you know other effective ways to handle waste (food, textiles, plastic, paper, glass, ewaste)?

MINDFUL CONSUMPTION

Mindful consumption is the practice of using awareness of sustainability issues to purchasing decisions everyday items to long-term investments. from

Mindful consumption is a combination of a mindful mindset and behaviour: a mindset for caring for the self, community, and nature, which translates into consumer behaviour of tempering acquisitive (greedy need to have something), repetitive, and aspirational (strong desire to have something) consumption (Sheth et al. 2010).



THE PLANET IS COUNTING ON YOU!

'ECO HEROES' RECYCLING CHALLENGE

AIM: The interactive game 'Eco Heroes' is intended to raise awareness and build knowledge about the importance of recycling by completing different missions developed in the **ActionBound** online app. By completing different tasks ranging from knowledge quizzes to hands-on activities, the players can gradually obtain a bigger picture of the impact of sorting waste and recycling efforts on the environment and sustainability in their area and beyond.

SKILLS TO BE PRACTICED: Critical Thinking, Awareness and Knowledge Building, Teamwork, Problem-solving, Creativity, Research and Information Gathering

HOW TO USE THE TOOL: The game includes 8 missions that can be used/transferred to digital format or used as separate tasks in offline settings (also in a longer period of time), connecting different tasks to different topics discussed in a classroom or a workshop. The tasks can be completed individually or in teams. If used digitally, the facilitator can assign higher points to the recycling efforts of specific waste, depending on the urgency of recycling in a specific geographical context. The missions can be used as interactive tasks to introduce the topics of environmental sustainability, environmental challenges, waste and waste management, or as a final task to complete a session.

REFLECTION QUESTIONS:

- Why is it important to talk about waste?
- What interesting/curious things did you learn about recycling systems in your area? What works and what could be improved?
- Which activities (missions) would you try to implement or are you implementing already in your daily life?
- What could encourage more recycling of waste?

MISSIONS OF THE GAME: ***

Welcome to the ECO HEROES Challenge, an interactive adventure designed to test your knowledge, creativity, and commitment to making our planet a cleaner place! In this game, you'll embark on a series of missions that will take you through the world of recycling, focusing on three key materials: plastic, paper, and glass. Each material comes with its own set of challenges, and the points you earn will reflect the environmental impact of properly recycling these items. Your goal is to complete as many missions as possible, collecting points along the way, and learning how to make a real difference in your community! Get ready to explore, learn, and act as you take on the Recycling Challenge. The planet is counting on you!

MISSION I: Awareness Building

Find and photograph the appropriate recycling bins for plastic, paper, and glass in your surroundings!

MISSION 2:

AWARENESS BUILDING

Find out if there are any recycling plants in your area! What are they? What kind of materials do they recycle? Share your findings!

MISSION 3: Knowledge Quiz

Question 1: How many years does it take for plastic to decompose in nature? Question 2: How many times can paper be recycled? Question 3: What happens to recycled glass?

ΠIJθ

MISSION 4: DI PRODUCT IDENTIFICATION

Find and identify different products in your home or surroundings that can be recycled as plastic, paper, or glass.

MISSION 5: 🕑 🖸 Waste collection

Collect a certain number of plastic bottles, paper wrappers, or glass bottles from your surroundings and recycle them properly! Take and share a proud photo(s) of your successfully completed mission!

Within 24 hours, collect as much waste made of plastic, paper, and glass as possible and dispose of it properly!

MISSION 7: 💥 🎉 Mini art Project 🎉

Create a mini project or artwork using only collected waste materials (plastic, paper, or glass). Take and share a proud photo of your creations!

MISS<mark>ION 8:</mark> Get active In your community

Post a question or share a tip in an online group or forum about recycling! Share the reactions!



THE TOOL 👲



INFOSHEET & THE TOOL

ZERO WASTE AND THE MAGIC OF 5RS

WHAT IS ZERO WASTE?

Zero Waste is a set of principles focused on waste prevention that encourages redesigning resource life cycles so that all products are repurposed and/or reused. The goal of the movement is to avoid sending trash to landfills, incinerators, oceans, or any other part of the environment. It promotes also the idea of responsible consumption and awareness about the products we consume (i.e., food, clothes, hygienic products, etc.) (Wikipedia). The term was coined by Bea Johnson in 2008 in her blog and later book 'Zero Waste Home' (2013).

WHAT ARE THE 5RS?

What you don't need. - FUISE

While refusing certainproducts does not make the waste disappear, it can result in creating a demand for more environmentally friendly alternatives. Refusing gains more power when applied collectively.

DE Wnau you ... and cannot refuse. What you do not need)|](Reducing implies that one should shift their consumer focus on quality versus quantity and experiences versus stuff, suggesting more thought-through decisions and evaluation of the past, present, and future purchases. If you own certain stuff, it's because you need it.

What you consume and C. cannot refuse or reduce. Reusing implies utilisation of the product in its original state for as many times as possible, maximising its usefulness, and in that way contributing to saving the resources. There are also other ways to reuse products, e.g., buying secondhand or using shared consumption options (e.g.,borrowing tools from tool libraries), or extending the useful life of a product by repairing it or finding a new application for it.

It is not about DLE. recycling more, but

less. Recycling systems usually not only require a lot of energy to process waste but also [in many countries still] lack regulations to effectively the collective efforts coordinate of manufacturers, municipalities, consumers, and recycling businesses [entities that recycle waste materials].

Rotting describes the process of • composting, which is simply the recycling of organic materials. It entails the decomposition of organic matter in the soil over time, resulting in soil enriched with nutrients from these decomposed organic materials.

'SUSTAINABLE & WASTE FREE PLANNING'

AIM: The 'Sustainable & Waste Free Planning' tool is intended to create a greater awareness and understanding of the impacts of individual and collective everyday consumption choices on the environment, to reflect on and become more aware of the steps that can be taken to avoid unnecessary creation of waste, namely, applying the principles of the 5Rs, where and when possible, and opting for more sustainable consumption choices.

SKILLS TO BE PRACTICED: Brainstorming, Research and Information Gathering, Teamwork, Critical Thinking, Assessment of Individual Consumption Habits, Awareness and Knowledge Building on the Topic

HOW TO USE THE TOOL: The tool includes 4 situational cards with 4 different everyday **scenarios**, i.e., doing groceries, going shopping, organising travel, and organising an event. The tool also has a worksheet with 2 blank cards if you want to **add your own scenarios**. The task is to assess the situation and provide input with as many sustainable and environmentally friendly options as possible to complete the task.

The tool can be used as a part of a practical team activity during a workshop on knowledge building/discussions about the impacts of waste on the environment, environmental challenges, or while exploring more sustainable ways of individual consumption. The tool is best suited for work in 4-8 small teams but can also be used individually.

Print and cut the worksheets and let the teams randomly pick the situational scenario and fill the blank space with the sustainable options they come up with.

REFLECTION QUESTIONS:

- Why is it important to think of sustainability in regard to consumption?
- How does more sustainable consumption benefit the environment?
- Can you share an example of different everyday situations where you follow the principles of 5Rs? What is your overall experience - is it hard, easy, rewarding?
- Is it always possible to opt for sustainable options?





REFUSE, REDUCE, REUSE, RECYCLE, ROT

SITUATION 1: SHOPPING

IT IS THE TIME OF DISCOUNTS IN THE SHOPPING CENTRES AT THE MOMENT. You have been invited by your FRIEND TO GO SHOPPING TOGETHER.

TASK: MAKE A SHOPPING LIST AND THINK ABOUT HOW YOU CAN MAKE **YOUR SHOPPING MORE SUSTAINABLE!**

- What do you need? .
- What is the country of origin of the products/items you're planning to buy? Would you be able to find local brands
- that sell the same quality products?
- Are your chosen products/ items made sustainably? How can you check it? Why do you need these items? •
- Could there be something at your home that serves the same purpose? Do these items/products come packaged
- or not?
- Would you refuse extra packaging if it's offered?

REFUSE, REDUCE, REUSE, RECYCLE, ROT SITUATION 2: GROCERY SHOPPING

YOU ARE OUT GROCERY SHOPPING AND WANT TO PREPARE A LUNCH FOR YOURSELF.

TASK 1: PICK YOUR GROCERIES CAREFULLY, KEEPING IN MIND HOW YOU COULD FULLY USE THE PRODUCTS WITHOUT CREATING ANY WASTE (WHEN POSSIBLE)! TASK 2: MAKE/PLAN YOUR WASTE-FREE LUNCH AND SHARE A RECIPE WITH US!

- What are you going to have for your waste-free lunch? How did you decide on the ingredients? What goes well together?
- Did you refuse certain ingredients? Why, yes or no?
- Did you use some ingredients repeatedly in the preparation of your meal? Which ones?
- What will you do with leftovers if you have them?
- How can you make sure in the long term you don't waste food?

REFUSE, REDUCE, REUSE, RECYCLE, ROT

SITUATION 3: TRAVELLING

THERE ARE TWO **SUSTAINABILITY** EXPERTS COMING TO TÂRGU NEAMT, ROMANIA. ONE OF THEM IS FROM YEREVAN, TRAVELLING Armenia, and the other is coming TUZLA, FROM BOSNIA AND HERZEGOVINA.

TASK: ORGANISE THE TRAVEL FOR THESE EXPERTS, HAVING IN MIND LOW CO2 EMISSIONS. HOW WILL THEY GET **TO ROMANIA?**

- Which means of transportation are you considering?
- What would be the best travel option with the least impact on the environment? Why?
- What is Green Travel, and what are the benefits of it?
- What could you do to compensate for the unavoidable CO2 emissions from travelling?
- What else could you do to ensure that the planned trips are as waste-free as possible?

REFUSE, REDUCE, REUSE, RECYCLE, ROT SITUATION 4: LET'S PARTY!

You are organising a birthday party for your friend. 30 friends ALREADY CONFIRMED THEIR ATTENDANCE.

TASK: FIGURE OUT AND PLAN HOW TO REDUCE WASTE AS MUCH AS POSSIBLE IN PREPARATION FOR AND **DURING THE PARTY!**

- Which products do you plan to buy?
- Which ' household items can vou repeatedly reuse?
- What about gifts? Are they going to be wrapped? Are there going to be gifts or maybe just financial contributions?
- Will you have snacks or prepared food? Will you make snacks yourself? Where will you get the ingredients?
 In what will you serve food and drinks?
- etc.
- What will you do with leftover food and drinks so that they don't go to waste? What other activities do you plan to do
- to ensure that your event is as waste-free as possible?



ART



SPACE FOR ADDRESS ONLY

THIS SPACE FOR ADDRESS ONLY

REFUSE, REDUCE, REUSE, RECYCLE, ROT SITUATION:

TASK:

REFUSE, REDUCE, REUSE, RECYCLE, ROT SITUATION:

TASK:

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NFORMATION SOURCES

Carrington, D. 2017 (The Guardian). "Plastic Fibres Found in Tap Water around the World, Study Reveals." online article (theguardian.com).

Climate Focus and WWF 2024. Biodiversity and Climate Action in Agriculture and Food Systems: Opportunities for Building Synergies, Policy Research Paper, Bakhtary, H., I. Palmegiani, M. J. Rodezno Ayestas, and G. Hahn (Climate Focus).

Ellen MacArthur Foundation 2017. A New Textiles Economy: Redesigning Fashion's Future. Ellen MacArthur Foundation.

EPA, 2012. Reducing Business Waste. Materials Fact Sheet: Glass. Environment Protection Authority, Sydney.

European Paper Recycling Council 2022. Monitoring Report 2022.

European Parliament Topics 2020a. "The Impact of Textile Production and Waste on the Environment (Infographic)." online article (europarl.europa.eu).

European Parliament Topics 2020b. "E-waste in the EU: Facts and Figures (infographic)." online article (europarl.europa.eu).

European Parliament Topics, 2022. "Deforestation: Causes and How the EU is Tackling it." online article (europarl.europa.eu).

Fraser, D., D.M. Weary, E.A. Pajor, and B.N. Milligan 1997. "A Scientific Conception of Animal Welfare that reflects Ethical Concerns." *Animal Welfare*, 6, 187-205.

Gorvett, Z. 2019 (BBC). "Made on Earth: How Paper is Making a Comeback." online article (bbc.com).

Harder, J. 2018. "Glass recycling – Current market trends." Recovery Magazine, Recycling Technology Worldwide, 5.

Hawley, J. M. 2006. "Textile Recycling: A System Perspective." In Recycling in Textiles: Woodhead Publishing Series in Textiles, 1st edition, edited by Y. Wang, Woodhead Publishing Limited, 7-24.

Hawley, J. M. 2009. "8 – Understanding and improving Textile Recycling: A Systems Perspective." In Sustainable Textiles: Life Cycle and Environmental Impact: Woodhead Publishing Series in Textiles, edited by R. S. Blackburn, Woodhead Publishing Limited, 179-199.

Johnson, B. 2013. Zero Waste Home: The Ultimate Guide to Simplifying Your Life by Reducing Your Waste. Penguin Books.

Kant, R. 2012. "Textile Dyeing Industry: An Environmental Hazard." Natural Science, Vol.4, No.1.

Kerr, J. and J. Landry 2017. Pulse of the Fashion Industry. Global Fashion Agenda and The Boston Consulting Group, Inc.

Leonard, A. 2010. The Story of Stuff: The Impact of Overconsumption on the Planet, Our Communities, and Our Health – And How We Can Make it Better. Free Press, New York.

Mellor, D. J., N.J. Beausoleil, K. E. Littlewood, A. N. McLean, P. D. McGreevy, B. Jones, and C. Wilkins 2020. "The 2020 Five Domains Model: Including Human-Animal Interactions in Assessments of Animal Welfare." Animals (Basel), 10(10), 1870.

Oakes, K. 2022 (BBC). "What would happen if we stopped using plastic?" online article (bbc.com).

OECD 2022. Global Plastics Outlook: Economic Drivers, Environmental Impacts, and Policy Options. OECD Publishing, Paris.

Poore, J. and T. Nemecek 2018. Reducing Food's Environmental Impacts through Producers and Consumers. *Science*, Vol 360, Issue 6392, pp. 987-992.

Purvis, B., M. Yong, and D. Robinson 2019. "Three Pillars of Sustainability: in Search of Conceptual Origins." Sustainability Science, 14(3): 681-695.

Ro, C. 2020 (BBC). "Can fashion ever be sustainable?" online article (bbc.com).

Sheth, J.N., N. K. Sethia, and S. Srinivas 2011. "Mindful Consumption: A Customer-Centric Approach to Sustainability." Academy of Marketing Science, 39: 21-39.

United Nations, 1987. Our Common Future: Report of the World Commission on Environment and Development. (Brundtland Report).

UNEP, 2018. Mapping of Global Plastics Value Chain and Plastics Losses to the Environment (With a Particular Focus on Marine Environment), Ryberg, M., A. Laurent, and M. Hauschild. United Nations Environment Programme, Nairobi.

UNEP 2021. "How Food Waste is Trashing the Planet." online article (unep.org).

UNEP 2024. Think Eat Save: Tracking Progress to Halve Global Food Waste. Food Waste Index Report 2024. Nairobi.

UNEP 2024. Global Waste Management Outlook 2024: Beyond an Age of Waste – Turning Rubbish into a Resource. Nairobi.

UN Food and Agriculture Organization, 2023. World Food and Agriculture – Statistical Yearbook 2023, Rome.

UNITAR, 2024. The Global E-Waste Monitor 2024. Geneva/Bonn.

Villalba, G., M. Segarra, A.I. Fernandez, J.M. Chimenos, and F. Espiell 2002. "A Proposal for Quantifying the Recyclability of Materials." Resources, Conservation and Recycling. 37(1): 39-53.

World Trade Organization 2013. Factors shaping the Future of World Trade. World Trade Report 2013.



Bernard-Rau, B. 2024. Sustainability Stories: The Power of Narratives to Understand Global Challenges. Springer.

Carson, R. 1962. Silent Spring. Harper Collins Publishers.

Humes, E. 2012. Garbology: Our Dirty Love Affair with Trash. Penguin Books.

Lacy, P., J. Long, and W. Spindler 2019. The Circular Economy Handbook: Realizing the Circular Advantage. Palgrave Macmillan.

Micklethwaite, P. 2021. Beyond Recycling. Routledge.

Scholz, K., M. Eriksson, I. Strid, 2015. "Carbon Footprint of Supermarket Food Waste." Resources, Conservation and Recycling 94, 56-65.







'I believe this project will for sure make a difference in my way of living, and I will tell my friends about everything that I learned here. I really recommend everyone who has a chance to go on projects like this to take it and do it. LAMIJA

'It deepened my understanding of sustainable practices and how they can be implemented in real-world scenarios. The collaborative environment and hands-on approach not only enhanced my professional skills but also inspired me to pursue sustainability-focused initiatives in my career.' HARUN





'I really enjoyed the 'Sustainable ImPACT 2' project. It helped me grow personally and professionally by teaching me how to work well with others and think long-term.

KNARIK

'I have completely enjoyed being a part of 'Sustainable ImPACT 2'. The activities have been diverse and vibrant, fully contributing to the team-building and group spirit of open-minded, tolerant, and goal-oriented people.'

NORAYR

'We learned how to transform what we often call "waste" into useful and creative items. The project expanded our understanding of ecology and sparked our imagination. The beautiful natural setting and engaging interactions with others made it a delightful experience.

EJNA

















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