C.H.A.N.G.E.R.S. - 2.0

WASTE

https://changers2.eu/

Co-funded by
the European Union

FALCO &ASSOCIATI
I tuoi partner d'impresa

CAM CONSULTING

Rights of Use

Statement of originality

This output contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

Clarifying important concepts and terms

The list below contains the main concepts to be used in this methodology:

- **Energy** – is an abstract physical quantity that relates to the capacity to produce action and/or movement, which can be expressed in many forms: kinetic, chemical, potential, etc.
- **Energy poverty** – is the inability of households to maintain adequate levels of energy services at an affordable cost.
- **Climate Change** – refers to global climate variation or regional climate changes that occur over decades and affect the balance of ecosystems.
- **Sustainable Development** – ”meeting the needs of the present without compromising the ability of future generations to meet their own needs”. (UN, 1987)
- **Intergenerational Commitment** - is a moral and ethical obligation related to sustainability which includes the defence of a healthy environment as a duty and inalienable right of current and future generations.

Module 4 – Waste
Lesson Plan

Aim: To reflect on personal values, identify and explain how values vary among people and over time, while critically evaluating how they align with sustainability values.
Objectives: To know the life cycle of different consumer goods. Incorporate responsible consumption practices.

Proposed Activities from WP3-A1

1. Introduce the concept of waste and its impact on the environment and let seniors share their perceptions of waste (or examples they have encountered). Use a visually engaging presentation to explain the stages of the life cycle of consumer goods and discuss the environmental impacts associated with each stage and emphasize the importance of waste reduction and responsible consumption.

2. Present practical tips and strategies for seniors to adopt responsible consumption habits. Then distribute personal action planning worksheets or provide a whiteboard for seniors to write down their commitments (e.g., reducing single-use items, practicing recycling and composting, and supporting local sustainable initiatives).

Module 4 – Waste
Connection to WP3

WP3 structure	WP3 unit topics
1. Living sustainably *Aim: To reflect on personal values, identify and explain how values vary among people and over time, while critically evaluating how they align with sustainability values*	1A - Intergenerational Responsibility 1B – Waste 1C - Green Economy
2. Problems of the world today *Aim: To manage transitions and challenges in complex sustainability situations and make decisions related to the future in the face of uncertainty, ambiguity and risk.*	2A - Adaptation to climate change 2B - Mitigation to climate change
3. Energy: Resources, Poverty & Sustainability *Aim: To identify own potential for sustainability and to actively contribute to improving prospects for the community and the planet.*	3A - Energy resources 3B - Energy poverty 3C - Energy sustainability 3D - Sustainable mobility

WP4 TRAINING MODULES
1. Green ABC
2. House performance
3. House renovations
4. Waste
5. Sustainable mobility
6. Sustainable food
7. Biodiversity and zero pollution

Table of content

1) Different types of waste and their recycling

Learn about waste management methods of rural senior households.

Waste management in EU

5 tonnes of waste
is produced by the average European each year

Only 36%
of waste in the EU is recycled

Over 60%
of household waste still goes to landfill in some EU countries

The EU wants to promote

- the prevention of waste and
- the re-use of products as much as possible.

If this is not possible,

- it prefers recycling (including composting),
- followed by using waste to generate energy.

Benefits of Recycling

Recycling is a critical process that helps:

1. Reduce landfill waste
2. Conserve natural resources
3. Prevent pollution

Support for the elderly

Bins with wheels

Regular waste disposal

Accessible bins and clear instructions

Source of image: Adobe Stock

Every waste in its right place.

PAPER	**PLASTIC**	**METAL**
GLASS	**ELECTRONIC DEVICES**	**HAZARDOUS WASTE**

Paper and Cardboard Recycling

Process

Paper and cardboard are collected, sorted, and cleaned. Fibers are turned into pulp and used to make new products.

End Products

Newspapers, magazines, paper towels, tissues, cardboard boxes, writing paper

Benefits

Reduces the number of trees cut down, saves energy, and reduces green-house gas emissions.

Class Exercise

How do you utilise old newspapers?

Plastic Recycling

There are 7 different types of plastics, each with unique chemical properties.

Recycling Process

Plastic is shredded, melted, and reformed into new products. The polymer code on plastic items indicates the type of plastic it is made of and whether it can be recycled.

Plastic Recycling

Benefits

- ✓Reduces energy use
- ✓Saves oil reserves
- ✓Reduces greenhouse gas emissions
- ✓Keeps plastic from ending up in the ocean and damaging marine ecosystems

Plastic Recycling

Challenges

- Contamination
- Low recycling rates
- Difficulties in collecting and sorting
- Lack of proper infrastructure
- Uplifting demand for recycled plastic, etc.

How to reduce your plastic waste?

1) Avoid cellophane-wrapped products
2) Store your leftovers without using plastic
3) Avoid tea bags and use a tea strainer
4) Use natural sponges or luffa instead of plastic sponges
5) Reuse your plastic bottles
6) Use bar of soap instead of liquid products

Glass Recycling

1. **Collection and Sorting**

   Glass is collected, sorted, and transported to recycling centres.

2. **Cleaning and Crushing**

   The glass is washed and crushed into small pieces called cullet.

3. **Melting and Moulding**

   The cullet is melted and moulded to create new glass bottles, jars, and other products.

Metal Recycling

Process

Metal is collected, sorted, and processed. It is then melted and moulded into new products, such as cars, bicycles, and cans.

Benefits

Recycling metal helps conserve natural resources, reduce greenhouse gas emissions, and lower energy use. It also reduces the need for mining new metals.

Electronic Waste Recycling

1 What is E-Waste?

Old or outdated electronics like computers, televisions, cellphones, and other electronic equipment.

2 Recycling Process

Electronic waste is collected, sorted, and disassembled. The components are then processed and refined to recover valuable metals and other materials.

Electronic Waste Recycling

Benefits

- ✓ reduces landfill waste
- ✓ conserves natural resources
- ✓ prevents the release of toxic chemicals into the environment

Electronic Waste Recycling

Challenges

- data security
- exportation to developing countries
- need for specific recycling technologies

Hazardous Waste

Examples

Batteries, the used cooking oil, pesticides, used tyres, light bulbs, construction waste, paint, medicines, etc. are hazardous and require special treatment.

Medicine/Clinical waste

Unused meds should be returned to the pharmacy or a local drop off site to ensure safe disposal.

The Future of Recycling

Technological Advancements

Innovations, such as robotics and artificial intelligence, are making recycling more efficient and accurate.

Circular Economy

A circular economy aims to keep resources in use for as long as possible, reduce waste, and promote recycling and innovation.

Benefits

The future of recycling is promising; it will help conserve natural resources, reduce pollution, and create new jobs.

Conclusion

Recycling is an essential process that helps reduce waste, conserve natural resources, and prevent pollution. By recycling commonly used materials like paper, plastic, glass, metal, and electronic waste, we can make a difference for the environment and future generations.

Source of image: Adobe Stock

References

- United Nations Brundtland Commission: Report of the World Commission on Environment and Development: Our Common Future
- Randall, A. On Intergenerational Commitment, Weak Sustainability, and Safety. Sustainability 2020, 12, 5381. https://doi.org/10.3390/su12135381
- Easy Recycling Tips for Seniors
- European Commission – Environment
- Exploring the three Rs of waste management — Reduce, Reuse, Recycle.
- "Let's take out the trash!" A guidebook for local governments and CBOs to support elderly people.
- Waste management in the EU: infographic with facts and figures
- UNICEF: 9 ways to reduce plastic waste at home

2) Circular Economy

Welcome to the world of circular economy where waste is transformed into resources, and sustainability is at the core of every decision.

Join us on this journey!

Source of image:
Stock Adobe

The Model

The principles of circular economy, which is a model of production and consumption, are based on reducing, reusing, and recycling resources. By embracing this approach, businesses can cut costs, reduce waste, and create a more sustainable future for all.

Source of image: European Parliament Research Service

Benefits

- reduced greenhouse gas emissions
- reduced raw material dependence
- increased resource efficiency
- economic growth & job creation
- save money

The Three Rs of Circular Economy

Source of image:
www.pixabay.com

Video: How to Build a Circular Economy | Ellen MacArthur Foundation

What you can do for it?

Craft a new hobby! Cooperate with family members!

Upcycling and Crafting

Cooking and Baking

DIY Home Maintenance

What can you gain from it?

Learn to save money!

1) Handyman crafts: elderly individuals with skills in carpentry, plumbing, jewelry or knitting can offer their services to others in their community with materials they already have.
2) Clean out your closet regularly and sell your unused clothes.

Challenges and Barriers

1 Mindset Shift

Changing traditional linear thinking to embrace circularity can be a challenge.

2 Infrastructure

Investments and collaborations are needed to establish robust collection, sorting, and recycling systems.

3 Policy and Regulation

Creating an enabling environment through supportive policies and regulations will drive the transition to a circular economy.

Class Exercise

Circular Economy

- Share stories/old habits from the good old days when everything in your household was either recycled or reused.

- What do you do nowadays to reduce the amount of waste you produce?

How can you reduce your waste?

- Buy high-quality products with long life span
- Choose products which can be repaired if necessary
- Prefer reusable products instead of disposal/non-refillable ones
- Always ask yourself if you really need that item
- Prepare weekly menu in advance to avoid food waste
- Try to avoid plastic bags and packaging
- Compost your green waste

Source of image: Adobe Stock

Conclusion

The circular economy is a necessity for a sustainable future. By embracing circularity, we can create a world where waste is minimized, resources are maximized, and everyone benefits.

References

Circular economy: definition, importance and benefits | European Parliament

3) Purchase Sustainable Products and Identify Greenwashing

Explore the importance of sustainable products in today's world and learn how to identify and avoid greenwashing.

What makes a product sustainable?

Source: What Is a Sustainable Product? The Complete Guide

Life cycle sustainability

the total impact on the environment throughout its entire lifespan.

Ecological and social impact

the fair, ethical treatment of workers, sharing on the profit, low environmental impact.

Positive contribution to humanity

the positive impact the brand has through charitable actions.

Sustainable Product is…

"…a product that is made with responsible materials, produced in an ethical way, has an efficient life cycle and can be disposed of with minimal impact."

/Jo Vieira: What makes a product sustainable?/

Benefits of sustainable purchasing

- ✓ reduce carbon emissions, e.g. by buying energy efficient products
- ✓ save natural resources, e.g. by choosing products and services that use recycled materials or waste as resource
- ✓ reduce waste sent to landfill, e.g. by buying products which can be reused or recycled
- ✓ help communities, e.g. by creating work for local suppliers or buying goods traded fairly to improve living and working conditions

Tips for Purchasing Sustainable Products

1 Research and Verify Claims

Check sustainability claims of companies.

2 Look for Certifications and Labels

Explore trustworthy certifications and labels that justify a product's sustainability.

3 Support Trustworthy Brands and Companies

Discover ethical and sustainable brands that prioritize transparency and environmental responsibility.

4 Be Aware of Greenwashing Traps

Stay informed about common tactics used in greenwashing and how to avoid falling for them.

1 Research and Verify Claims

Check where your food is sourced and the methods of manufacturing.

Source of image: Adobe Stock

2 Look for Certifications and Labels

- ✓ **Fairtrade**: With this label, you can feel comfortable knowing the producer provides fair compensation and working conditions to their employees.

- ✓ **EU Ecolabel** is the EU official voluntary label for environmental excellence based on standardised processes and scientific evidence. Goods and services can also get it.

- ✓ **Cradle to Cradle:** ”the global standard for materials, products and systems that positively impact people and planet.”

3 Support Trustworthy Brands and Companies

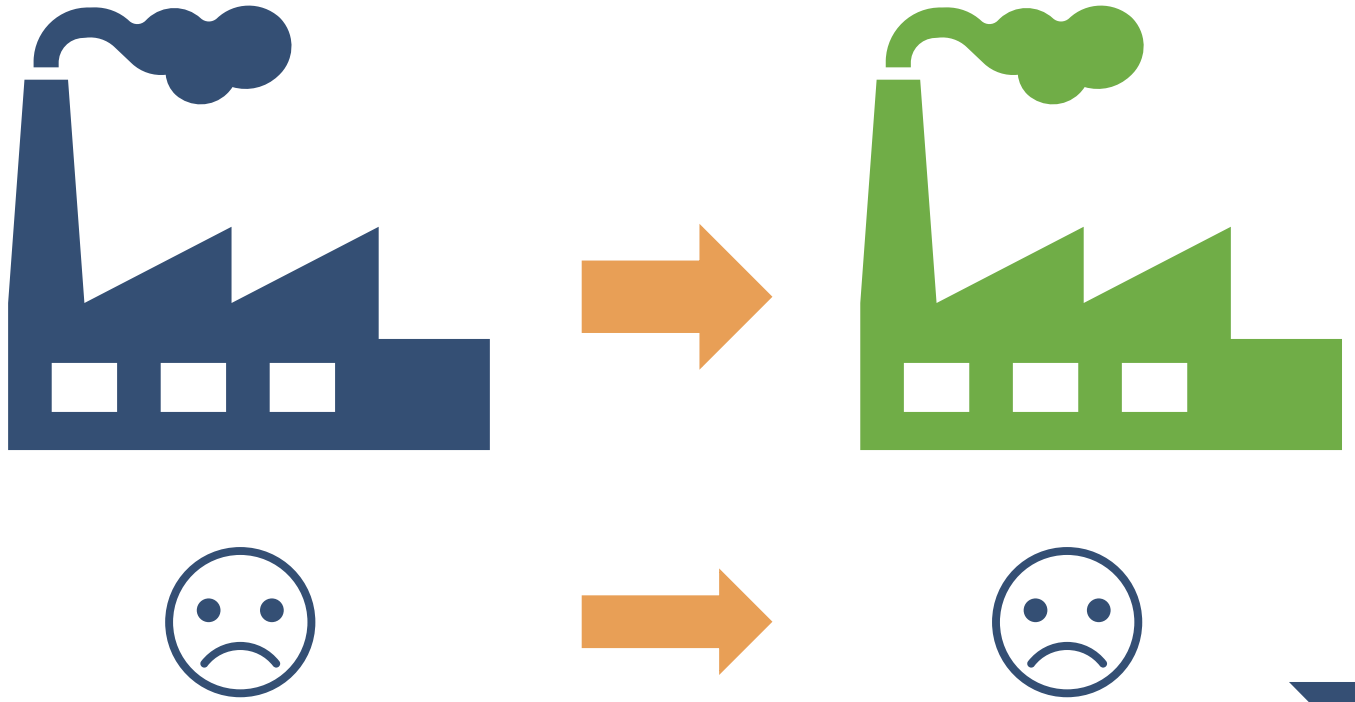
Buy the products of such companies who…

- ✓ make effort to do something for the environment and/or for the humanity
- ✓ have transparent sustainability practices and behaviour
- ✓ display detailed ingredients on their labels, so you know exactly what you're eating, drinking, or wearing

4 Be Aware of Greenwashing Traps

Be cautious with….

- no certification
- bad ingredients
- misleading imagery



Identifying Greenwashing

1

Definition of Greenwashing

Understand the concept of greenwashing and its implications in misleading consumers.

2

Signs and Tactics Used by Companies

Explore the strategies employed by companies to create the illusion of sustainability.

3

Examples of Greenwashing in Various Industries

Discover real-life instances of greenwashing in different sectors.

1 Definition of Greenwashing

According to the European Supervisory Authorities Greenwashing is:

- "a practice where sustainability-related statements, declarations, actions, or communications do not clearly and fairly reflect the underlying sustainability profile of an entity, a financial product, or financial services. This practice may be misleading to consumers, investors, or other market participants."

With other words, greenwashing means:

- " deceptive or misleading environmental claims, which are false, vague, omit key information or a combination of these" (Urbański and Haque, 2020)

2 Signs and Tactics Used by Companies

Vague Label:

- These refer to labels poorly define features or where broad claims are made leading to the mislead of consumers about the actual benefits of the product.

- For example, terms like "non-toxic," "all-natural," or "green" may sound positive, but they often lack clear meaning.

2 Signs and Tactics Used by Companies

False Label:

- This involves using fake labels that suggest nonexistent third-party endorsements.

- For instance, companies may use eco-labels like "Certified Green" to make their products seem more legitimate and environmentally friendly, even though such endorsements don't actually exist.

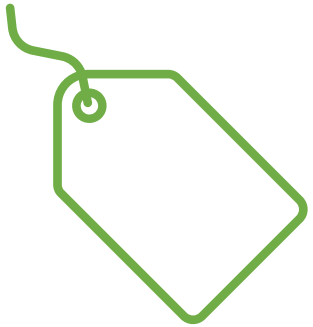
2 Signs and Tactics Used by Companies

Irrelevant Label:

- Some companies make claims that seem true but aren't relevant to determining the product's environmental friendliness. These claims can distract consumers and lead them to believe that a product is more environmentally beneficial than it actually is.

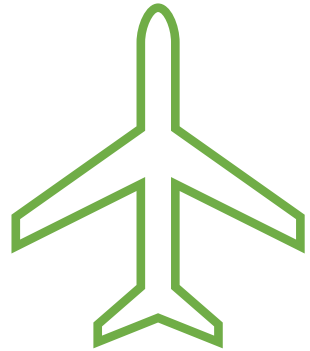
3

Examples of Greenwashing in Fashion



Fast fashion industry: **insincere sustainable fashion claims**

Furniture production: **accredited illegal logging**



Transport service (airline): **false low-emissions claims**

Conclusion

Keep in mind the impact of informed consumer choices in driving sustainable practices and combating greenwashing. Take action for a greener future.

Source of image: Adobe Stock

References

- Cradle to Cradle Products Innovation Institute
- European Commission: About the EU Ecolabel
- European Securities and Market Authoruty: ESAs put forward common understanding of greenwashing and warn on risks
- Jo Vieira: What makes a product sustainable?
- Supply chain efficiency: Benefits of buying sustainable goods and services
- The sustainable agency – Greenwashing 14 examples
- Urbański, Mariusz, and Adnan ul Haque. 2020. "Are You Environmentally Conscious Enough to Differentiate between Greenwashed and Sustainable Items? A Global Consumers Perspective" Sustainability 12, no. 5: 1786. https://doi.org/10.3390/su12051786
- What Is a Sustainable Product? The Complete Guide

END OF MODULE

Thank you for your attention and please complete the exit questionnaire.

C.H.A.N.G.E.R.S. - 2.0

Visit our website
for more training materials and tools:

https://changers2.eu/

Co-funded by
the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.
"Change Household Attitudes for a Non-wasteful, Green environment and Energy-consciousness addressing Rural Seniors" project number: 2022-1-HU01-KA220-ADU-000089052