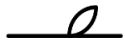


HANDBOOK FOR YOUTH WORKERS

Project number: 2020-3-R001-KA205-094853

MODULE 3: Sustainable communities – Eco-cities



Project Information

PROJECT: greenACT

PROJECT TITLE: Youth 'agents of change' on Climate Action and Environmental Sustainability

ACRONYM: greenACT

PROJECT WEBSITE: <https://greenactproject.eu/>

PROJECT NO.: 2020-3-R001-KA205-094853

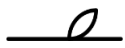
PROJECT COORDINATOR: ASOCIATIA D.G.T





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Project information

GreenACT is a 20 months' project designed to enhance ENVIRONMENTAL EDUCATION and AWARENESS of YOUNG PEOPLE through the organization of SUMMER SCHOOL PROGRAMME to familiarize young people with the idea of environmental citizenship, based on the fact that the future depends on each and one of us by acting responsibly and positively towards our environment and developing sustainable solutions for addressing environmental challenges. In a period where Earth faces the consequences of climate change and global warming crisis and the need for mitigation of climate change is emerging, Green-ACT aims to support further these YOUTH INITIATIVES and raise more awareness in the 6 countries, by educating young people on environmental issues, inspire them in developing a firm ecological mindset, and invite them to have a positive impact in their communities as active agents.

The partnership is composed of 6 partners from 6 countries: Romania, Lithuania, Cyprus, Slovenia, Bulgaria, Portugal.

Furthermore, it aims:








- To promote the idea of establishing SUMMER SCHOOLS for raising young people's environmental awareness.
- To set up the GreenACT MOVEMENT (a network of young activists) for coordinating their actions and engaging citizens.
- To build/increase the capacity of partner organizations to act regarding the reduction of waste in the partner countries by encouraging local communities to recycle and reuse.
- To equip youth workers with new sustainable environmental skills to empower younger people.
- To facilitate brainstorming on challenges and possible solutions of topics such as alternative forms of socio-economy, biodiversity and food production, sustainable production and consumption, transport, etc.

This handbook is developed by each partner with the following aims:

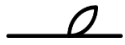
1. to empower youth workers to organize and implement activities for young people, to inspire them to have a positive societal and environmental impact in the world.
2. to engage young people in environmental actions with positive impact.
3. to develop the DATA BANK which will contain a wide selection of tools, resources, teaching material, videos, reports, etc. highly useful for YW and YP.

This handbook will have the following modules:

1. Human impact in natural systems - environmental challenges
2. Green living
3. Sustainable communities - Eco-cities
4. Green act movement: become an active agent for the environment
5. EU and national environmental policies
6. Climate Change & our sustainability

<i>Symbols</i>	<i>Explanation</i>
	Definitions
	Case study
	Additional Resources
	Tips
	Activities
	Reminder
	Video

Key Symbols



General Objective of the Module

This module aims to provide learners with more in-depth knowledge of the concept of **sustainable communities**. It will define and go over different methods, integrated into our society, which allow us to lead a more environmentally friendly lifestyle. By observing concepts, such as water and waste management, ecological innovations and more, the module aims to inspire learners to take a more eco-conscious approach in the decision-making process of their everyday lives.

Topics: You will be able to find in this document the following topics:

1. **Eco-innovation & Entrepreneurship**
2. **Sustainable Urban Development**
3. **Alternative Transportation (emissions-free/electric vehicles and public transportation, alternative ways of transportation)**
4. **Waste Management and the 5R's**
5. **Water Management, Quality & Access**
6. **Examples of good practices**



Learning Goals

1. Introduce the learners to the **environmental benefits** of sustainable products
2. **Learning** what some of the largest businesses are doing to reduce the footprint
3. The purpose of the lesson is **to Inspire** learners toward improving their energy efficiency.
4. **To define** the term “Sustainable Urban Development” and encourage learners to brainstorm of new practices, which can help their cities reach a higher level of sustainable urban development
5. **To specify** why sustainable transportation should be chosen rather than using a car.
6. **To encourage** the active use of alternative transportation.



1. Eco-innovation & Entrepreneurship

Eco-innovation has gained widespread acceptance as a means of enhancing many businesses' environmental performance and assisting them in the process of developing new products. Nowadays, sustainable packaging, innovative and 100% recyclable phone boxes, and many other environmentally friendly products are becoming increasingly popular. Hence, being able to differentiate between which products are good for the planet and which are harmful has become an essential skill.

The main goal of this topic is the learners to introduce to them the environmental benefits of sustainable products. Participants will have to brainstorm new ecological innovations that can be implemented in their cities. They will have to create an executive plan about how/where they will create their products, how it will be distributed, why the product is beneficial and what



Definition

- This is the way to benefit by developing products or services, improving environmental sustainability, and using commercial strategies.
- Innovation that originates from ecosystems. Eco-innovation is related to eco-technology. The goal of eco-innovation is to solve environmental problems and become more competitive. Eco-innovation is also related to smart cities
- The development of processes, products and services in ensuring human, economic, social and environmental sustainability.
- Innovation of goods and/or services as well as in production, exploration, production, management, or business processes that seeks to reduce both environmental risks and the use of natural resources.
- Innovative in production process which consent to a reduction of environmental risk and benefited to society and stakeholders.
- The concept refers to making substantial and measurable progress toward the objective of sustainable development by minimizing environmental effects and increasing environmental resilience.



Activities

Linked with Topic 1 – Lesson Plan



Video

Video 1- https://www.youtube.com/watch?v=6L_ipFvVtWE&t=1s

Video 2- <https://www.youtube.com/watch?v=li0EpfSbOJg>



2.Sustainable Urban Development

Through sustainable urban development, the so-called ‘eco-cities’ are able to reduce the effects of climate change. Cities, which fall into this category, tackle global warming by:

- creating more green spaces within their territories
- being able to use renewable energy to power themselves
- strictly controlling sources of pollution
- encouraging ecological means of transportation over personal vehicles

The benefits of those actions are better living conditions, economic growth, less waste of valuable resources, improved health and more. While working on this topic, learners will be assigned the task to explore the practices executed in their hometowns and suggest what need to be done, for their cities to reach a higher level of sustainable urban development.

The aim of the module is to define the term “Sustainable Urban Development” and encourage learners to create visual materials containing good environmental practices, already implemented in advanced eco-cities, which can help participants’ hometowns reach a higher level of sustainable urban development.



Definition

- Improving the quality of life in a city, including ecological, cultural, political, institutional, social and economic components without leaving a burden, e.g., the result of a reduced

natural capital and an excessive local debt, on the future generations—and thus forming the sustainable city.

- Promoting urban growth in line with the present needs without compromising the needs of future generations.



Activities

Linked with Topic 2 – Lesson Plan



Article

Article - 6 Traits of a Sustainable City <https://www.digi.com/blog/post/sustainable-city>



Video

https://www.youtube.com/watch?v=fsWr0Lfm_uQ&ab_channel=GoingGreen



3.Alternative Transportation

By definition, alternative transportation includes using “eco” vehicles with a low environmental impact. The dangerously high levels of carbon emissions, due to the increasing number of cars in

the cities, has incited society to turn to less harmful to the environment means of transportation. Some of the main alternative transportation methods include walking, biking, taking the bus, tram or a train, carpooling, etc.

The topic aim to specify why sustainable transportation should be chosen rather than using a car and thus, understand the environmental concerns that come from modern transportation means. At the end to encourage people to use alternative transportation choices that can be implemented in their day-to-day lives.



Tips

- Walking
- Biking
- Bus
- Mass Transit Rail
- Train
- Carpooling
- Car sharing
- Alternative fuel Vehicles
- Electric / Hybrid Vehicles



Activity

Linked with Topic 3 – Lesson Plan



Video

https://www.youtube.com/watch?v=VJXXVnUE1Ts&ab_channel=EcoMasteryProject



4. Waste Management and the 5R's

As a result of the population increase, the generation of waste is doubling with each day causing negative effects on the lives of many. Many waste slums have formed as a result of the accumulation of trash around the world, specifically around coasts. Single-use plastic materials, alongside other non-degradable components, present the biggest environmental threat. To tackle the issue, the method of the 5R's has been introduced. Essentially, the abbreviation has many interpretations, but generally stands for refuse, reduce, reuse, repurpose, and recycle.

The module will focus on creating a video on the 5R's (how to reduce their plastic consumption, new ways for repurposing used plastic containers), which will encourage the integration of the 5R's in the learners' and viewers' everyday lives.



Case study

According to the 5 R's, four actions should be taken, if possible, prior to 'recycling': refuse, reduce, reuse, repurpose, and then recycle. Incorporating this methodology into your business' waste reduction and recycling efforts will minimize landfill waste and help take your recycling program to the next level.



4.1 How to apply the 5Rs

Applying the 5 R's to your business' waste management and recycling strategies can positively impact the outcome of your program by significantly reducing the amount of waste your business generates. In the 5 R's hierarchy, remember to treat recycling as a last resort. Before disposing of your waste, walk through each of these steps in the following order:

STEP ONE: REFUSE

Refuse: the first element of the 5 R's hierarchy. Learning to refuse waste can take some practice but incorporating this step into your routine is the most effective way to minimize waste. If you own a business, talk to your procurement team about refusing to buy wasteful or non-recyclable

products. When working with vendors, refuse unnecessary product packaging and request reusable or returnable containers. Making smarter purchasing decisions and setting standards and expectations early in the process makes it easier for organizations to “refuse” waste in the first place.

STEP TWO: REDUCE

Reduce the use of harmful, wasteful, and non-recyclable products. Reducing dependency on these kinds of products results in less waste materials ending up in landfill and the associated negative environmental impacts. We recommend always using the minimum amount required to avoid unnecessary waste. For example, when printing a document, print double-sided to cut your waste output in half. Other commonly used items you can focus on reducing include single-use plastics, plastic packaging, organic waste, and Styrofoam cups.

STEP THREE: REUSE

Single-use plastics have created a “throw-away” culture by normalizing consumer behavior of using materials once and then throwing them away. The rate at which we consume plastics has become unimaginable, and the plastic crisis has become one of the world's greatest environmental challenges. To reduce waste, reuse items instead of buying new ones. Begin by focusing on one area of your life at a time, like your kitchen. Replace all of the single use eating utensils, Styrofoam cups, water bottles, and paper plates with compostable or reusable alternatives. Once you master one area, prioritize reuse for other products like packaging, printer cartridges, cardboard boxes, food containers, and rechargeable batteries.

STEP FOUR: REPURPOSE

For every item that can't be refused, reduced, or reused, try repurposing it. Many people in the green community refer to this method as upcycling. You may be surprised to learn how many common products serve more than one purpose. Sometimes it requires using some creativity, but the possibilities are endless. Try using wasted printer paper for scrap paper, cardboard boxes for storing supplies, binder clips to hold power cords and chargers in place, and even mason jars, coffee mugs, and tin cans for holding pens and pencils. Encourage your family to add items to the station they no longer need and to check there before purchasing new supplies.

STEP FIVE: RECYCLE

Last but definitely not least: recycle. Once you've gone through all the other R's, recycling is the most environmentally friendly waste disposal method. If your family doesn't already, start collecting cardboard, mixed paper products, commingled materials (plastics, aluminium, glass) and organics.



Activity

Linked with Topic 4 – Lesson Plan



Article

<https://galleryclimatecoalition.org/news/60-what-are-the-5-rs-of-the-waste/>



5. Water Management, Quality & Access

This module will point out to learners how certain actions, which seem harmless, are negatively influencing the quality of the water at national and international levels. They will learn what micro-plastics are and where they can be found. As a task, learners will have to create a list with products containing large quantities of micro-plastics and suggest sustainable alternatives.



Definition

Water quality refers to the chemical, physical, and biological characteristics of water based on the standards of its usage. It is most frequently used by reference to a set of standards against which compliance, generally achieved through treatment of the water, can be assessed.

Access to water according to the United Nations General Assembly established the 17 Sustainable Development Goals (SDGs) means

- Access to drinking water.
- The access to sanitation and hygiene.
- Water quality and the management of wastewater.
- The efficient use of water resources.
- Integrated management of water resources.
- Protection of water-related ecosystems.
- A Building of management capacities.
- Participation of local communities in management.



Activity

Linked with Topic 5 – Lesson Plan



Video

https://www.youtube.com/watch?v=ZHCgA-n5wRw&ab_channel=NationalGeographic

6. Good Practices in the field of Green Cities

The goal is to define the best practice in the field of eco – cities around the world and to extract the most eligible resources and methods to apply at local level in order to improve our surrounding. The learners will be able to understand what ‘good practices’ are and why they are needed. Moreover, participation in such activities will be highly encouraged.



Definition

There are several ways to define "good practices." However, a theme that runs across most definitions is that they all refer to tactics, methods, and/or activities that have been demonstrated via study and assessment to be reliable in producing the intended results and to be successful, efficient, sustainable, and/or transferrable.



Examples of good practices

GP 1- Incentives for Electric Vehicles in the EU

Most EU member states have begun to provide up to 5000 EUR as financial support to citizen for electric vehicle purchases. Moreover, in most parts of the EU, EV are a subject from partial to full exemption of some mandatory taxes.

GP 2- 2LIFES projects by Interreg Europe

"The project is meant to be an instrument to help boost re-use through public policies... 2LIFES focuses exclusively on re-use and more specifically on re-use activities promoted by public administrations – something pending as it is usually promoted by the third sector."

GP 3- WWF's charity swimming challenge

Swim so that they can swim too is the name of WWF Bulgaria's challenge aiming at supporting the protection of Bulgarian rivers' water quality and their inhabitants.



Activity

Linked with Topic 6 – Lesson Plan



Article

https://ec.europa.eu/migrant-integration/page/what-are-good-practices_en#:~:text='Good%20practices'%20can%20be%20defined,lead%20to%20a%20desired%20result



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https://www.youtube.com/watch?v=VJXXVnUE1Ts&ab_channel=EcoMasteryProject

<https://galleryclimatecoalition.org/news/60-what-are-the-5-rs-of-the-waste/>

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<http://www.interregeurope.eu/2lifes/>

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