INTERGREEN

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TRAINING MODULE 2 – Green competences

Final version

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Introduction

Green competencies are the skills, knowledge, and attitudes required to live and work in a sustainable way, and they're essential for addressing the environmental challenges facing our planet.
The objective of this module is to help municipal employees develop skills specific to the municipal needs, such as environmental and cultural heritage protection and green businesses, energy efficiency, social responsibility, green economy etc.
The whole module focuses on skills directly applicable to local municipal problems identified through needs analysis, and will offer participants more ready-to-go skills applicable in their local, municipal context.

To make it easier, the module includes practical examples and case studies to help participants better figure out the meaning and the practical realisation of certain aspects.

Unit 1 – The EU Sustainability Competence Framework (GREENCOMP)

Introduction

GreenComp is a reference framework for sustainability competencies. It provides a common ground to learners and guidance to educators, advancing a consensual definition of what sustainability as a competence entails. It offers a common language on competencies for sustainability and is suggested to be used for policy development, evaluation of existing curricula, design of new ones, and reflection.

It responds to the growing need for people to improve and develop the knowledge, skills and attitudes to live, work and act in a sustainable manner. It is designed to support education and training programmes for lifelong learning. It is written for all learners, irrespective of their age and their education level and in any learning setting – formal, non-formal and informal.

Sustainability competencies can help learners become systemic and critical thinkers, as well as develop agency, and form a knowledge basis for everyone who cares about our planet's present and future state.

For the trainer

Learning outcomes:

After the learning session, participants will:

- Understand what sustainability is as a general concept;
- Recognize what green competencies is and why they are so useful in the workplace;
- Adopt a more sustainable approach.

Methodology:

GreenComp presentation (about 1 hour) using projector, laptop, PPT. The trainer can invite participants to a practical training using the GreenComp game (about 2 hours)

Greencomp Presentation

GreenComp consists of **12 competencies** organised into the **four areas** below:

AREA 1

Embodying sustainability values, including the following competencies

Valuing sustainability: 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.

Supporting fairness: To support equity and justice for current and future generations and learn from previous generations for sustainability.

Promoting nature: To acknowledge that humans are part of nature; and to respect the needs and rights of other species and of nature itself in order to restore and regenerate healthy and resilient ecosystems.

AREA 2

Embracing complexity in sustainability, including the following competencies

Systems thinking: To approach a sustainability problem from all sides; to consider time, space and context in order to understand how elements interact within and between systems.

Critical thinking: To assess information and arguments, identify assumptions, challenge the status quo, and reflect on how personal, social and cultural backgrounds influence thinking and conclusions.

Problem framing: To formulate current or potential challenges as a sustainability problem in terms of difficulty, people involved, time and geographical scope, in order to identify suitable approaches to anticipating and preventing problems, and to mitigating and adapting to already existing problems.

AREA 3

Envisioning sustainable futures, including the following competences

Futures literacy: To envision alternative sustainable futures by imagining and developing alternative scenarios and identifying the steps needed to achieve a preferred sustainable future

Adaptability: To manage transitions and challenges in complex sustainability situations and make decisions related to the future in the face of uncertainty, ambiguity and risk

Exploratory thinking: To adopt a relational way of thinking by exploring and linking different disciplines, using creativity and experimentation with novel ideas or methods

AREA 4

Acting for sustainability, including the following competences

Political agency: To navigate the political system, identify political responsibility and accountability for unsustainable behaviour, and demand effective policies for sustainability

Collective action: To act for change in collaboration with others

Individual initiative: To identify own potential for sustainability and to actively contribute to improving prospects for the community and the planet

Key messages:

While GreenComp encourages learners to acquire the 12 competences, they do not need to acquire the highest level of proficiency in all 12, nor have the same proficiency across all of them. Indeed, GreenComp implies that sustainability as a competence is made of 12 building blocks.

The Boardgame

The game after the GreenComp presentation can give participants the opportunity to learn about and discuss together how to develop these skills.

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FOR THE STUDENTS – UNIT 1

UNIT 1: Greencomp framework

Key competences in sustainability are "*a distinctive and multifunctional competence, which is composed of several sustainability competences that functionally relate to each other. It facilitates achieving successful performance and a positive outcome that progresses sustainability (given what is known, valued, and aspired at a given moment in time), while working on specific sustainability challenges and opportunities in a range of contexts*" (Brundiers et al., 2020).

Key competences in sustainability equip individuals with the necessary competences to solve complex problems and exploit opportunities in favour of sustainability. Knowledge in a specific discipline, as well as other basic or interrelated competences, are critical but acquired through specific course in higher education. Key competences in sustainability should be transversal and intrinsic.

GreenComp is a reference framework, developed by the European Commission, for sustainability competences. It provides a common ground to learners and guidance to educators, advancing a consensual definition of what sustainability as a competence entails. It also *provides guidelines for thinking, planning and acting responsibly towards people, animals and thus the planet we live on.*

It responds to the growing need for people to improve and develop the knowledge, skills and attitudes to live, work and act in a sustainable manner. It is designed to support education and training programmes for lifelong learning. It is written for all learners, irrespective of their age and their education level and in any learning setting – formal, non-formal and informal.

Sustainability competencies can help learners become systemic and critical thinkers, as well as develop agency, and form a knowledge basis for everyone who cares about our planet's present and future state.

GreenComp consists of **12 competences** organised into the **four areas** below:

1. Embodying sustainability values, including the competences

- **Valuing sustainability:** 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.
- **Supporting fairness:** To support equity and justice for current and future generations and learn from previous generations for sustainability.
- **Promoting nature:** To acknowledge that humans are part of nature; and to respect the needs and rights of other species and of nature itself in order to restore and regenerate healthy and resilient ecosystems.

Equipping learners (people) with these sustainability values has the potential to lead to more sustainable behaviour. Behavioural sciences evidence indeed shows that sustainability values are a clear driver of sustainable behaviour. Individuals are more likely to behave sustainably when they hold environmental values (that is, caring for the environment and nature, also known as biospheric values) or fairness values (that is, caring for others and for social justice, also known as altruistic values). For instance, people with high environmental values tend to save more hot water in their household, and fairness values such as universalism and benevolence are associated with using public transport to commute to work. Sustainability values are important because they can lead people to behave sustainably more consistently in the long term than if they are just motivated by other values.

Sustainability values may lead to more sustainable behaviour because people want to avoid feeling an unpleasant tension between their values and their actions, for instance when they choose a hotel. Conversely, acting in line with one's sustainability values can increase positive emotions of pride and contentment.

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2. Embracing complexity in sustainability, including the competences

- **Systems thinking:** To approach a sustainability problem from all sides; to consider time, space and context in order to understand how elements interact within and between systems.
- **Critical thinking:** To assess information and arguments, identify assumptions, challenge the status quo, and reflect on how personal, social and cultural backgrounds influence thinking and conclusions.
- **Problem framing:** To formulate current or potential challenges as a sustainability problem in terms of difficulty, people involved, time and geographical scope, in order to identify suitable approaches to anticipating and preventing problems, and to mitigating and adapting to already existing problems.

This area is about empowering learners with (1) systems thinking (i.e., approaching sustainability problems holistically, integrating different angles of causes and consequences, and understanding their interactions), (2) critical thinking (i.e., being able to understand biases, to critically assess information, sources and arguments related to sustainability), and (3) problem framing (i.e., formulating sustainability problems and identifying suitable solutions).

Being able to think systematically can lead to more sustainable behaviour because it is likely to increase learners' "awareness of consequences". Systems thinking precisely allows learners to understand the long and multiple chains of causality that eventually lead to sustainability problems, including the consequences of small actions. There is evidence that individuals who can think systematically about climate change are more likely to understand the value of ecosystems and to support sustainability policies, such as improving fuel consumption standards for cars. Conversely, believing that social, environmental and economic problems are unrelated is associated with lower awareness of the risks and consequences of climate change.

The evidence suggests that being aware of the consequences of one's actions is necessary, but not sufficient to behave sustainably. For instance, having a high degree of systemic thinking and literacy regarding climate change does not necessarily lead to concern and, hence, to action. Just like for sustainability values, this means that education interventions do need to equip learners with complexity competences that help them understand the consequences of their actions on sustainability, but they also need to equip them with all the other competences.

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3. Envisioning sustainable futures, including the competences

- **Futures literacy:** To envision alternative sustainable futures by imagining and developing alternative scenarios and identifying the steps needed to achieve a preferred sustainable future
- **Adaptability:** To manage transitions and challenges in complex sustainability situations and make decisions related to the future in the face of uncertainty, ambiguity and risk
- **Exploratory thinking:** To adopt a relational way of thinking by exploring and linking different disciplines, using creativity and experimentation with novel ideas or methods

This competence mainly encompasses being able to envision alternative futures and the steps needed to achieve a preferred sustainable future. Other components include being able to adapt to, and detect uncertainty, ambiguity and risk related to alternative sustainability futures.

Here again, evidence from the behavioural sciences confirms the fitness of this competence to promote sustainable behaviour, confirming the need to embed it in curricula. One of the main documented barriers to sustainable behaviour is, precisely, our difficulty to think about the future. Unlike Covid-19, sustainability issues like climate change can seem distant. Behavioural evidence shows that the more people perceive climate change as something occurring far in the future, the less they are likely to be concerned about it, to support mitigation public policies, or to reduce their energy consumption. The problem here is that people have a natural tendency to focus more on immediate problems, gains, losses and risks, than on future ones. Similarly, the more people perceive climate change as uncertain, the less likely they are to engage in sustainable behaviour. As a counterexample, farmers who have already personally experienced the effects of climate change are more likely to adapt their agricultural practices.

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4. Acting for sustainability, including the competences

- **Political agency:** To navigate the political system, identify political responsibility and accountability for unsustainable behaviour, and demand effective policies for sustainability
- **Collective action:** To act for change in collaboration with others
- **Individual initiative:** To identify own potential for sustainability and to actively contribute to improving prospects for the community and the planet

(Education) policymakers aiming to promote sustainable behaviour ought to include these "acting" competences in their curricula, as they leverage or address numerous proven psychological drivers and barriers of (un)sustainable behaviour:

- Ascription of responsibility: the more people feel that they have a moral role to play to improve sustainability, the more likely they are to move to action. This responsibility feeling has proven necessary for a wide array of actions, such as for politicians to vote sustainability laws, and for citizens to demand accountability for unsustainable policies or to engage in collective sustainability activism. Conversely, blaming others is associated with less feelings of responsibility for action, and hence with less likelihood of behaving sustainably. The "acting for sustainability" competence from GreenComp includes attitudes, knowledge and skills that precisely aim to increase learners' sense of responsibility regarding sustainability, for instance, the knowledge that 'individuals have a commitment towards society and the environment' and the ability to 'take personal initiative […] in achieving sustainability'.

- Efficacy beliefs: a major driver for sustainable behaviour is individuals' belief that they are able to behave sustainably and that their action can make a difference4 . For instance, lay persons may feel they have little to contribute to make their country sign the Paris agreements. In contrast, adolescents who feel their actions do mattermatters are more likely

to engage in pro environmental behaviour, such as reducing their water consumption or signing a petition to demand environmental protection.

- Social norms: the way other people behave has a major influence on our own behaviour, also when it comes to sustainability. For example, hotel clients tend to reuse their towel if they see that other clients also do so. Others' expectations also affect our behaviour: for instance, the more managers feel society expects them to behave in a sustainable manner, the more likely they are to engage in environmentally responsible actions in their organisation.

- Habit consists in a predisposition to repeat past behaviour, often without a conscious intent. Even if people are concerned about sustainability, know which actions to take and think these actions may have a positive effect, they may experience difficulties in changing their habitual behaviour accordingly. For instance, habit is a major barrier (although not the only one) to commuting by bicycle (vs. by car), to taking shorter showers or to adopting more sustainable diets.

The four competence areas are tightly interrelated: sustainability as a competence encompasses all four taken together.

The 12 sustainability competences are also interrelated and interconnected, and should be treated as parts of a whole.

While GreenComp encourages learners to acquire the 12 competences, they do not need to acquire the highest level of proficiency in all 12, nor have the same proficiency across all of them. Indeed, GreenComp implies that sustainability as a competence is made of 12 building blocks.

Anyway, sustainability competences are relevant not only for (future) citizens and consumers. Learners acquiring sustainability competencies may also behave in a more sustainable way if

they later act, for instance, as voters choosing MPs supporting sustainability, as lawmakers passing sustainability regulations or providing budget for new public transport infrastructures, as engineers designing more sustainable turbines, or as CEOs granting fair wages to workers. Therefore, those who tomorrow may have a greater responsibility to contribute to sustainability may also benefit today from acquiring the sustainability competencies identified in GreenComp.

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FOR THE TRAINER – Overview of UNIT 2

Unit 2 – Building greener, sustainable and more resilient communities

Introduction

Sustainability affects different areas and activities of towns and local administration. Municipalities are responsible for the operations, regulations, and resources within a given area, and ultimately responsible for the well-being of their population.

For the trainer

Learning outcomes:

After the learning session, participants will:

Find possible solutions for similar problems/needs from the case studies

Better understand the practical implementation of specific competencies

Methodology:

Presentation. According to the interest of the participants at least two or more case studies will be presented and discussed (about 3 hours). Support: projector, laptop, PPT

Comparing local problems/needs to the example listed in the module. Participants can also use the result of the game carried out in the previous session and compare the possible solutions created with the real case studies implemented in Europe. According to the participants interest and/or everyday tasks two or more case studies will be analyzed and discussed. The scope of the unit is to encourage exchange and problem solving among the participants.

FOR THE STUDENTS – UNIT 2: Case studies

UNIT 2

Municipalities, defined as a town, city, or administrative entity with local governance, are directly affected by sustainability issues and have a unique role in promoting solutions. They are responsible for the operations, regulations, and resources within a given area, and ultimately responsible for the well-being of their population.

Since sustainability has environmental, economic, and social dimensions, municipalities are inextricably interested in sustainability. Many municipalities are already engaging in sustainability solutions either by choice or by demand of their circumstances.

A local government can influence citizen and business behavior in either sustainable or unsustainable directions by setting an example in its own behavior – "getting its own house in order" – as well as in raising community awareness through education about similar choices that households and businesses can make in shaping whether their decisions contribute to sustainable or unsustainable trends.

What Are the Benefits of Embracing Sustainability for Local Governments?
Not only will sustainable efforts from your locality benefit the local environment, but will also resonate with your constituents that are growing increasingly more concerned about climate change and sustainability. Plus, sustainable government workflows like paperless filing are better for the environment while simultaneously saving time and money.

CASE STUDIES

CULTURAL AND NATURAL HERITAGE

Katowice (Poland)

The term "cultural and natural heritage" refers to the combined wealth of cultural, historical, and natural features that are considered valuable and significant to a particular territory, region, or country. This concept is often associated with the fields of cultural and natural heritage conservation and is recognized globally as important for the identity and well-being of communities.

For example, the purpose of the Silesian Museum project in Katowice (Poland) is to preserve the cultural heritage for future generations, and to enhance the region's touristic appeal. One important factor in improving people's ability to adapt to social and economic change is identity, including regional identity, and so the project is supporting initiatives to nurture the existing cultural heritage and traditions, history, cultural achievements, local customs and language. Developments here make it possible to develop a modern society that is open and creative – helping to optimise human resources. Expanding the cultural infrastructure will help to draw investment and tourism to Silesia.

The Silesian Museum's collections have acquired a new and novel setting: new main premises have been located on a former industrial site, and old mining buildings dating from the turn of the 20th century have been arranged as the exhibition spaces, restaurant and observation tower, from which there is a panoramic view of an ever growing Silesia.

The new Silesian Museum is the first place to be designated a "cultural axis" in Katowice. Others in addition to the new museum building include the International Congress Centre and the home of the Polish National Radio Symphony Orchestra in Katowice.

LAND PLANNING/GREEN DESIGN

Kielce (Poland)

Land planning and green design in local communities play a pivotal role in shaping sustainable, livable, and environmentally conscious urban environments. By integrating thoughtful land use, green spaces, and eco-friendly infrastructure, these approaches contribute to improved quality of life for residents. They help mitigate the urban heat island effect, reduce pollution, conserve resources, and enhance biodiversity. Additionally, green design promotes community health and well-being, offering spaces for recreation and relaxation while fostering a strong sense of place and identity. It's a holistic strategy that not only addresses current needs but also ensures a resilient and harmonious future for local communities.

Kielce is a unique city located in the Świętokrzyskie Region of Poland. The city has five nature reserves, two ski slopes, and themed trails, and engages in many activities to protect the city and its inhabitants from carbon pollution and climate change.

The municipality of Kielce introduced different solutions to manage and develop local public green areas. Some of these includes AirSpade, Treegator ® , planting phytoremediation shrubs and trees, and establishing meadows in parks and road lanes.

Activities under Kielce's Climate Change Adaptation Plan to 2030 (a strategy adopted as local law) include designing a water park using the natural springs and vegetation of the Silnica River Valley. The adaptation plan provides for other such nature-based solutions (NBS), including bioretention basins and increasing the number of green roofs on new buildings.

MOBILITY

Kungsbacka (Sweden)

Sustainable mobility in local communities is the bedrock of a greener, healthier, and more efficient urban landscape. It revolves around promoting transportation options that reduce carbon emissions, such as walking, cycling, and public transit, while also encouraging the use of electric vehicles and carpooling. Sustainable mobility not only alleviates traffic congestion but also curbs air pollution, noise, and energy consumption. By prioritising pedestrian-friendly infrastructure, accessible public transit, and smart urban planning, local communities can create a more inclusive and environmentally conscious transportation system, ultimately enhancing the well-being and quality of life for their residents.

The municipality noticed that almost a fifth of middle school students were driven to school daily by car. During this crucial stage of development, it's essential for children to realize their ability to navigate independently, bolstering their self-assurance. Simultaneously, a decrease in car usage fosters a safer and more enjoyable local environment in the vicinity of the school.

That is why the municipality created a challenge for middle schoolers called “On their own” that requires the students to independently travel to school on foot – a goal that not only aims to boost their self-assurance but also enhance their alertness and cultivate a deeper understanding of sustainable transportation. This engaging initiative takes the form of an exciting scavenger hunt, with classes competing for appealing prizes, including gift cards for activities chosen collectively. Running through the autumn weeks (weeks 38-42), the challenge not only encourages self-reliance but also imparts valuable knowledge through exercises on road safety, health, sustainable development, and environmental awareness.

ENERGY

Gravena (Greece)

In local communities, the importance of sustainable energy extends to initiatives that promote efficient and mindful energy use. By encouraging residents and businesses to adopt energy-saving practices and technologies, communities reduce waste, lower energy bills, and minimize their environmental impact. These initiatives involve measures such as energy-efficient building designs, LED lighting, and smarter heating and cooling systems. Not only do these efforts conserve resources and reduce emissions, but they also contribute to energy security and enhance the overall quality of life in the community. In prioritizing both sustainable energy sources and efficient energy utilization, local communities are poised to lead the way toward a greener and more responsible future.

The municipality of Gravena (Greece) has focused the attention to the upgrade of its buildings infrastructure in order to reduce its environmental footprint. This was done by using shallow geothermal energy as a renewable energy source (RES) to optimize the conservation of valuable resources and mitigate environmental impact. This project serves a multifaceted purpose, including reducing energy consumption, conserving resources, minimizing pollutants to enhance the environmental footprint, modernizing the building stock, setting an exemplary precedent for renewable energy utilization, and advocating for our region.

WATER MANAGEMENT

Galicia (Northern Portugal)

Effective water management is the lifeblood of local communities, as it underpins public health, environmental sustainability, and economic prosperity. Communities rely on clean and accessible water for drinking, sanitation, agriculture, and industrial processes. Thoughtful water management ensures a secure and sustainable supply, reducing the risk of scarcity and contamination. It also plays a vital role in preserving local ecosystems and safeguarding against flooding and water pollution. Furthermore, responsible water management is a cornerstone of climate resilience, helping communities adapt to changing weather patterns. In essence, it's not just about water; it's about the resilience and well-being of local communities.

One example is the Euroregion of **Galicia-Northern Portugal** that boasts an extensive wealth of natural resources and benefits from a strategic advantage with its ample water resources.Recognizing the vital role these natural endowments play in advancing society, it becomes imperative to shield and conserve them. Simultaneously, there is a compelling call to optimise their utilisation, channelling these resources more effectively towards the region's overall development and well-being.

In this context, the **AQUALITRANS** project was born, the objective of which is to establish an energy-efficient and sustainable model for waste water treatment plants (WWTPs), aligning with Europe's broader goals of sustainable development and environmental preservation.

The significant merit of the **AQUALITRANS** initiative lies in the collaborative synergy it has fostered between Galicia and Northern Portugal. This collaborative approach, coupled with the innovative use of information and communication technology (ICT), has enabled the successful resolution of shared challenges.

WASTE MANAGEMENT

Milan (Italy) and France

Public Works Department is one of the most solicited. That being said, picking up your constituents' recycling every several weeks or even less frequently is a surefire way for them to not recycle to the best of their ability. Plastic waste winding up in the landfill because your constituents don't have the recycling bin space to dispose of it all properly is bad for the environment (and inconvenient for your constituents!). Public works software can help to manage employees and keep recycling and trash disposal processes as efficient and structured as possible.

Managing food and organic waste is vital to any city's zero waste plan. A quarter of the greenhouse gas emissions from food come from losses and waste in supply chains and by consumers. Cities should ideally reduce waste, recover and process organic waste by separating it from dry recyclables like plastic and glass. From December 2023, separate collection of bio-waste will be mandatory across Europe to help meet EU waste rules' ambitious recycling and collection targets. However, collection systems and rates still differ substantially among the 28 EU members.

Biodegradable waste, commonly referred to as bio-waste, is primarily made up of organic materials which can safely be returned to the soils via natural processes. It mainly consists of garden waste, food waste and other organics from households, restaurants, and shops.

While, according to the waste hierarchy, we should ideally reduce, reuse, or recycle all waste, in practice, this does not always occur. Processing issues, poor planning, or a lack of communication/knowledge are just a few examples that can lead to losses.

A crucial step to minimise emissions and contamination is separating bio-waste from other waste streams. There are several strategies to help achieve this. Here are some examples from local and state governments improving bio-waste collection through different approaches.

1. Communication is key: Milan

When it comes to collecting bio-waste in a dense city, Milan is an outstanding example. With 1.4 million residents, it is one of Italy's most populous cities. Yet, it is a shining example for others around the world.

In 2014, Milan rolled out their residential food waste collection program. Every single household received a 10-litre kitchen bin, compostable bags, and an extensive information packet. As part of the plan's extensive pilot program, communication proved to be key in the logistics.

Workers were not only trained to collect food waste, but also to educate citizens about the new collection process. The campaign also included leaflets, school programs, a free app and website in multiple languages, face-to-face communication, and 24/7 customer service.

Additionally, there are financial penalties in place to encourage compliance. For instance, a household or business that does not use the provided separate food waste bins receives a fine.

2. Join forces to promote food waste collection: France

Separate collection of bio-waste was a neglected practice for many years in France. Until 2007, a network that brings together municipalities, called Reseau Compost Plus, successfully started bringing visibility to the bio-waste sector.

By joining forces, the network of 28 communities with around 9 million inhabitants introduced food waste collection at the local level. The Reseau Compost Plus provides public information, including recommendations and cost estimates. The network also manages quality assurance for compost and promotes best practices through local events.

GREEN PROCUREMENT

Region of Dalarna (Sweden)

Green procurement, also known as sustainable procurement, is the practice of purchasing products, services, and goods with a primary focus on environmental and sustainability criteria. It involves considering the environmental and social impacts of the items being procured and making choices that minimise negative effects on the planet and society.

Green procurement is of paramount importance for local communities. By prioritising environmentally sustainable purchasing decisions, local governments and organisations can set a positive example for their constituents and encourage the adoption of eco-friendly practices. This approach not only reduces the environmental impact but also supports the local economy by promoting green businesses and innovation.

The **Region of Dalarna** in **Sweden** is a co-founder and a supporting actor for the 'Villa Zero' project.

Villa Zero stands as the world's inaugural carbon dioxide-neutral standalone residence, a pioneering collaboration in which participating organizations gained invaluable experience and knowledge, all in pursuit of a more sustainable future.

The project is centered on two key objectives: reducing carbon dioxide emissions and promoting greater gender equality within the construction sector.

The house was meticulously crafted using the most eco-friendly materials and techniques available in today's market and a dedicated team composed entirely of women was responsible for the construction.. The project has successfully met its targets, with the house achieving carbon dioxide neutrality. Moreover, the insights gained from this endeavor will serve as a foundation for the development of new construction methods, choices, and products, contributing to a more sustainable and equitable industry.

ENVIRONMENTAL EDUCATION

Oulu, Northern Ostrobothnia (Finland)

The circular economy is one aspect of sustainable development. It helps mitigate climate change and reduces overconsumption of materials.It means we don't need to source raw materials from nature, but can instead use processed materials and energy again and again.

A large number of technological innovations, experiments and solutions to this end have already been identified.

There is still a need for people's support, understanding and willingness to place their habits on a more sustainable footing. In this transformation, what children and young people learn has a key role to play, as core circular economy values are formed at a young age.

The circular economy handbook for schools, which was put together in Oulu, includes ideas for implementation, tips for cooperation with different organisations, a materials bank and local places to visit with a circular economy theme. The guide brings together circular economy issues in a comprehensible form as a way of supporting education.

GREEN ECONOMY AND TOURISM

Oulu, Northern Ostrobothnia (Finland)

The green economy is an economic model that focuses on sustainability, environmental responsibility, and social inclusivity. It seeks to promote economic development while minimising negative impacts on the environment and enhancing social well-being. In the same way, the green tourism aim to minimise the negative impact of tourism on the environment, promote conservation, and benefit local communities. The focus is on preserving natural and cultural heritage while providing positive experiences for visitors.

Europe's most sustainable Capital of Culture project promotes responsible event organisation in Northern Ostrobothnia and provides an effective platform for piloting low-carbon solutions. The project helps events organised in Oulu and Northern Ostrobothnia to reduce their carbon emissions. It is also being used to demonstrate the city's environmental credentials in Oulu's bid for the title of European Capital of Culture. The project offers new cross-sectoral opportunities for cooperation and in business activities in the sustainable economy. There is a growing basis for the sustainable economy in new innovations, whose piloting receives financial support under this project.

The project defines a model aimed at reducing the carbon footprint, to which events that are part of Oulu's Capital of Culture application are also committed. The results of the project will be published in "Oulu 2026: the home of events that make the world a better place. Guide to sustainable events".

Project duration: 01.08 – 31.05.2022 Budget: EUR 615 000.

Background materials

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