



Upcycling and Regeneration of urban Space for green skills

Ref. num. 2024-1-IT02-KA220-SCH-000249480

Collection of best practices on sustainable development and efficient use of natural resources

Report Analysis



**Co-funded by
the European Union**

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About the project

The UpSpace – Upcycling and Regeneration of urban Space for green skills project, co-funded by the Erasmus+ Programme, intends to build a real space for growth that allows the development of an experiment-oriented culture, based on knowledge and care for the territory.

The project specifically aims to:

- train the students and the teachers on sustainable management and efficient use of natural resources, increase their awareness of sustainable consumption.
- enhance the teachers' and students' green skills and key competences on upcycling and urban regeneration processes.
- mainstream sustainable development in secondary schools' curricula boosting policy cooperation.
- raise local, national and European awareness about environmental issues and climate change challenges.

During its 30-months duration, the project will achieve the following results:

- Collection of best practices on sustainable development and efficient use of natural resources.
- UpSpace e-learning platform with Future Oriented Curricula for teachers and students.
- Upcycling Workshop booklet and Urban Regeneration Lab Guidelines for teachers.
- Cross-Country Study on EU sustainable development policies.
- Synopsis Report of consultations with key decision-makers and Policy Recommendations for sustainable education.
- Social media awareness campaign.
- Final local events and International Conference

Partners



CESIE ETS (Italy, coordinator)



Appworks Doo Beograd (Serbia)



Stimmuli For Social Change O.E (Greece)



Blended Learning Institutions Cooperative (Germany)



Istituto D'Istruzione Superiore Einaudi Pareto (Italy)



Osnovna Skola "Mihailo Petrovic Alas" (Serbia)



50 Gymnasio Thessalonikis (Greece)



Förderverein RUZ Reinhausen e.V. (Germany)

About this Collection of Best Practices

By gathering a set of five good practices per country, from 4 partner countries Germany, Italy, Greece and Serbia, this document gives an overview of the types and methodologies used in national level regarding education for environmental sustainability and cross-country research. The analysis helped the consortium draft the instructional design for both students' and teachers' curricula development. As will be shown in the following pages, the document gives insights into national pedagogical perceptions and methodologies used to teach environmental sustainability.

Methodology

The report analyses the current trends regarding practices in partners' countries, on sustainable development and efficient use of natural resources. A template (ANNEX) was provided to partners, with a set of guidelines on the aspects to be covered. Stimmuli for Social Change, as the leader of the Working Package 2, processed the data, conducting quantitative analysis on specific categories. Based on that, Stimmuli developed this present analysis.

1. Introduction

Context and background

While many members of the EU member states have already made significant progress by adopting sustainable development learning programs to support the green transition, continued and intensified efforts are still needed. The European Green Deal, the EU Biodiversity Strategy for 2030, UNESCO's Education for Sustainable Development for 2030 strategy, and related initiatives highlight the important role that schools, and other education providers, play, especially by engaging students, parents, educators and communities to drive the change together.

Education for Sustainability is a key pillar in advancing the green transition, by empowering individuals and communities with knowledge, skills and attitudes needed to foster long-term sustainability.

Aim & Objectives

Overall, the aim of this catalogue is the collection of existing good practices of educational activities and programs that have an impact on students' behaviors and knowledge regarding sustainable development and efficient use of natural resources.

The aim of the analysis is to showcase successful educational activities and approaches towards learning environmental sustainability, that inspired the use and development of specific methodologies and activities for the UpSPACE Curricula.

The specific objectives are:

- To provide knowledge and inspiration on activities and methodologies used to teach environmental sustainability.
- To enhance teachers' capacity to deliver educational programs on sustainable development and efficient use of natural resources.
- To offer valuable insights and the foundation for further research on the topic of education for sustainability.

2. Methodology

Selection criteria

The selection of best practices was guided by a combination of relevance, innovation and possible impact. Relevance ensured that the practices aligned closely with the project's thematic focus.

Innovation was a key consideration, prioritizing approaches that took place in the later years and in terms of using interesting and novel solutions. Additionally, impact was assessed in terms of measurable outcomes, such as scalability and sustainability, ensuring that the chosen practices could serve as replicable models.

Data Collection Methods

The primary method for data collection involved review of secondary resources, particularly online pages, news articles and other publicly available documents. Supplementary materials, such as reports or official publications were also used to validate and deepen understanding.

3. Key Findings

In this section the most important best practices identified in each country are presented. The aim of this section is to present a maximum of five examples per country illustrating how some activities and educational approaches to environmental sustainability were implemented on local, regional or national level. These examples emphasize the awareness and importance of the topic at different European levels.

Thematic Areas

The data collection reveals a broad focus on sustainability-related thematic areas, reflecting national priorities and educational strategies. The most common themes that appeared in analysis include School Gardens & Sustainable Agriculture, Sustainable Nutrition and finally Waste Management & Recycling. An analysis of thematic area is presented below.

Thematic Area	Findings
School Gardens & Sustainable Agriculture	Widely implemented across countries, including various activities such as garden creation, food cultivation, food waste management, and soil health management, among others. Particularly in Germany and Greece, where agriculture plays a significant role in education in the case of Germany and in the environment and the economy in the case of Greece.
Waste Management & Recycling	Projects within the thematic area of Waste management & Recycling located in all partner countries. A key theme in Germany and Serbia, where national policies emphasize circular economy principles.
Sustainable Nutrition & Cafeteria Programs	More prominent in Germany and Greece. Despite the differences in climate conditions, both countries both interlink food literacy and agriculture with sustainability in education.
Eco-friendly Mobility	The programs set the foundations for sustainable mobility by adopting environmentally friendly practices (walking and cycling), and by creating sustainable mobility contests (safe home-school routes, air quality etc.). Found in Greece and Serbia, which do not have strong strategies on sustainable transport and environmental responsibility.

Energy Efficiency & Renewable Energy	A focus area in Italy and Serbia, where waste management and recycling programs were the most important among others.
Green School Buildings	An emerging theme mainly in Greece, where sustainability is not very popular, and lacks in green and sustainable infrastructure
Student Engagement & Awareness	A common thread across all contexts, demonstrating the importance of active participation in sustainability initiatives.

Overall, each country showcases unique strengths and policy approaches, offering opportunities for cross-national learning and adaptation in curriculum development.

Addressed activities by thematic area

Across the four countries, diverse activities are employed to engage students and promote hands-on learning. The activities that are most frequently developed by the schools involve learning about waste management, food cultivation and recycling. While notable types of activities implemented are quizzes, gardening, composting and contests. More specialized activities, such as CO₂ reduction calculation and energy conservation also appear, but with lesser frequency. The most prevalent activities in comparison with the thematic area are presented in the following table.

Activity	Thematic Area and Country
Waste management and recycling	Strongly emphasized in Germany and Serbia , where students engage in sorting, upcycling, and waste reduction projects.
Food cultivation and gardening	Particularly relevant in Italy and Greece , fostering food literacy and local sustainability awareness.
Quizzes and experiential learning	Common across all countries as interactive tools to enhance engagement and understanding of sustainability concepts.
Composting and food waste reduction	Effective Educational Approaches Implemented in Italy and Greece as part of school cafeteria sustainability programs.
Carbon sequestration and energy conservation	Key focus areas in Germany and Serbia , aligning with national energy and climate policies.

Type of educational approaches used

A variety of impactful educational strategies have been employed to foster sustainability awareness and relevant competencies among students. The approaches are mostly rooted in active participation, in the effort to transform both knowledge and attitudes and values.

Experiential learning

One of the most powerful methods utilized is experiential learning, which involves, among other hands-on activities, project-based learning, and fieldwork. Through direct engagement with their environment—such as **school gardening, waste audits, or renewable energy experiments**—students gain practical knowledge on theoretical concepts. This approach not only deepens understanding but also encourages personal responsibility, as learners witness the outcomes of their actions in real time.

Interdisciplinary Approaches

Sustainability is not confined to one subject area, and as such, interdisciplinary teaching plays a central role. By integrating sustainability themes across various disciplines—science, geography, economics, literature, and even art—educators create a holistic learning experience. For example, students might explore the science of climate change in biology, its economic impacts in social studies or home economics, and its ethical dimensions in philosophy. This cross-curricular approach helps students understand the complexity and interconnectedness of sustainability challenges and encourages systems thinking.

Gamification and Creativity

Innovative methods such as gamification and creative expression have also been used effectively in engaging students. **Competitions, role-playing games, and simulations** make learning dynamic and fun, while fostering teamwork and problem-solving skills. Artistic activities—like murals, storytelling, music, and digital media—allow students to express environmental themes in emotionally resonant and personal meaningful ways. Digital tools and interactive platforms further enhance participation and allow students to visualize data, track progress, and collaborate beyond the classroom.

Community Engagement

A crucial component of the approaches used is strong community involvement. Whether it's **organizing local clean-up campaigns, collaborating with farmers, or conducting interviews with elders** on traditional ecological knowledge, these experiences strengthen the bond between students and their surroundings. They also reinforce the idea that sustainability is a shared responsibility, rooted in collaboration and mutual care.

The importance of Education for Sustainability

The integration of sustainability-related themes, activities and competencies into national curricula is crucial for fostering a culture that values and acts towards environmental sustainability. By engaging students in hands-on, real-world experiences, sustainability education ensures that young people develop a deep understanding of environmental responsibility, which can lead them to act and make sustainable use of natural resources. More specifically:

Biodiversity Conservation

Gardening and food cultivation programs in Germany and Italy bring students directly in contact with nature, nurturing a personal connection and understanding of local ecosystems. With hands-on activities, students can instill a deeper appreciation for biodiversity and bioeconomy, illustrating its critical role in food security, ecosystem resilience and overall planetary health.

Circular Economy

In Serbia, education programs with a strong emphasis on waste reduction, recycling, and upcycling effectively introduce students to circular economy principles. These practices help learners understand the value of resource efficiency and the potential of rethinking consumption habits to minimize environmental impact.

Sustainability Literacy

Greece and Italy have pioneered innovative energy conservation initiatives and food sustainability projects that promote a broad understanding of environmental, social, and economic interconnections. These initiatives build sustainability literacy by combining theoretical instruction with tangible actions, such as reducing food waste or optimizing energy use.

Each of these national examples offers adaptable and scalable best practices that can inform the development of progressive, future-ready curricula. By incorporating these models into mainstream education, schools can play a vital role in shaping environmentally conscious citizens who are prepared to lead transformative efforts toward a more equitable and sustainable world.

4. Catalogue of Collected Best Practices

GERMANY

EdGar – Educational Gardening

Title of Practice	EdGar – Educational Gardening
Target Group	Elementary school children
Scale of Implementation	Regional
Year of Implementation	Since 2018
Thematic area	<i>School Gardens & Sustainable Agriculture</i>
Link	HERE

Description

The school garden project "Garden – Life – Learning," funded by the Hessian Ministry of the Environment as part of the Hessian Climate Protection Plan, offers elementary school students the opportunity to experience ecological gardening hands-on. As a continuation of the project "Culinary Sowing – Regional, Seasonal, and Global," it guides children from planning through sowing and caring for plants to harvesting and processing garden products. A central element of the project is the weekly preparation of a garden snack, where students enjoy the freshly harvested produce. They also learn how to process, preserve, and prepare fresh foods. In the off-season, topics such as food waste, consumer behavior, and regional and seasonal nutrition are addressed.



Electing environmental representatives

Title of Practice	Electing environmental representatives
Target Group	Students
Scale of Implementation	Local
Year of Implementation	2022
Thematic area	<i>Student Engagement & Awareness</i>
Link	HERE

Description

The introduction of environmental representatives in schools is an effective measure to promote sustainability and environmental awareness within the school community. These students act as a link between their classes and the school, implementing eco-friendly practices in daily school life and raising awareness for climate protection.

Each class elects two environmental representatives who receive regular training to serve as "climate experts." Their primary responsibilities include promoting environmentally friendly behaviors, such as turning off lights and heating, as well as waste separation. Moreover, the networking of environmental representatives with other classes and the climate working group facilitates the exchange of ideas and the implementation of joint projects. This creates a dynamic learning environment where sustainability is not only discussed theoretically but also experienced practically.



Vegetable Academy

Title of Practice	GemüseAckerdemie / Vegetable Academy
Target Group	Ages 3-6; Elementary Schools: Ages 6-12; Secondary Schools: Ages 12-16
Scale of Implementation	National
Year of Implementation	Since 2013
Thematic area	<i>School Gardens & Sustainable Agriculture</i>
Link	<u>HERE</u>

Description

The GemüseAckerdemie is a year-round educational program initiated by Acker e. V. to engage students in healthy eating, nature, and sustainability. Since its launch in 2013, the program has been implemented in over 1,000 schools across Germany, Austria, and Switzerland. The goal is to establish the physical field as a nature-based learning environment where children and adolescents actively learn how food is produced.

As part of the GemüseAckerdemie, students work alongside their teachers to cultivate around 30 different types of vegetables according to ecological criteria on school-owned fields. Through hands-on gardening experiences, participants develop a fundamental understanding of agricultural processes and the origins of their food. Studies show that children involved in the program exhibit a significantly higher awareness of healthy eating. Approximately 80% of students report an increased appreciation for fresh produce, and 70% indicate that they eat healthier.



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Langes Gemüse Glück

Title of Practice	Langes Gemüse Glück
Target Group	Students
Scale of Implementation	Regional
Year of Implementation	Since 2021
Thematic area	Waste Management & Recycling; Sustainable Nutrition & Cafeteria Programs
Link	HERE

Description

Langes Gemüseglück is an environmentally conscious company dedicated to the sustainable utilization of food waste. Through innovative methods such as fermentation and worm composting, it offers tailored solutions for composting organic waste for schools, businesses, and private households. The goal is to improve soil health and reduce food waste, which is particularly crucial as one-third of all food in Germany is wasted.

A key aspect of Langes Gemüseglück is its focus on educating and raising awareness among children in schools. Through workshops and hands-on projects, students learn how to avoid food waste and transform it into valuable worm humus. These experiences not only foster an understanding of sustainable practices but also instill a sense of responsibility towards the environment in children.



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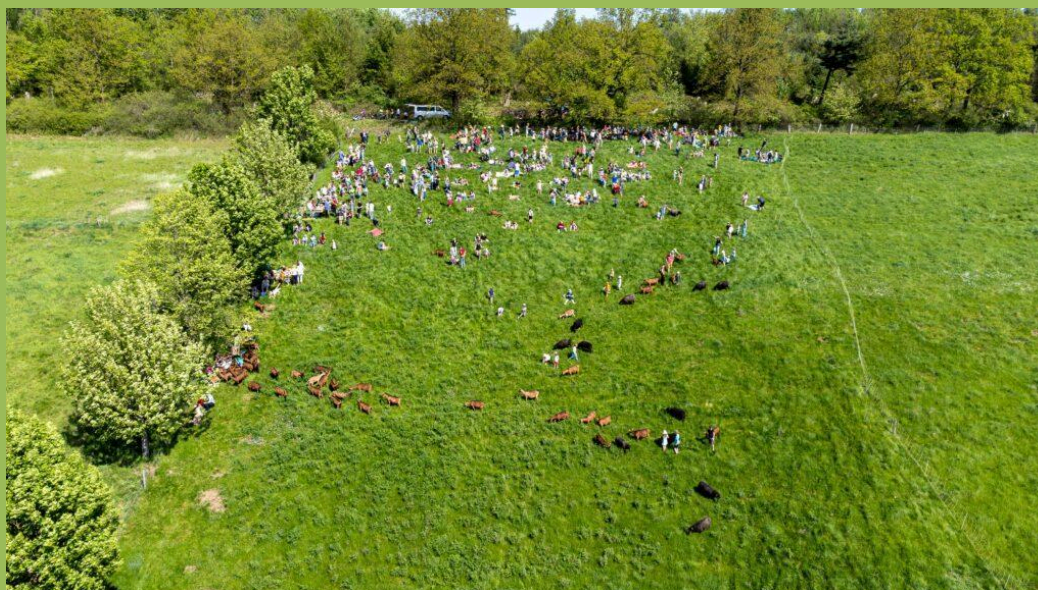
Raus aufs Land / Out to the Countryside

Title of Practice	Raus aufs Land - Out to the Countryside
Target Group	Kindergarten to secondary school children
Scale of Implementation	Regional
Year of Implementation	Since 1987
Thematic area	<i>School Gardens & Sustainable Agriculture</i>
Link	HERE

Description

"Raus aufs Land" is an innovative project by the Ökotoxia Südniedersachsen e.V. that focuses on environmental education for students and takes place on an active agricultural farm, the Käsehof Landolfshausen. The aim is to introduce children and young people to ecological farming and nature conservation in a practical and playful manner. The programs cater to various age groups and offer a diverse educational experience that occurs both in nature and directly within the working environment of a biodynamic farm. Around 6,500 children took part in the educational programs on the farm in 2024.

For students from the 5th grade onwards, a variety of events are offered, including the pasture project, where participants can meet and interact with human-friendly dairy goats and sheep, as well as try their hand at milking. Another highlight is cheese-making, where students learn to produce their own cheese from organic milk. Additionally, the topic "Ecological Agriculture – Agriculture of the Future?" is explored, allowing students to see firsthand what humane animal husbandry entails and how crop farming can be conducted without chemical inputs.



GREECE

CLICK AND PROTECT IT

Title of Practice	CLICK AND PROTECT IT
Target Group	Kindergarten to secondary school children
Scale of Implementation	regional
Year of Implementation	Since 2014
Thematic area	<i>Student Engagement & Awareness</i>
Link	HERE

Description

"Raus aufs Land" is an innovative project by the Ökotopia Südniedersachsen e.V. that focuses on environmental education for students and takes place on an active agricultural farm, the Käsehof Landolfshausen. The aim is to introduce children and young people to ecological farming and nature conservation in a practical and playful manner. The programs cater to various age groups and offer a diverse educational experience that occurs both in nature and directly within the working environment of a biodynamic farm. Around 6,500 children took part in the educational programs on the farm in 2024.

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ΔΗΜΟΣ ΘΕΣΣΑΛΟΝΙΚΗΣ
 Διεύθυνση Δευτεροβάθμιας Εκπαίδευσης Ανατολικής Θεσσαλονίκης
 Γραφείο Περιβαλλοντικής Εκπαίδευσης

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 Πνευματικό Κέντρο

**Κλικ,
προστατέυσέ το!**
 Περιφερειακό Δίκτυο Περιβαλλοντικής Εκπαίδευσης

Έκθεση
 φωτογραφίας
**15 έως 31 Μαΐου
2024**

Βαφοπούλειο
 Πνευματικό
 Κέντρο
 (5ος όροφος)

Εγκαίνια:
 24 Μαΐου, 19.00
Παρουσιάσεις δράσεων σχολείων:
 16 Μαΐου, 8.30 – 14.00, 4ος όροφος ΒΠΚ
 17 Μαΐου, 9.00 – 12.45 (διαδικτυακά)

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Big Bang School: The First Non-Profit School of Nature in Greece

Title of Practice	Big Bang School: The First Non-Profit School of Nature in Greece
Target Group	School students interested in alternative and nature-based education.
Scale of Implementation	Local
Year of Implementation	2019
Thematic area	<i>Curriculum Integration</i>
Link	<i>HERE</i>

Description

The Big Bang School, which opened its doors in 2019, proudly stands as Greece's first non-profit middle school dedicated to nature-based education. Nestled in the outskirts of Thessaloniki, this innovative school offers a unique educational experience that merges academic learning with environmental awareness and hands-on outdoor activities. Operating as a cooperative, the school's structure embodies principles of sustainability and democratic participation. Students engage in interdisciplinary curricula that blend together subjects like biology, physics, and history through projects centered on the natural world.

For instance, they explore ecosystems, monitor biodiversity, and learn about renewable energy sources. A hallmark of the Big Bang School is its commitment to experiential learning. Students spend a considerable part of their day outdoors, acquiring practical skills in gardening, woodworking, and ecological conservation. The curriculum also prioritizes critical thinking and emotional intelligence, featuring workshops focused on communication, teamwork, and self-awareness.



"The Green School: Five Environmental Activities by the Municipality of Trikala".

Title of Practice	"The Green School: Five Environmental Activities by the Municipality of Trikala".
Target Group	Elementary school students and teachers
Scale of Implementation	Regional
Year of Implementation	2024
Thematic area	<i>School Gardens & Sustainable Agriculture Partnerships & Collaboration Student Engagement & Awareness Water Management and Recycling Energy Efficiency & Renewable Energy</i>
Link	HERE

Description

In 2024, the Municipality of Trikala and the 27th Primary School of Trikala implemented a the "Green School" initiative, which involved:

1. **Recycling Program:** Students collected recyclable materials and sorted them into designated bins, learning about waste management and the importance of reducing landfill waste.
2. **Tree Planting:** Students and teachers collaborated to plant trees on the school grounds, promoting biodiversity and improving the local microclimate.
3. **Energy Conservation Campaign:** The school conducted workshops on energy-saving habits, such as turning off lights and using energy-efficient devices, empowering students to make eco-friendly choices at school and home.
4. **Water Management Education:** Interactive lessons and demonstrations highlighted techniques for conserving water, including installing simple water-saving devices in the school.
5. **School Garden Creation:** Students cultivated a small garden, growing vegetables and herbs while learning about sustainable agriculture and healthy eating habits.



The Model School of Thessaloniki

Title of Practice	The Model School of Thessaloniki
Target Group	Students, teachers, and local community
Scale of Implementation	Local
Year of Implementation	Since 2019
Thematic area	<i>Green School Buildings Curriculum integration</i>
Link	<i>HERE</i>

Description

The transformation of the school into a sustainable model began in 2009 with the development of a Sustainability Management Plan, created with input from all teaching staff and the administration. The Sustainable School serves as a model for sustainable practices and equips students with skills to shape a future based on environmental and social sustainability.

The school's objectives are built on three pillars: pedagogical, environmental, and social. Key initiatives include adopting teaching methods that promote critical thinking, systemic understanding, and democratic participation. Environmental ethics are cultivated, encouraging students to think, act, and recognize their potential to drive change. The school focuses on reducing CO2 emissions, minimizing waste through reuse and recycling, conserving energy and water, and fostering healthy eating habits.

The campus supports biodiversity with 120 plant species, including a vegetable garden, greenhouse, and botanical garden. Energy-efficient infrastructure includes solar panels, an advanced cooling-heating system, rainwater recycling, and smart lighting controls. The school uses renewable energy for hot water and environmentally friendly school buses equipped with Euro6 engines.



ITALY

Einaudi Sustainable Environment

Title of Practice	Einaudi Sustainable Environment
Target Group	Students of upper secondary school
Scale of Implementation	Regional
Year of Implementation	2020 - ongoing
Thematic area	<i>School Gardens & Sustainable Agriculture; Student Engagement & Awareness.</i>
Link	HERE

Description

The Luigi Einaudi Institute in Syracuse has launched a series of initiatives in the field of waste management, recycling, sustainability and respect for the environment under the name of "Einaudi Ambiente sostenibile". It is a virtuous model not only in Sicily but throughout Italy and the hope is that it will also be adopted in other institutes to bring girls and boys closer to good practices. Einaudi Ambiente Sostenibile is a virtuous model of environmental sustainability, ecological transition and effective waste management among projects that are growing and multiplying.

The Einaudi Sustainable Environment revolution is so contagious that it has become the heritage not only of this Syracuse school but of the entire school community. Proof? Even if there are no classes on Saturdays, with the original Saturday For Future volunteer activity - two hours for Einaudi and six for environmental ASL -, the students of the scientific high school, in various groups, go to the garden to irrigate, hoe, tend their crops and maybe even harvest them for the much-loved sustainable breakfasts.



Energically – At school for sustainability

Title of Practice	Energically – At school for sustainability
Target Group	Primary (IV and V) and secondary schools
Scale of Implementation	National
Year of Implementation	2022
Thematic area	Curriculum Integration
Link	HERE

Description

More than 700 Italian schools, including more than 300 in Abruzzo, Marche Molise and Tuscany and Umbria, with active teachers on the Energicamente website and 12,135 unique users: these are the numbers of the twelfth edition of the educational path Energicamente - A scuola di sostenibilità promoted by Estra, in collaboration with Legambiente and La Fabbrica.

This is a national gamified-educational project on Energy and the Environment offering an educational path created to involve children and young people in the construction of a more sustainable, livable and fair world, in line with the UN 2030 Agenda and its 17 Sustainable Development Goals.

The programme gave primary (IV and V) and 1st grade secondary schools throughout the country the opportunity to discuss these issues thanks to a 100% digital platform and a gamified learning path developed in stages full of mini-games, quizzes, in-depth activities and missions, designed to directly and actively involve the students who, in this way, learn by doing.

With the project, the Estra Group, one of the main operators in the energy sector at national level, intends to enhance the role of schools as an essential place to grow a new culture of sustainability made of information but also of actions.

Energicamente ti aiuta a portare in classe l'**Agenda 2030** con una prospettiva originale: quella dell'energia, risorsa indispensabile per centrare molti dei 17 Global Goal dell'ONU. Il progetto si inserisce nelle ore di **Educazione civica** e coinvolge direttamente i tuoi studenti per costruire tutti insieme una **nuova cultura della sostenibilità** fatta di conoscenze ma anche di azioni.

Crea la tua classe online e unisciti al progetto.
Energicamente mette a tua disposizione tante risorse pronte all'uso.

Gioca, impara e vinci
Il cuore del progetto è il **percorso-gioco online** in 4 tappe. Ogni tappa attiva bambini e ragazzi su un diverso Global Goal con quiz, mini game, indizi, curiosità... Superare le prove del gioco permette di imparare, entrare nella **classifica online** e vincere i premi in palio.

PROVA

Insieme per i Global Goal
Il progetto nasce digitale ma vive anche nella vita reale con il **concorso creativo finale**. Il concorso chiama gli studenti a fare squadra per migliorare la realtà che li circonda e centrare l'Agenda 2030 a livello locale.

PARTECIPA

Ricordati il Magazine
Porta in classe una ventata di novità con le **news** di Energicamente. Condividi con gli studenti progetti innovativi ma anche **curiosità**, consigli da mettere in pratica e **tutorial creativi** da fare insieme.

LEGGI

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Green Game

Title of Practice	Green Game
Target Group	Students in the 1st and 2nd grade of upper secondary schools
Scale of Implementation	<i>National</i>
Year of Implementation	Since 2023
Thematic area	<i>Waste Management & Recycling</i>
Link	HERE

Description

The Green Game is an educational cultural competition - in presence and, from 2019, in a digital version - promoted by the National Consortia for the Collection, Recycling and Recovery of Packaging Materials, including [BIOREPACK](#) for compostable bioplastics, [CIAL](#) for aluminum, [COMIECO](#) for paper and cardboard, [COREPLA](#) for plastic, [COREVE](#) for glass, [RICREA](#) for steel. This initiative is 12 years old and aims to involve and engage high school students on the topic of separate collection and recycling of packaging.

These national non-profit consortia, established by law, work throughout Italy to ensure that packaging collected by Italian municipalities through separate waste collection is sent for recycling. In Italy, on average, around 11 million tons of packaging waste are produced each year. Of this, the national Consortia system recovers over 78%, i.e. 3 out of 4 packaging.

Each year, the national consortia decide in which Italian region the Green Game in presence will be launched. The Green Game staff will visit 50 schools in the designated region completely free of charge! The first 50 schools to apply will be able to participate in the project



Monti's "sustainable" diary

Title of Practice	Monti's "sustainable" diary
Target Group	Students at the upper secondary school "Monti", Cesena
Scale of Implementation	<i>National</i>
Year of Implementation	school year 2020-2021
Thematic area	<i>Student Engagement & Awareness</i>
Link	HERE

Description

Environmental sustainability is a theme dear to the school that has also been reflected in the diaries that were distributed to approximately 1,350 pupils for the school year 2020-2021.

The cover was produced by processing excess algae from polluted lagoon environments. In fact, it is an uncoated cover, which has enabled the purification of polluted areas through the recycling of natural substances, such as (infesting) algae. Inside there is also information on the proper discarding of some elements and the possibility of reusing others, and on animals threatened with extinction.

The children are thus gradually educated to adopt correct behavior and, who knows, perhaps stimulated to delve personally into certain environmental protection issues, which the institute is particularly fond of.

Moreover, thanks to teacher Bianca Maria Manuzzi, who is an ecological guard, the 'Monti' high school has put in place various actions to encourage pupils and teachers to have an environmentally friendly culture, such as proper waste separation, attention to water consumption and the disposal of plastic for proper recycling.



Let's collect green miles

Title of Practice	Let's collect green miles
Target Group	Primary and lower secondary school classes, public and private, in the Municipality of Padua
Scale of Implementation	<i>Regional</i>
Year of Implementation	School year 2023-2024
Thematic area	<i>Eco-friendly Mobility</i>
Link	HERE

Description

Since 2006 the Municipality of Padua has organized the "Let's collect green miles" ("Raccogliamo miglia verdi") contest for schools, a sustainable mobility contest which main goal is to get students engaged in adopting an eco-friendly mobility solution in a playful way and to raise their awareness of sustainable themes.

Each participant is committed to give their tangible contribution by gaining a green mile every time that they will cover the home-school route in a eco-friendly way, that is on foot, by bicycle, by bus or asking a parent to drive many students to school and back home (car-pooling).

In each of the 18 previous editions of this contest, special attention was given to specific themes, such as: school streets, safe home-school routes, socializing and neighborhood awareness, air quality, etc



Kids Go Green

Title of Practice	Kids Go Green
Target Group	Various primary schools across Emilia-Romagna
Scale of Implementation	<i>National</i>
Year of Implementation	2017
Thematic area	<i>Eco-friendly Mobility, Student Engagement & Awareness</i>
Link	HERE
Description	
<p>1. Sustainable Travel Tracking Each day, students record how they travel to school—on foot, by bike, by public transport, or by car. Only the "green" trips (non-polluting methods) are counted for the project.</p> <p>2. Kilometers Converted into a Virtual Journey The sustainable kilometers covered by the students are converted into distance on a virtual map. The class follows a virtual route to a chosen destination (e.g., "Rimini to Tokyo").</p> <p>3. Learning Through Travel While students conduct on the virtual journey, they reach checkpoints (cities). At each stop, teachers use custom educational materials to explore: The geography, culture, and history of the area.</p> <p>4. Interactive Dashboard A digital platform shows: The class's current location on the map, the total kilometers collected and the comparison with other classes (optional, for a friendly competition).</p> <p>5. Gamification & Motivation Students feel involved and motivated because they see their personal and collective impact, learn that small daily choices (like walking) contribute to a bigger goal and sense of progress makes learning fun and meaningful.</p>	

SERBIA

"Caps for Handicap" – A Grassroots Initiative for a Better Life

Title of Practice	Einaudi Sustainable Environment
Target Group	Students of all ages, citizens, and local government
Scale of Implementation	Regional
Year of Implementation	Since 2012.
Thematic area	<i>Waste management & recycling</i>
Link	HERE

Description

The "Caps for Handicap" association is an authentic grassroots citizen initiative that emerged as a social response to unfavorable legislation in Serbia.

Since September 2012, our initiative has worked by encouraging citizens to voluntarily collect plastic bottle caps. These caps are then gathered and sold to companies specializing in hard plastic recycling. The funds obtained are used to purchase new or second-hand orthopedic aid for people with disabilities.

The mission of the association is to improve the quality of life for people with disabilities and advocate for their full potential using available community resources.

Without the participation of over 650 kindergartens, 800 primary schools, 220 high schools, ministries, embassies, and more than 580 socially responsible companies and entrepreneurs from Serbia, Montenegro, and Bosnia and Herzegovina, we would not have been able to achieve significant results. Over five years, we have provided 78 orthopedic aids and recycled around 120 tons of plastic caps annually.



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UPSPACE - Upcycling and Regeneration of urban Space for green skills

Ref. Number: 2024-1-IT02-KA220-SCH-000249480

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Eco Package – Raising Awareness Through Education

Title of Practice	Einaudi Sustainable Environment
Target Group	Primary school students
Scale of Implementation	National
Year of Implementation	2014 - 2018
Thematic area	Waste management & recycling
Link	HERE

Description

Eco Package, part of the International Eco-Schools Program, is a project designed to educate the public about the correct disposal of used Tetra Pak packaging and to promote environmental responsibility.

The project primarily targets children from an early age, teaching them how to properly dispose of multilayer Tetra Pak packaging. By doing so, they contribute to environmental preservation and public health.

A key aspect of the project is the collection of used Tetra Pak packaging and the organization of educational workshops in kindergartens, schools, and universities. These workshops encourage children and students to create various objects from used Tetra Pak materials while learning about recycling from teachers, educators, and professors.

To further engage participants, the project includes a creative competition. Schools and other institutions create small artistic pieces from used Tetra Pak packaging and submit them to the project organizers. At the end of the school year, Tetra Pak and its partners reward the most successful schools and the most creative children and students with valuable prizes.



Eco-Schools

Title of Practice	Eco-Schools
Target Group	Primary school students
Scale of Implementation	regional
Year of Implementation	2015
Thematic area	<i>Green School Buildings</i>
Link	HERE

Description

More than 47 educational institutions across Serbia that participated in the international "Eco-Schools" program have launched various initiatives in the fields of ecology and environmental protection. Activities such as marking significant eco-dates, building eco-gardens, organizing environmental workshops, quizzes, and field trips will become part of the educational program for preschoolers, students, and university attendees. Participation in most activities will allow schools to collect points and win cash prizes at the end of the school year, as well as earn the title of "Eco-Motivator". All schools, from preschool to university level, can join the program activities throughout the school year, with registration available via a link.

Children will also showcase their knowledge by participating in the Eco Quiz and report on environmental issues in the Eco Reporters competition. In the spring, Vip Mobile will provide all schools with materials for creating Eco Gardens, along with seedlings. Successfully creating and regularly maintaining the garden will earn the schools' valuable points and bring them closer to the "Eco-Motivator" title and cash rewards.



The Eco-Schools program

Title of Practice	Eco-Schools
Target Group	Students from preschool to university
Scale of Implementation	Regional
Year of Implementation	2023
Thematic area	<i>Green School Buildings</i>
Link	HERE

Description

The Eco-Schools program was developed by the Foundation for Environmental Education (FEE) to engage young people in solving environmental issues identified at the 1992 Rio Conference on Environment and Development. Launched two years later, it began in countries like Denmark, Germany, Greece, and the UK, and today is implemented in 68 countries with over 59,000 schools worldwide.

In Serbia, the "Ambassadors of Sustainable Development and Environment" operate the Eco-Schools program. Any educational institution, from kindergartens to universities, can join. To gain Eco-School status, schools must follow the "Seven Eco-School Steps": forming an Eco-Committee, assessing the environmental situation, creating a work program, monitoring and evaluation, integrating the program into the curriculum, informing the public, and promoting the Eco-School program. Schools must also choose a main ecological theme and two additional topics to focus on each year.

The benefits of the program include positive changes not only for the school but for the local community as well. The program strengthens connections between schools and communities, fosters international links, and promotes sustainable development principles. One of Serbia's Eco-Schools is in Požega, where the Forca association supports improvements to the program and promotes it in other municipalities.



The "Environmental Identity of Primary School Students in Serbia" (ELIPS) project

Title of Practice	The "Environmental Identity of Primary School Students in Serbia" (ELIPS) project
Target Group	Primary school students
Scale of Implementation	National
Year of Implementation	2023
Thematic area	<i>Curriculum Integration, Green School Buildings</i>
Link	HERE

Description

More than 47 educational institutions across Serbia that participated in the international "Eco-Schools" program have launched various initiatives in the fields of ecology and environmental protection. Activities such as marking significant eco-dates, building eco-gardens, organizing environmental workshops, quizzes, and field trips will become part of the educational program for preschoolers, students, and university attendees. Participation in most activities will allow schools to collect points and win cash prizes at the end of the school year, as well as earn the title of "Eco-Motivator". All schools, from preschool to university level, can join the program activities throughout the school year, with registration available via a link.

Children will also showcase their knowledge by participating in the Eco Quiz and report on environmental issues in the Eco Reporters competition. In the spring, Vip Mobile will provide all schools with materials for creating Eco Gardens, along with seedlings. Successfully creating and regularly maintaining the garden will earn the schools' valuable points and bring them closer to the "Eco-Motivator" title and cash rewards.



5. Conclusion & Next Steps

Teachers' Training Needs for Sustainability in Education

A comparative analysis of sustainability education across Germany, Greece, Italy and Serbia reveals disparities in thematic coverage and teaching methodologies. These gaps highlight the need for teacher training to ensure that educators can effectively implement sustainability-focused curricula.

In Germany, sustainability education places strong emphasis on school gardens and food literacy, waste management and composting. However, there is a need for more teacher training in systems thinking and circular economy concepts in other areas beyond agriculture. Educators would benefit from professional development in interdisciplinary and participatory learning methods to enhance student engagement.

In Greece, while there are notable efforts in school gardening and student engagement, biodiversity conservation and eco-friendly mobility remain underrepresented. Teachers require training in nature-based and project-based learning techniques on sustainability in education that can be integrated across several disciplines.

Italy demonstrated a focus on waste management, and curriculum integration but lacks widespread implementation of energy efficiency and eco-friendly mobility education. To address this, training in project-based learning within the above thematic areas would be beneficial in strengthening curriculum effectiveness.

In Serbia, sustainability education focuses strongly on waste management and recycling, but it is still emerging, highlighting a strong need for capacity building across all thematic areas, particularly in food sustainability, and biodiversity conservation. Teachers training in active learning methodologies and community-based sustainability projects would help bridge this gap and create a more comprehensive approach to sustainability education.

Conclusion

This analysis highlights the diverse approaches to sustainability education in Germany, Greece, Italy and Serbia. While national contexts shape the specific focus areas, common themes emerge that can inform and influence future-oriented curricula. Due to the differentiation on thematic areas, and approaches used in each country, it is important to develop a curriculum that could be easily adapted by diverse national curricula programs. Thus, the UpSpace Curricula follows the structure of learning scenarios that could be easily transferred into each national program and could be adapted to the needs of each school. By integrating sustainability topics and hands-on activities in combination with key competencies into educational frameworks, these countries can equip students and

educators with the skills needed to address global environmental challenges. The insights from this analysis will serve as a foundation for developing innovative curricula that advance sustainability, biodiversity, and circular economy principles across Europe and beyond. However, for these efforts to be effective, teacher training must be enhanced to ensure educators have the knowledge and tools to deliver sustainability education effectively. Strengthening interdisciplinary methodologies, experiential learning approaches, and green competencies training will be crucial in building the next generation of responsible and active environmental citizens.

ANNEX

1. Template for Best Practices Collection

Upspace_WP2 Activity 1

Title of the Practice:	
Target Group:	
Country:	
Scale of Implementation: (<i>choose between local, regional, national level</i>)	
Year of Implementation:	
Thematic area (<i>mark the area of your interest</i>)	Curriculum Integration Green School Buildings Energy Efficiency & Renewable Energy Waste Management & Recycling Water Management School Gardens & Sustainable Agriculture Eco-friendly Mobility Partnerships & Collaboration Student Engagement & Awareness Sustainable Nutrition & Cafeteria Program)
Link (website, social media):	

Description (200- 300 words): *if possible, include numbers or any behavioral changes after the implementation in the school (impact)*

Attach, if possible, at least one image:



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