greenACT

GREEN ACT:
«Youth 'agents of change' on Climate Action and Environmental Sustainability»

Intellectual Output 1: GREEN ACT

COMPETENCY FRAMEWORK FOR INCREASING ENVIRONMENTAL AWARENESS AND RESPONSIBLE BEHAVIOR

Learning Modules

MODULE 3: Sustainable communities - Eco-cities

1. General description 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.

2. List of Topics:

Topic 1: Eco-innovation & Entrepreneurship

Short description:

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. During the lesson on this topic, students will have to research the environmental policies of a multimillion-dollar company of their choice, outline the actions taken by the corporation to reduce their environmental footprint and give their critical opinion on whether the actions are reasonable/helpful.

Topic 2: Energy Efficiency

Short description:

The fundamental meaning of the term 'energy efficiency is to eliminate energy waste by reducing the amount of it that is needed to complete a task. Each year, we are introduced to many innovations across various consumer sectors, which aim at reducing this exact energy wastefulness. Those include small things such as using LED light at home to big ones, such as integrating solar panels into a building to achieve the so-called 'zero-waste home'. Nevertheless, energy, especially electricity, keeps being wasted every day through means we tend to ignore. The topic aims to make learners aware of their actions leading to energy waste and brainstorm how they can improve their energy efficiency.

Topic 3: Sustainable Urban Development

Short description:

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 itself
- 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.

Topic 4: Alternative Transportation (emissions-free/electric vehicles and public transportation, alternative ways of transportation)

Short description:

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. While exploring the topic, learners will be introduced to statistical data on the harmful effect of non-sustainable transportation on the environment. Later, they will be encouraged to research more conscious transportation choices that can be implemented in their day-to-day lives.

Topic 5: Waste Management and the 5R's

Short description:

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 teaching learners how to reduce their plastic consumption, suggest new ways for repurposing used plastic containers and encourage the integration of the 5R's in the learners' everyday lives.

Topic 6: Water Management, Quality & Access

Short description:

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.

Topic 7: Examples of good practices

Short description:

GP 1- Incentives for Electric Vehicles in the EU
Most EU member states have begun to provide financial support to citizens for electric vehicle purchases. Private bodies can now take up to 5000 EUR (depending on the country) in the form of a grand when they purchase new fully electric vehicles. Moreover, in most parts of the EU, EVs 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."

The project itself has implemented many good practices, some of which being:

- Macerata Trashware (January 2012-December 2013)- Recovery of obsolete PC before they enter the waste cycle, making them usable again through non-substantial repairs and installations of free software.
- Green Dot Cyprus (Ongoing)- Green Dot Cyprus is the first Collective Compliance System for Packaging and Packaging Waste in Cyprus. Green Dot Cyprus collects and manages three packaging streams, PMD, Paper and Glass.

/source: http://www.interregeurope.eu/2lifes/ /

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. All funds raised were used for the field work of WWF experts on the Danube and inland Bulgarian rivers.

MODULE 3: Sustainable communities - Eco-cities					
		KNOWLEDGE (*In the context of EQF, knowledge is described as theoretical and/or factual*) *https://europa.eu/europass/en/european-qualifications-framework-eqf* *https://europa.eu/europass/en/description-eight-eqf-levels*	**SKILLS** (*In the context of EQF, skills are described as practical*)	**ATTITUDE** (*In the context of the EQF, attitude is described as the ability of the learner to apply knowledge and skills autonomously and with responsibility*)	**Activities/Lesson Plan**

Topic 6.1: Eco-innovation & Entrepreneurship	**Main Objectives:** ● Introduce the learners to the environmental benefits of sustainable products ● Learn what some of the largest businesses are doing to reduce their footprint	● I understand what eco-innovations are ● I understand how beneficial sustainable products are. ● I understand how tiny plastic products have large impact on the planet. ● I understand my impact as a customer.	● I can give a critical opinion on an environmental practice. ● I know what an environmental policy is. ● I know more about the environmental principles of a company of choice.	● I am ready to make more responsible decisions when purchasing new products	
Topic 6.2: Energy Efficiency	**Main Objectives:** The purpose of the lesson is to Inspire learners toward improving their energy efficiency.	● I understand how my actions lead to energy wastefulness. ● I understand why we need to preserve energy ● I understand what actions I need to take to reduce the waste of energy some of my actions	● I can improve my energy efficiency. ● I can help the ones around me reduce their waste of energy.	● I want to improve my energy efficiency. ● I want to help the planet by teaching others what I learnt in this lesson.	

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Topic 6.3: Sustainable Urban Development	**Main Objectives:** The aim of the module is 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	• I understand what Sustainable Urban Development is • I understand how beneficial it is for my health	• I can advocate for new sustainable urban units in the city I live • I can explain to other why developing urban sustainability is necessary		
Topic 6.4: Alternative Transportation (emissions-free/electric vehicles and public transportation, alternative ways of transportation)	**Main Objectives:** To specify why sustainable transportation should be chosen rather than using a car. To encourage the active use of alternative transportation.	• I understand the environmental concerns that come from modern transportation means • I understand how to critically evaluate different transportation options	• I can research into alternative transportation means • I can make critical decisions and choose the most environmentally friendly transportation system	• I prefer taking public transport during rush hours • I prefer reducing the CO_2 emissions I create with my car • I want to reduce the carbon footprint my family and friends leave	

Topic 6.5: Waste Management and the 5R's	**Main Objectives:**	• I understand why plastic is harmful • I understand the need of recycling • I understand why I need to reduce my plastic waste • I understand how to put in use the 5R's • I understand the different types of plastic	• I can differentiate between degradable and non-degradable materials	• I want to begin recycling my waste • I would like to share what I have learned • I would like to continue learning more on the topic	
Topic 6.6: Water Managemen, Quality & Access	**Main Objectives:**	• I understand how micro-plastics harm our waters • I am aware of the everyday products that cause a lot of damage to the waters and the marine wildlife • I understand how I can substitute the harmful products I use with gentle ones	• I can identify harmful products • I can make better decisions from now on	• I want to be more careful with my action as they might be harmful to the World Ocean • I want to make better choices when purchasing items	
Topic 6.7: Examples of good practices	**Main Objectives:** To introduce participants with a selection of good	• I understand what 'good practices are' • I understand why good practices are needed	• I can identify a good practice ●— I can research a good practice	• I would like to participate in similar initiatives	

GREEN ACT_ FRAMEWORK DRAFT

	practices across Europe aiming at fighting environmental issues				

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