



**Upcycling and Regeneration of urban Space for
green skills**

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

**Cross-country Study on EU
Sustainable Development
Policies**

International desk research on policies and approaches to
education for environmental sustainability & best practice
collection



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Introduction

The current document is Cross-Country Study on EU sustainable development policies gathering information from all partners involved in the [UpSpace: Upcycling and Regeneration of urban Space for green skills project](#). The research includes national policies and educational approaches to environmental sustainability as well as cross-country research, which is deemed useful to analyse the state of the art of the partners' countries situation and to have a common ground among partners. It represents a valuable resource aimed to provide a fundamental basis for the development of the training courses for teachers and students in order to bring school curricula closer to the national policies, making them more relevant and in line with the real needs of each country involved.

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 aim is to:

- train the students and the teachers on sustainable management and efficient use of natural resources, increase their awareness on 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 the environment issues and climate change challenges.

During its 30-months duration, the project will reach 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 Cross-country Research

This document consists of three key parts:

1. **National Context introduction**, which allows to have an overview of each national context of the 4 countries involved;
2. **Policies**, identifying the main policy approaches in each partner country;
3. **Best Practices**, national policies and approaches to education for environmental sustainability.

By gathering national researches from 4 countries provided by project partners from Germany, Italy, Greece and Serbia, this document gives an overview of national policies and approaches to education for environmental sustainability and cross-country research, useful to analyse the state of the art of the partners' countries situation and to have a common ground among partners. As it will be shown in the following pages, the document gives insights into national frameworks, thus being a good first step for the exploration of the existing EU sustainable development practices and policies.

Methodology

The current work represents the development of several national data provided by each project partner: all of them have received a template where they were required to gather information under specific topics as well as to identify local good practices. CESIE ETS was in charge of processing the information and presenting the current result.

1. National Context introduction policies and educational approaches

1.1 National policies for environmental sustainability

Italy

Achieving the 2030 Agenda Goals in Italy requires the activation of public policy coordination systems in order to make them coherent and integrated. The national strategies, which are added to those defined at the European level or decline them for our country, therefore assume a central role by defining objectives, indicators and processes for their implementation on the territories (ASviS, 2024).

- The **National Sustainable Development Strategy** (*La Strategia Nazionale di Sviluppo Sostenibile, SNSvS*): It represents the national coordination tool for the implementation of the 2030 Agenda and defines the national reference framework for the planning, programming and evaluation processes of the policies needed to achieve the Sustainable Development Goals. The new Strategy was approved in September 2023 and, compared to its previous version, includes for the first time an analysis of 'sustainability vectors' as enabling dimensions for a full integration of sustainability in public policies. This is an important innovation that can contribute decisively to the implementation of the Strategy. (ASviS, 2024).
- The **National Recovery and Resilience Plan** (*Piano Nazionale di Ripresa e Resilienza, PNRR*): The Ecofin Council of 8.12.2023 approved the revision of the PNRR following the Italian government's proposal submitted in August. With the approval of the changes, the overall budget of the new PNRR increases from EUR 191.5 billion to EUR 194.4 billion (ASviS, 2024). The Plan is divided into 7 Missions, i.e. main thematic areas on which to intervene, identified in full coherence with the 6 pillars of the Next Generation EU. Mission 2 of the PNRR, 'Green Revolution and Ecological Transition', is the one where the Italian Ministry of the Environment and Energy Security (Ministero dell'Ambiente e della Sicurezza Energetica, MASE) carries out the most activities. The Mission aims to close the structural gaps that hinder the achievement of a new and better balance between nature, food systems, biodiversity and the circularity of resources (Governo Italiano, n.d.).
- The **National Plan for Ecological Transition** (*Piano Nazionale per la Transizione Ecologica, PTE*): together with the PNRR, is one of the main planning frameworks with which the SNSvS relates. The Plan, consistent with the programmatic lines outlined in the PNRR, envisages full achievement of the goals in 2050. The PTE is a transversal document covering a number of topics that concern the environment, energy and climate as a whole, as well as all those guidelines to be put in place to implement a

'green' transition towards sustainable development and ecological management (Governo Italiano, n.d.).

The following indicators, presented in the 2024 edition of ISTAT's **Noi Italia in Breve**, make it possible to outline Italy's state of the art and monitor the efforts made by public administrations to protect the environment and improve citizens' quality of life:

In 2022, in Italy, both the production of **urban waste** (-1.8%) and the relative share of disposal in landfills decreased, settling at 17.8% (-1.2 percentage points); the increase in waste sorting continued (+1.1), reaching, for the first time, the target set by the EU in 2012.

In 2022, the **GHG emissions** of the Italian economy (on Italian territory and abroad) generated by households and productive activities resident in Italy, were substantially stable, compared to the previous year (+0.1%), after the strong increase recorded in 2021, compared to the year of the pandemic crisis (+8.7%). In 2022, GHG emissions generated in Italy (by resident and non-resident units) were also essentially stable compared to the previous year (+0.1%).

In 2023, 39.6% of households considered **air pollution** as one of the main environmental problems, especially in urban areas (the indicator reaches 66.3% in the central municipalities of the metropolitan area).

In 2022, total **water losses** in municipal drinking water distribution networks were 42.4% of the volume of water fed into the network, a slight increase compared to 2018 (42.0%) and 2020 (42.2%). It is estimated that the water dispersed in distribution would meet the water needs of 43.4 million people for an entire year.

In 2022, 89.6 per cent of **bathing waters** in Italy were of excellent quality and 97.8 per cent met the minimum standards set by the EU Bathing Water Directive, although a small portion remained of poor quality (1.5 per cent) or not sampled (0.7 per cent).

In 2022, the amount of **marine litter** was 303 litter per hundred metres of beach (in 2021, it was 273 litter/100 m), which is still far from the European Commission's recommendations (20 litter/100 m).

Germany

Germany, located in Central Europe, is recognised for its robust economy and commitment to environmental sustainability. As a leading industrial nation and a key player in the European Union, Germany has integrated environmental considerations into its national policies, aiming to balance economic growth with ecological responsibility. The country has made significant progress in various areas, including climate action, renewable energy, and biodiversity conservation, while also prioritising education for sustainable development.

Germany has established a comprehensive framework for environmental sustainability, characterised by ambitious goals and a range of policies aimed at reducing greenhouse gas emissions, promoting renewable energy, and enhancing biodiversity. Key components include:

- **Climate Action Plan:** Germany's Climate Action Plan 2050 aims for greenhouse gas neutrality by 2045, with a target of reducing emissions by 65% by 2030 compared to 1990 levels (Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, 2021). This plan outlines specific measures for various sectors, including energy, transport, and agriculture, to achieve these targets.
- **Renewable Energy Expansion:** The government plans to increase the share of renewable energy in the electricity mix to 80% by 2030 (German Federal Government, 2020). As of 2022, renewable energy sources accounted for approximately 42% of total electricity consumption, with wind and solar power being the largest contributors (Federal Network Agency, 2022).
- **Biodiversity Strategy:** The National Strategy on Biological Diversity aims to halt biodiversity loss and promote sustainable resource use, with approximately 15% of land designated as protected (Federal Agency for Nature Conservation, 2021). This strategy includes measures for habitat protection, species conservation, and sustainable land management.

Recent statistics indicate that as of 2021, Germany's greenhouse gas emissions were approximately 762 million tons, reflecting a reduction of about 40% compared to 1990 levels (Federal Environment Agency, 2022). These efforts demonstrate Germany's commitment to addressing climate change and promoting environmental sustainability.

Greece

Greece is making progress in environmental sustainability, particularly in renewable energy expansion and public engagement. However, to meet its climate goals and improve biodiversity conservation, the country must address policy shortcomings and enhance implementation efforts.

- **Sustainable Development Goals (SDGs)**

In the 2023/2024 Europe Sustainable Development Report, Greece ranks 28th out of 34 countries. It faces major challenges in climate action (SDG 13), responsible consumption and production (SDG 12), and biodiversity (SDG 15).

- **Sustainable Policy making**

Economic sustainability - Greece falls into the sample's bottom ranks (rank 29) with regard to economic sustainability. The state has adopted a circular economy strategy, but the country's per capita material footprint is still the highest in the OECD. Recycling performance is poor overall. The government has a clear roadmap for updating and protecting critical

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infrastructure. The plan for transitioning to a decarbonized energy system by 2050 includes binding goals.

Environmental sustainability - In the category of environmental sustainability, Greece falls into the sample's lower-middle ranks (rank 19). A national climate law was passed in 2022, and the national climate strategy is binding. The state aims to phase out coal-powered electricity by 2028 and reduce greenhouse gas emissions by 55% by 2030. However, the country ranked near the OECD's bottom in greenhouse gas intensity growth and carbon emissions from land cover during the 2010s.

Social sustainability - Greece scores relatively poorly in international comparison (rank 25) regarding social sustainability. The public education system is still struggling to recover from austerity measures and remains underfunded and understaffed. Greece has made strides in gender equality, but traditional cultural gender norms persist.

- **Environmental Performance Index**

For the year 2024, Greece ranks 11th globally with a score of 67.3, showing an 8.4-point improvement over the past decade. The country excels in areas like climate change mitigation, wastewater treatment, and air pollution control.

- **Climate Change Performance Index**

Greece ranks 22nd overall and 11th among the EU-27 countries with a "medium" performance. It has moved up 6 places compared to last year but is below the European Union which is 17th. Greece ranks 15th with "medium" performance in Renewable Energy, 19th with "medium" performance in Energy Use, 33rd with "medium" performance in Greenhouse Gas Emissions and 37th with "low" performance in Climate Policy.

- **Solar Energy Systems – Solar Share of Public Electricity**

Greece posted the highest share of public electricity generation in 2023, according to an energy chart released by [Fraunhofer](#) Institute for Solar Energy Systems ISE. The chart ranks 26 countries of Europe and reveals that Greece's share was the highest at 22.6%, just above that of Luxembourg, which boasts 22.1%.

Serbia

Serbia, as a candidate country for European Union membership, has made notable progress in developing environmental sustainability policies over the past decade. Key strategic documents include, The Green Agenda for Serbia and the Environmental Protection Strategy 2024–2033, the National Environmental Protection Program, the Low-Carbon Development Strategy, and the Law on Climate Change adopted in 2021. These frameworks aim to align Serbian legislation with EU standards while promoting sustainable development.

The National Sustainable Development Strategy (NSDS) 2008–2017:

At the national level, Serbia's policy framework for environmental sustainability includes overarching strategies and international commitments. The National Sustainable Development Strategy 2008–2017 was an early effort to define long-term sustainable development goals across economic, social, and environmental pillars. Building on that foundation, Serbia has shifted towards contemporary green transition policies.

The Green Agenda for Serbia and the Environmental Protection Strategy 2024–2033:

A notable recent [initiative](#) is the Green Agenda for Serbia, part of the regional Green Agenda for the Western Balkans. Serbia's government is implementing this through the new Environmental Protection Strategy (2024–2033), which outlines clear priority areas: climate change and decarbonization, circular economy, pollution reduction, biodiversity and ecosystem protection, and sustainable rural development. The strategy incorporates the commitments from the Sofia Declaration (e.g. climate neutrality goals) and provides an action plan with timelines, responsible institutions, and funding sources.

The National Environmental Protection Program (NEPP)

The National Environmental Protection Program is a strategic planning document of the Republic of Serbia, developed to operationalize the country's environmental policy goals. It provides a medium- to long-term framework for implementing national legislation and aligning with EU environmental standards in key areas such as air and water quality, waste management, biodiversity protection, noise control, and chemicals management. The program defines institutional responsibilities, monitoring indicators, and financing mechanisms. It is implemented through five-year Action Plans and is aligned with the Environmental Protection Law and Serbia's EU accession process.

The Law on Climate Change (2021):

This law provides Serbia with a formal legislative framework for addressing climate change. Adopted in 2021, it establishes procedures for monitoring greenhouse gas emissions, sets the basis for the development of national and sectoral climate plans, and enables alignment with the EU Climate Law and Paris Agreement. It also re-established the National Climate Change Committee, created mechanisms for GHG inventories and projections, and requires Serbia to develop a National Climate Adaptation Plan.

The Low Carbon Development Strategy 2023–2030 (with an outlook to 2050):

In parallel, Serbia's climate change policy has been strengthened by the adoption of the Low Carbon Development Strategy to 2030 (with an outlook to 2050). This strategy envisions Serbia as a low-carbon society by 2050 and lays out mitigation scenarios to reach targets

under the Paris Agreement. For instance, it commits to cut national GHG emissions by about 33% by 2030 compared to 1990 (13% reduction from 2010 levels).

1.2 National approaches to education for environmental sustainability

Italy

In Italy starting from the 2020-2021 school year the cross-curricular teaching of **civic education** was introduced in the first and second cycles of education, with initiatives to raise awareness of responsible citizenship starting in kindergarten. The civic education consists of three thematic cores: the first thematic core is "Constitution, law (national and international), legality and solidarity." The second thematic core is "**Sustainable development, environmental education, knowledge and protection of heritage and territory.**" The third core is "Digital citizenship."

[ReGeneration School](#) is the Ministry of Education's Plan implementing the goals of the UN Agenda 2030 designed to guide schools in the ecological and cultural transition and implementation of sustainable development education pathways provided by the teaching of civic education. The Plan aims to enhance, systematize and implement the projects and activities already in place in schools and to offer a vast repertoire of tools and resources, which schools will be able to use to develop projects on issues related to sustainable development. In the development phase of the Educational Offer Plan for the three-year period 2022-2025, schools will be able to include, as of September 2022, activities related to the themes of ecological and cultural transition in the school curriculum, linking them to the four pillars and objectives of Regeneration:

- [Pillar 1 - Regeneration of knowledge](#) provides educational - training activities aimed at pupils, teachers and families. The activities will be laboratory, experiential and interactive. They will be held not only inside the school building but also in symbolic places for learning knowledge, in open spaces in contact with nature and in digital environments.
- [Pillar 2 - Regeneration of behaviors](#) involves the implementation of a set of training activities and the issuance of guidelines to stimulate and induce the school community to virtuous behaviours aimed at converting habits and lifestyles.
- [Pillar 3 - Regeneration of physical and digital infrastructure](#) aims to provide a clear direction for the construction of new sustainable schools with large green spaces and remodelled learning environments. The pillar includes gradual energy upgrading of schools, modification of outdoor spaces into green spaces, and asbestos abatement.
- [Pillar 4 - Regeneration of opportunities](#) aims to establish new Secondary School pathways, such as Environmental High Schools and Higher Technical Institutes (ITS) with a Sustainable Development focus. It promotes the establishment of new

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ITS addresses aimed at providing new job opportunities in areas such as: bio-agriculture, precision and regenerative agriculture, circular economy, sustainable finance, green chemistry, bio-economy, zero-emission design, sustainable mobility, and design and processing of new materials.

[Memorandum of Understanding between the Ministry of Education and Merit \(MIM\) and the Italian Alliance for Sustainable Development](#) from 26th of July 2023 - the purpose of the initiative is to promote the dissemination of the culture of sustainable development for full realization of the 2030 Agenda Goals. In particular, the two sides undertake to:

- a) Promote and support, when requested by autonomous educational institutions, educational research, innovation and training initiatives for the enhancement of the culture of sustainable development and all aspects traceable to the 17 Goals of Agenda 2030, aimed at students of all levels and grades of education and training, their families, school staff and the territory;
- b) undertake joint actions to support, while respecting the educational autonomy, organizational and research autonomy of individual educational institutions and the freedom of teaching of teachers, organizational and curricular design methods of educational offerings in connection with issues related to sustainable development and their inclusion in key strategic documents (PTOF, RAV, PdM and Social Accountability);
- c) promote an integrated and interdisciplinary teaching approach on the themes of sustainable development in the teaching of civic education and the design of pathways for transversal skills and orientation;
- d) define, promote and activate, in compliance with the competencies and responsibilities designed by the national plan of teacher education (PNFD), initiatives to raise awareness and train teaching and management staff on the theme of education for sustainable development;
- e) to support the purpose networks of educational institutions that have promoted and implemented projects or educational initiatives on education for sustainable development and acquire from the different realities useful insights and reflections;
- f) to promote the preparation of innovative learning environments by individual school institutions, which by enhancing didactics for skills, stimulate in students the development of styles and behaviours of active citizenship in line with the 17 Goals of Agenda 2030;
- g) disseminate tools, resources and significant educational experiences of multi-inter and trans-disciplinary curricular innovation on the theme of sustainable development, enhancing products, materials and experiences already implemented, or that will be prepared within the framework of this Memorandum of Understanding, by ASviS members and by the educational institutions themselves;
- h) enhance the educational-training initiatives of schools through participation in calls or competitions promoted by MIM and which may also conclude with events organized as part of the collaboration between MIM and ASviS, as well as with the contribution of third parties, such as UNESCO, public and private institutions.

Germany

Germany places significant emphasis on education for environmental sustainability, integrating it into various educational frameworks, particularly in secondary education. Key approaches include:

- **Sustainability Education in Schools:** Environmental education is part of the curriculum in primary and secondary schools, focusing on topics such as climate change, biodiversity, and sustainable resource management. The "Education for Sustainable Development" (ESD) initiative promotes interdisciplinary learning and critical thinking (German Commission for UNESCO, 2021). This initiative encourages students to engage with real-world environmental issues and develop solutions.
- **Focus on Secondary Education:** In secondary schools, environmental education is further developed through subjects such as geography, biology, and social studies. Students are encouraged to participate in projects that promote sustainability, such as school gardens, recycling initiatives, and energy-saving campaigns. The integration of sustainability into the curriculum aims to foster a sense of responsibility and empower students to take action in their communities (Federal Ministry of Education and Research, 2021).
- **Higher Education:** Universities and colleges offer programmes and research opportunities focused on sustainability, environmental science, and renewable energy. The "Sustainable University" initiative encourages institutions to adopt sustainable practices on campus, such as energy efficiency measures and waste reduction strategies (German Rectors' Conference, 2021).
- **Public Awareness Campaigns:** The government and NGOs conduct campaigns to raise awareness about environmental issues and promote sustainable practices among the general public. These campaigns often target young people, aiming to instil a culture of sustainability from an early age.

Greece

Greece has demonstrated a commitment to integrating environmental sustainability into its national education system, either as educators' initiative or as part of national legislation. As a member of the European Union and active participant in global sustainability efforts, Greece in the past years is in efforts to align its educational strategies with key international frameworks, including the **United Nations Sustainable Development Goals (SDGs)**. At the moment, the national statistics regarding participation and programs implementation, present the following data:

- **Over 60% of Greek schools** participate in organized environmental education programs.

- **More than 400,000 students** have benefited from KPE initiatives over the last decade.
- Greek universities offer **dozens of postgraduate programs** focused on sustainability and environmental education.

The impact was succeeded through several initiatives, curriculum integration, national and European programs, the network of centers for education for environmental sustainability, and school networks, among others.

Greek schools and educational institutions actively engage in a range of international networks and programs, reflecting the country's strong commitment to global environmental education efforts. A notable example is participation in the **Eco-Schools Program**, coordinated by the Foundation for Environmental Education (FEE), through which numerous schools across Greece have earned the prestigious Green Flag certification for their efforts in promoting sustainability at the school and community level. Additionally, Greece is a committed participant in **UNESCO's Global Action Programme (GAP) on Education for Sustainable Development (ESD)**, contributing to global efforts to integrate sustainability into all aspects of education and learning. Greek institutions also collaborate extensively through the Erasmus+ programme, engaging in cross-border projects that address sustainability, environmental citizenship, and green innovation.

- **The Panhellenic Association of Teachers for Environmental Education**

The Panhellenic Association of Teachers for Environmental Education is a Panhellenic scientific association with a central Board of Directors and branches all over Greece. It was founded in 1992 by pioneering teachers who informally dreamed of a school open to life and action since the 1980s.

The members are School Teachers, Environmental Education (E.E.) and School Activities Managers, Teachers of Education Centres for the Environment and Sustainability (K.E.E.E.A.- formerly K.P.E.) as well as university teachers, postgraduate students of pedagogical or other departments related to E.E. and E.A. Their goals are to strengthen and promote education for environmental sustainability and improve the functioning of supporting institutions such as the educational centres for education for sustainability.

Serbia

In the education sector, Serbia has been integrating environmental sustainability into curricula and school activities, in line with the concept of Education for Sustainable Development (ESD). Over the past few years, sustainability and "green" practices have become [more prominent](#) in Serbian education.

Environmental topics are included across subjects such as biology, geography, and civic education, and there are elective courses explicitly focused on ecology and environmental protection in primary and secondary schools. Students thus have opportunities to learn about

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climate change, nature conservation, and sustainability principles through both mandatory content and optional electives. Extracurricular activities also play a role – some schools are recycling, running tree planting actions, and similar projects to engage students in practical environmental stewardship.

Serbia has undertaken continuous professional development (CPD) programs to equip teachers with knowledge and methods for teaching sustainability. In 2022 and 2023, the national Institute for the Improvement of Education teamed up with the World Wide Fund for Nature (WWF Adria-Serbia) to host [teacher trainings](#) on environmental and sustainability topics. Through these CPD programs, teachers learned interactive and interdisciplinary approaches to engage students in topics like climate action, biodiversity, and resource conservation. This capacity-building indicates a systematic approach to empower educators for ESD.

Serbia encourages linking formal education with civil society and international projects to enhance environmental learning. For example, Erasmus+ projects led by Serbian schools – such as "[Competences as a Solution to Global Problems](#)" (KA210-SCH), "[Let's Hear the Voice of Ecology](#)" (KA220-SCH), and "[New Sustainable Rural Tourism Learning Opportunities for Women in Border Areas](#)" (KA210-ADU) – have provided students with project-based learning experiences in sustainability and global environmental issues. NGOs and youth organizations frequently partner with schools to implement eco-initiatives, bringing non-formal education methods into the classroom.

In June 2024, an online conference organized by the National Eurydice Unit of Serbia spotlighted sustainability in education, allowing schools to share best practices and align with European research on ESD.

All these efforts illustrate Serbia's approach of mainstreaming environmental sustainability in education through curriculum content, teacher training, and collaborative projects. There is a clear recognition that educating young people on sustainable development is vital for fostering an environmentally conscious society.

2.Policies

2.1. National legislative provisions about environmental sustainability

Italy

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Constitutional Law No. 1 of 11 February 2022 on 'Amendments to Articles 9 and 41 of the Constitution on environmental protection' was published in the Gazzetta Ufficiale No. 44 of 22 February 2022 and includes an express reference to the protection of the environment and animals in the Constitutional Charter (Governo Italiano, n.d.). In particular:

- Integrating **Article 9 of the Constitution**, the draft law introduces among the fundamental principles the protection of the environment, biodiversity and ecosystems, also in the interest of future generations. It also establishes that the law of the State regulates the ways and forms of animal protection (Governo Italiano, n.d.).
- It also amends **Article 41 of the Constitution**, providing that economic initiative may not be carried out in a way that is harmful to health and the environment and that the law shall determine the programmes and controls appropriate for public and private economic activity to be directed and coordinated for environmental purposes (Governo Italiano, n.d.).
- Finally, the draft law contains a provision to safeguard the legislative competences recognised to the Regions with special statutes and to the Autonomous Provinces of Trento and Bolzano by their respective statutes (Governo Italiano, n.d.).

The Environmental Code, **Legislative Decree No 152 of 3 April 2006**:

The "Consolidated Environmental Act" or "Environment Code" refers to Legislative Decree No. 152 of 3 April 2006, which came into force in its historical text on 29 April 2006 and contains the main rules governing environmental matters. In reality, this decree is not a true 'consolidated act', since not only does it not deal with many other important environmental subjects (e.g.: noise, electrosmog, protected areas, etc.), but not even in its 'form' can it be defined as such, as demonstrated, by its true 'title': 'norms on environmental matters'. The decree has as its primary objective the promotion of the levels of quality of human life to be achieved through the preservation and improvement of the conditions of the environment and the prudent and rational use of natural resources (Associazione Italiana Ambiente e Sicurezza, 2022).

Law No. 68 of 2015:

It introduced new offences for environmental protection into the Penal Code, thus changing the previous regulatory framework that almost exclusively entrusted environmental protection to violations and administrative sanctions, provided for in the Environmental Code (Legislative Decree 152 of 2006) (Parlamento Italiano, n.d.).

Germany

Germany has established a robust legal framework to promote environmental sustainability, which is rooted in its constitution and further developed through various federal laws and regulations. Key legislative provisions include:

- **Basic Law (Grundgesetz):** Article 20a mandates the state to protect the natural foundations of life and ensure a healthy environment for future generations. This constitutional provision serves as a foundation for all environmental legislation in Germany.
- **Federal Nature Conservation Act (Bundesnaturschutzgesetz):** This act provides guidelines for the protection of biodiversity and the sustainable use of natural resources. It establishes a framework for the designation of protected areas and the conservation of endangered species.
- **Environmental Impact Assessment Act:** This law requires environmental assessments for certain projects to consider potential impacts in planning and decision-making. It aims to ensure that environmental consequences are taken into account before project approval.

Greece

Greece's legislative framework for environmental sustainability is rooted in both national law and its obligations as a member of the European Union. The foundation of this framework is laid out in **Article 24 of the Greek Constitution**, which explicitly states that the protection of the natural and cultural environment is a duty of the state. This article embeds the principle of **sustainable development** into the country's legal and policy planning, requiring that environmental considerations be integrated into national development goals.

At the core of Greece's environmental legislation is **Law 1650/1986**, which establishes the basic principles for environmental protection, including the requirement for environmental impact assessments (EIAs), regulation of industrial activities, and mechanisms for enforcing environmental standards. This law has evolved over time, particularly with **Law 3010/2002**, to harmonize national provisions with European Union directives.

Beyond legislation, Greece has developed a **National Strategy for Sustainable Development**, which serves as the overarching framework integrating environmental protection with social equity and economic development. This strategy promotes **green growth**, emphasizing sustainable agriculture, eco-tourism, clean energy, and innovation.

In the face of the climate crisis, Greece has adopted an ambitious national strategy through its **Climate Law (Law 4936/2022)**. This law sets out a binding roadmap for achieving **climate neutrality by 2050**, introducing interim carbon budgets, decarbonization targets across sectors, and measures to promote renewable energy, electrification of transport, and energy efficiency in buildings. These efforts build on earlier legislation such as **Law 3851/2010**, which promoted the integration of **Renewable Energy Sources (RES)** into the national energy mix.

Biodiversity protection also plays a central role in Greece's sustainability vision. Under **Law 3937/2011**, Greece has established regulatory frameworks to protect natural habitats and endangered species, while also managing the **Natura 2000** protected areas network.

Serbia

The following laws represent the foundation of Serbia's legal framework on environmental sustainability:

- **Law on Environmental Protection** (amended in 2021)

Establishes an integrated system for environmental protection, ensuring the human right to a healthy environment. It outlines principles for sustainable development, pollution prevention, and public participation in environmental decision-making

- **Law on Climate Change**

Regulates the system for limiting greenhouse gas (GHG) emissions and adapting to climate change. It mandates the development of a low-carbon development strategy, action plans, and establishes the National Council for Climate Change as an advisory body.

These laws aim to harmonize national policies with EU environmental directives and facilitate the transition to a low-carbon and circular economy.

- **Law on Energy**

Focuses on energy efficiency and the promotion of renewable energy sources (RES). It sets the framework for the development of energy policies that align with environmental protection goals and EU directives.

- **Law on Nature Protection**

Aims to protect and conserve biological, geological, and landscape diversity. It designates nature as an asset of general interest, warranting special protection, and outlines measures for the preservation of natural habitats and species.

2.2. The institutions / regulatory bodies that are responsible for the regulation and supervision policy implementation

Italy

The **Ministry of the Environment and Energy Security** - Ministero dell'Ambiente e della Sicurezza Energetica, MASE: plays a key role in the Government's activities aimed at protecting the environment. The action of the MASE is aimed at safeguarding the territory and water resources, terrestrial and marine ecosystems, animal and plant species at risk, the reclamation of areas and watercourses, the reduction of sources of pollution and emissions of gases that cause climate change, in the context of the challenge of global warming. The Ministry ensures the safety of energy and geo-mineral infrastructures and systems, supply, efficiency and competitiveness, and the promotion of renewable energies. It promotes good practices and environmental education, circular economy, sustainable mobility and urban regeneration (Governo Italiano, n.d.).

Public bodies supervised by MASE (Governo Italiano, n.d.):

- ISPRA - Institute for Environmental Protection and Research
- ENEA - National Agency for New Technologies, Energy and Sustainable Economic Development
- NATIONAL PROTECTED AREAS
- AUTHORITIES OF DISTRICT BASINS
- GREAT LAKES REGULATION CONSORTIA
- UNIQUE EXTRAORDINARY COMMISSIONER FOR PURIFICATION

Subsidiary companies - Private law entities controlled by the MASE (Governo Italiano, n.d.):

- SOGESID S.p.A
- GSE S.p.A.
- SO.G.I.N. S.p.A.

Germany

Germany has a multi-tiered institutional framework for the regulation and supervision of environmental policies. Key institutions include:

- **Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU):** Responsible for national environmental policy and legislation, the BMU develops strategies and coordinates federal initiatives to promote sustainability. It plays a crucial role in implementing Germany's Climate Action Plan and other environmental policies (BMU, 2021).
- **Federal Environment Agency (Umweltbundesamt, UBA):** The UBA is the central environmental authority conducting research, monitoring compliance with environmental laws, and providing expert advice to the government. It is responsible

for collecting and analysing environmental data, which informs policy decisions (UBA, 2022).

- **State Ministries for the Environment:** Each of Germany's 16 federal states has its own ministry responsible for implementing federal laws at the state level. These ministries oversee local environmental policies, manage protected areas, and ensure compliance with national regulations.
- **Regional Environmental Agencies:** These agencies operate at the regional level and are responsible for enforcing environmental regulations, conducting inspections, and monitoring compliance with environmental laws. They play a vital role in local environmental management.
- **Local Authorities:** Municipalities are crucial in implementing environmental policies, particularly in areas such as waste management, local planning, and air quality control. They are responsible for enforcing local regulations and engaging with the community on sustainability initiatives.

Greece

In Greece there are several institutions / regulatory bodies that are responsible for the regulation and supervision policy implementation, such as:

- **Ministry of Environment and Energy (ΥΠΕΝ)** - Central authority for environmental policy, sustainability strategy, and legislation.
- **Hellenic Environmental Inspectorate** - Supervises compliance, performs inspections, enforces environmental laws.
- **Hellenic Recycling Agency (EOAN)** - Implements recycling policy, monitors producer responsibility, promotes circular economy.
- **Green Fund (Πράσινο Ταμείο)** - Funds environmental and sustainability projects using environmental revenues.
- **Ministry of Maritime Affairs and Insular Policy** - Oversees marine and coastal environmental protection.
- **Decentralized Regional Administrations** - Handle local environmental permitting, inspections, and resource management.
- **Regulatory Authority for Energy (RAE)** - Regulates energy sector with emphasis on renewable energy and sustainability.
- **General Secretariat for Natural Environment and Waters** - Manages water resources, forest policy, and biodiversity.

Serbia

The main institutions responsible for regulating and supervising the implementation of environmental policies include:

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- **Ministry of Environmental Protection**

Role: Serves as the primary governmental body responsible for environmental policy development, implementation, and oversight. It coordinates national strategies, ensures compliance with international agreements, and supervises environmental protection activities.

- **Environmental Protection Agency of the Republic of Serbia**

Role: Handles environmental monitoring, data collection, and reporting. It prepares the annual State of the Environment report, supports decision-makers with environmental information, and manages the national environmental information system.

[Serbia country briefing - The European environment — state and outlook 2015 — European Environment Agency](#)

- **Green Fund of the Republic of Serbia**

Role: Provides financial support for environmental projects, including those related to pollution reduction, conservation, and sustainable development. It mobilizes resources to facilitate the implementation of green initiatives across the country.

- **Local self-governments**

Role: Responsible for implementing environmental policies at the local level. They manage local environmental projects, engage with communities, and ensure that national environmental standards are upheld within their jurisdictions

These institutions work in coordination to ensure policy enforcement, public education, and support for green initiatives.

2.3. Specific national laws or initiatives that promote environmental sustainability

Italy

Listed below are some examples of plans, programmes and strategies that represent the framework of the MASE's main policy and programme instruments. To view the entire list, click [here](#).

- **National Climate Change Adaptation Plan** - [Piano Nazionale di adattamento ai cambiamenti climatici](#), PNACC): The aim of the Plan is to contain the vulnerability of natural, social and economic systems to the impacts of climate change and increase their resilience.
- **National Integrated Energy and Climate Plan** - [Piano Nazionale Integrato per l'Energia e il Clima](#), PNIEC): The Plan is structured into five lines of action, which will be developed in an integrated manner: from decarbonisation to energy efficiency and security, through the development of the internal energy market, research, innovation and competitiveness. The goal is to implement a new energy policy that ensures the full environmental, social and economic sustainability of the national territory and accompanies this transition.
- **Implementation Action Plan (2020-2025) for the Italian bioeconomy Strategy BITII**: the updated version of the Action Plan was released in January 2021, in connection with the revision of the National Bioeconomy Strategy (BIT II). The updated version of the Action Plan presents:
 - A detailed Action Plan for 2025-2027, including a set of actions organised in five main macro-areas of the Bioeconomy;
 - Flagship projects underway and/or ready to be implemented, to provide concrete examples of how investments in the circular Bioeconomy can act as catalysts to strengthen and expand the main sectors of the Bioeconomy;
 - Legislative requirements and economic opportunities;
 - A plan for disseminating and monitoring the results and impacts of the Action Plan.

The BIT II Strategy and the BIT II Action Plan (2020-2025) aim to more effectively interconnect the main sectors of the Italian Bioeconomy, namely the production of renewable biological resources and their transformation into valuable raw materials in the form of food, feed, biobased materials, pharmaceutical and cosmetic compounds, wood products and bioenergy, together with the valorisation of biowaste.

- **National Strategy for the Circular Economy**: this is a programmatic document in which the actions, objectives and measures to be pursued in defining institutional policies aimed at ensuring an effective transition to a circular economy are identified. The Strategy intends, in particular, to define new administrative and fiscal instruments to strengthen the market for secondary raw materials, so that they are competitive with virgin raw materials in terms of availability, performance and cost. Furthermore, the Strategy is a

fundamental tool for achieving climate neutrality goals and defines a roadmap of actions and measurable targets from now until 2035.

- **National Programme for Waste Management** - [Programma Nazionale Gestione Rifiuti](#), PNRG: It constitutes a strategic guiding tool for the Regions and Autonomous Provinces for the elaboration of regional waste management plans. The Programme, with a time horizon of six years (2022-2028), starting from the European reference framework, is designed to guide public policies and encourage private initiatives for the development of a sustainable and circular economy, to the benefit of society and the quality of the environment. The Programme is one of the strategic and implementation pillars of the National Strategy for the Circular Economy, together with the National Waste Prevention Programme and other policy instruments (e.g. PNRR).
- **National Strategic Plan for Sustainable Mobility** - [Piano Strategico Nazionale Mobilità Sostenibile](#), PSNMS: Approved with Prime Ministerial Decree 30.04.2019 on the proposal of the MiMS, the Plan has the following objectives: the renewal of the road vehicle fleet, through the replacement of the most energy-intensive and polluting vehicles; the improvement of air quality; and the reduction of climate-altering and particulate emissions.
- **National Biodiversity Strategy 2030**: On 3 August 2023, Ministerial Decree No. 252 was signed, adopting the new National Biodiversity Strategy 2030 and establishing its governance bodies. Consistent with the objectives of the European Biodiversity Strategy 2030 and in line with the strategic vision of the international context to 2050, the new National Strategy is hinged on the following objectives:
 - **Building a coherent network of terrestrial and marine Protected Areas** with the achievement of the targets of 30% protected areas to be established on land and sea, and 10% strictly protected areas;
 - **Restoring terrestrial and marine ecosystems**, with the achievement of the target of 30% restoration of the conservation status of habitats and species, in particular through the work carried out at the regional scale concerning the conservation objectives and measures of Natura 2000 Network sites.

Germany

Germany has implemented several specific laws and initiatives aimed at promoting environmental sustainability:

- **National Strategy on Biological Diversity**: This strategy aims to halt biodiversity loss and promote sustainable land use. It includes measures for habitat protection, species conservation, and sustainable agricultural practices (Federal Agency for Nature Conservation, 2021).
- **Energy Transition (Energiewende)**: A comprehensive initiative to increase renewable energy and improve energy efficiency, the Energiewende encompasses various laws, including the Renewable Energy Sources Act (EEG) and the Energy Efficiency Strategy (BMU, 2021).

- **National Circular Economy Strategy:** Launched in 2021, this strategy promotes waste reduction and recycling, enhancing resource efficiency. It aims to transition from a linear to a circular economy, where resources are reused and recycled (Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, 2021).

Greece

- **Adoption of the National Biodiversity Strategy for the years 2014-2029 and five-year Action Plan duration.**

Greece's biodiversity - and the ecosystem functions it supports, i.e., the country's natural, considered national, capital - is valued, rationally managed, effectively protected, restored both as an intrinsic value and because of its essential contribution to prosperity and economic well-being. The overall objective of the strategy is to halt biodiversity loss, to promote biodiversity as a national asset, to intensify Greece's contribution to the global prevention of biodiversity loss.

- **National Circular Economy Action Plan (revised)**

In March 2020 the European Commission presented the new EU Action Plan for the Circular Economy, one of the main pillars of the European Green Deal. The new European Action Plan focuses on sectors with increased resource use and high circularity potential, such as, and among others, electronics, batteries, vehicles, packaging, plastics, textiles, textiles, construction, food, water and nutrients. Already in December 2018, the Ministry of Environment and Energy published the National Strategy for the Circular Economy and the National Operational Action Plan 2018-2019. In November 2021, the National Action Plan was revised and concretized with the new Country Action Plan for the Circular Economy. The first actions towards the circular economy are: - The adoption of Law 4736/2020 for the harmonisation of Directive 904/2019 on the reduction of the impact of certain single-use plastic products. - The approval of the Action Plan for Green Public Procurement by the Ministry of Development and Investment and the Ministry of Environment and Energy in February 2021; - The award of the Eco-label for products from different categories (extended to financial services). - The issuance of specifications for the inclusion of projects promoting the circular economy in various NSRF funding programs, etc.

- **National Plan for Energy and Climate (revised)**

The revised National Energy and Climate Plan (NECP) is a Strategic Plan for the Greek Government on Climate and Energy issues and presents a detailed roadmap for the achievement of comparable Energy and Climate Targets towards the goal of climate neutrality in 2050, with 2030 as the initial milestone. The NCCR presents and analyses Priorities and Policy Measures across the whole spectrum of the economy, making it a reference document for the coming decades. Greece has made successive leaps in its energy transition in recent years, having emerged as a pioneer in the European Union, having exceeded the targets set in the first NSRF in 2019, for the penetration of RES and the reduction

of GHG emissions. This is why it is in a position, in the context of the revised NSRF, to set more ambitious energy and climate targets for 2030 initially, while targets are now also set for the period up to 2050.

Serbia

Serbia has a comprehensive set of laws and national initiatives that promote environmental sustainability across various domains. [Key legislation includes:](#)

- **Environmental Protection Law (Zakon o zaštiti životne sredine, Official Gazette of RS, No. 135/2004, latest amendments in 2016).**

This is the cornerstone of Serbia's environmental legislation. It recognizes environmental protection as a fundamental right of citizens and enshrines principles such as the precautionary principle, sustainable development, and the "polluter pays" principle. The law mandates environmental impact assessments (EIA) for potentially harmful projects, requires permits for activities with significant environmental impact, and provides the legal basis for secondary regulations related to air, water, soil, and biodiversity protection. It also established the Serbian Environmental Protection Agency (SEPA) as the central body for environmental monitoring and reporting.

- **Law on Nature Protection (Zakon o zaštiti prirode, Official Gazette of RS, No. 36/2009)**

This law governs the conservation of biodiversity and protection of natural heritage. It enables the designation and management of protected areas such as national parks, nature reserves, and monuments of nature. It aligns Serbia's legal framework with the EU's Natura 2000 network and the Convention on Biological Diversity. The law prohibits harm to endangered species and critical habitats and mandates the adoption of management plans and conservation measures with the active involvement of local communities.

- **Law on Waste Management (Zakon o upravljanju otpadom, Official Gazette of RS, No. 36/2009)**

This legislation establishes a framework for the collection, transport, treatment, and disposal of waste, in line with EU directives. It introduces the waste management hierarchy, giving priority to prevention, reuse, and recycling before final disposal. The law also assigns extended responsibility to producers for managing packaging waste and hazardous materials, and it supports the development of recycling systems and landfill standards to minimize environmental impact.

- **Law on Air Protection (Zakon o zaštiti vazduha, Official Gazette of RS, No. 36/2009)**

This law regulates air quality by setting emission standards for pollutants such as PM_{2.5}, PM₁₀, SO₂, NO₂, CO, and O₃. It aligns with EU air quality standards and requires regular air quality monitoring and public disclosure. Industrial facilities and power plants must obtain emissions permits and implement pollution control technologies. This law plays a central role in tackling air pollution, especially from coal-fired power plants and urban traffic, which are major challenges in Serbia.

- **Water Law (Zakon o vodama, Official Gazette of RS, No. 30/2010, amendments in 2012)**

The Water Law regulates the use, protection, and management of water resources. It sets standards for the quality of surface and groundwater, governs water abstraction, and mandates pollution control measures for industrial and agricultural sources. Significant uses of water (e.g. for hydroelectric projects or industrial processing) require permits. The law also calls for maintaining ecological flow in rivers and preventing hazardous discharges, thus contributing to the sustainable use of freshwater ecosystems.

- **Law on Climate Change (Zakon o klimatskim promenama, Official Gazette of RS, No. 26/2021)**

This law provides Serbia with a legal basis for systematic climate action. It includes provisions for developing national and sectoral climate plans, establishing a GHG monitoring system, and aligning with the EU Climate Law and the Paris Agreement. The law re-establishes the National Climate Change Council as an advisory body and mandates the preparation of a National Adaptation Plan. It also supports the implementation of Serbia's Low-Carbon Development Strategy by giving legal force to emission reduction targets.

2.4. National legislative provision about education for environmental sustainability

Italy

Italy includes sustainability issues cross-curricular, both in terms of general goals and values, as well as in relation to the guidance specifics provided on how they should be included, starting with the primary regulatory frameworks:

- [Law 107/2015 Art. 1 para. 7 \(e\)](#) Reform of the national education and training system and delegation of authority for the reorganization of existing legislative provisions. In specific, **the point e of paragraph 7** foresees development of responsible behaviour inspired by the knowledge and respect for legality, sustainability environment, landscape assets, heritage and cultural activities.

- [Law 92 of Aug. 20, 2019](#) introduced from the 2020-2021 school year the cross-curricular teaching of civic education in the first and second cycles of education, with initiatives to raise awareness of responsible citizenship starting in kindergarten.
- Guidelines for the teaching of civic education were published by [Ministerial Decree No. 35 of 06/22/2020](#). For the school years 2020/2021, 2021/2022 and 2022/2023, the educational institutions of the national education system, including the Provincial Centres for Adult Education, shall define, in first implementation, the civic education curriculum, taking as reference the Guidelines, indicating competence goals, learning outcomes and specific objectives of learning, in coherence and possible integration with the National Directions for the curriculum for preschools and the first cycle of education, as well as with the document National Directions and New Scenarios, and with the National Directions for high schools and the Guidelines for technical and vocational schools in force.
- [Article 10 of Legislative Decree No. 196 of November 8, 2021](#) For the purposes referred to in paragraph 1, the Ministry of Education adopts "Regenerate School," the Plan for the Ecological and Cultural Transition of Schools, which provides for the implementation, for the benefit of the school community, of training activities aimed at promoting awareness and knowledge of the issues related to the consumption of single-use plastics and transforming living habits in a sustainable way. The Plan also provides, as well, the specific criteria for identifying suitable subjects for the implementation of training activities so that the provision of training takes place in an impartial and objective manner.

Germany

Germany has recognised the importance of education in achieving environmental sustainability. The **National Strategy for Education for Sustainable Development** aims to integrate sustainability into all levels of education. This includes:

- **Curriculum Development:** Educational materials and curricula are designed to incorporate sustainability topics across subjects, ensuring that students understand the importance of environmental stewardship (Federal Ministry of Education and Research, 2021).
- **Teacher Training:** Programmes are in place to train educators in sustainability education methodologies, equipping them with the skills to teach students about environmental issues effectively (German Commission for UNESCO, 2021).
- **Partnerships with NGOs:** Collaboration with non-governmental organisations promotes environmental education initiatives in schools and communities. These partnerships often involve projects that engage students in hands-on learning experiences related to sustainability.

- **Extracurricular Activities:** Many secondary schools offer extracurricular activities focused on environmental sustainability, such as eco-clubs, gardening projects, and community clean-up events. These activities provide students with practical experience and foster a sense of responsibility towards the environment.

In **Lower Saxony**, the decree "Education for Sustainable Development (BNE) in public general education and vocational schools as well as schools under private sponsorship" came into effect on June 1, 2021. This decree aims to promote a clear understanding of education for sustainable development in schools and to systematically integrate BNE into teaching and school culture (Lower Saxony Ministry of Education, 2021).

The goal of the decree is to continuously develop the quality of education for sustainable development and to equip students with the skills to make informed decisions and act responsibly. This includes protecting the environment, promoting a viable economy, and creating a just society for present and future generations, while also respecting cultural diversity (Lower Saxony Ministry of Education, 2021).

The framework for BNE in Lower Saxony is also to be viewed in the context of international initiatives. Following the UN Decade for Education for Sustainable Development, which ended in 2014, the UNESCO World Action Program was adopted in 2015, encompassing all three dimensions of sustainability. In Germany, the National Action Plan for Education for Sustainable Development was adopted on June 20, 2017, which contains specific recommendations for the dissemination of BNE (Lower Saxony Ministry of Education, 2021).

Additionally, the mandate for education for sustainable development in Lower Saxony arises from § 2 of the Lower Saxony School Act (NSchG) and § 2 of the Training and Examination Regulation (APVO-Lehr). The Development Policy Guidelines of the State of Lower Saxony, which came into effect in 2015, and the Lower Saxony Sustainability Strategy of 2017, which includes a chapter on BNE, further support these efforts (Lower Saxony Ministry of Education, 2021).

In this context, the Lower Saxony Ministry of Education promotes various areas, including extracurricular learning sites for BNE, international sustainability schools, environmental schools in Europe, global learning, sustainable mobility, the Lower Saxony School Garden Network, and UNESCO project schools. These initiatives help raise awareness of sustainable development and actively involve students in shaping a sustainable future (Lower Saxony Ministry of Education, 2021).

Greece

- **The Centers for Environmental Education -KEPEA**

The Centers for Environmental Education (formerly KPE, now KEPEA) constitute a network of decentralized, sustainable public educational structures under the Ministry of Education, focusing on environmental education and its support at the local, national, and international levels. The ultimate goal of environmental education is to cultivate environmental awareness and to sensitize students so that they perceive the environment holistically and approach it in an interdisciplinary manner.

Through the work of the Centers for Environmental Education, innovative educational methods are developed, promoted, and implemented with a focus on environmental protection and sustainable development.

There is a total of 53 Centers for Environmental Education across Greece, which are run by a team of educators from various fields. Their mission is to:

- Implement environmental programs for all levels of education
- Collaborate with environmental education coordinators of each regional education authority
- Produce educational support materials
- Support and promote research in the field of environmental education
- Host students during environmental field trips
- Offer training sessions for teachers and students of all educational levels

Some of the topics addressed by the KEPEA centers during the 2024–25 school year include: climate change, circular economy, environmental footprint, recycling, education for sustainability, biodiversity, local ecosystems, and sustainable development. A large number of schools participated in these activities. For example, only in East Thessaloniki's area 151 schools (Middle Schools, Upper High Schools, Vocational Schools) implemented environmental projects and cooperated with different KEPEAs.

- **Skills Labs**

Skills Labs is a new, innovative school module which focuses on the cultivation of soft and digital skills. The *Skills Labs*' main goal is the cultivation of skills necessary for a rapidly changing world. These skills include both fundamental life skills related to health, safety, and social interactions, as well as more elaborate skills related to education and life-long learning. Particular emphasis is placed on the 4Cs of 21st century skills – communication, collaboration, critical thinking, and creativity – along with digital skills.

The *Skills Labs* is designed to promote and bring into effect the UN Sustainable Development Goals, with particular emphasis to Goal 4.7 and has gathered significant attention from international bodies such as UNSECO. It was awarded the **Global Education Network Europe (GENE) Global Education Award (2020/2021)**.

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The *Skills Labs* are divided in four thematic cycles: Well-being, Environment, Social Empathy and Accountability, Creative Thinking and Innovation. Since September 2021 the *Skills Labs* have been rolled out to all classes throughout the country. In addition, almost 100% of the total of targeted teachers have either completed (60,000) or enrolled in the *Skills Labs* module teacher training (32-hour online workshop). Source: Eurydice Unit Greece Regarding the thematic *Caring for the Environment* there are modules about a) Ecology-Global and Local Natural Heritage, b) Climate Change -Physical Disasters, c) Prevention and Protection -Sustainability. From school year 2024-25 the Ministry of Education engaged the activity "Active citizen" under the umbrella of Skills Labs, promoting active citizenship and environmental awareness in schools.

Serbia

The Serbian legal framework for education incorporates environmental sustainability through:

- The **National Education Strategy** (up to 2030), which promotes sustainable development education at all levels.
- **Laws on Primary and Secondary Education**, allowing the integration of environmental topics into subjects like biology, geography, and civic education.
- Programs encouraged by the **Ministry of Education**, such as eco-contests, teacher training, and participation in global networks (e.g., UNESCO ASPnet).

Education for Sustainable Development in Serbia

The goal of Serbia's national efforts in education for sustainable development (ESD) is to enhance the quality of education and to empower students with the knowledge, skills, values, and attitudes needed to make informed decisions and act responsibly for environmental integrity, economic viability, and a just society. This includes preserving natural resources, supporting sustainable economic practices, and fostering social equity for current and future generations, while respecting cultural and ethnic diversity.

Serbia's approach to ESD is aligned with international frameworks, particularly UNESCO's Global Action Programme on Education for Sustainable Development, which followed the UN Decade of Education for Sustainable Development (2005–2014). As a member of the United Nations and a participant in the 2030 Agenda for Sustainable Development, Serbia has committed to achieving the Sustainable Development Goals (SDGs), including Goal 4.7, which focuses on integrating sustainability into all levels of education.

At the national level, the Strategy for Education Development in Serbia 2020 and the new Strategy for Education until 2030 highlight sustainability as a core educational principle. Additionally, the Law on the Fundamentals of the Education System mandates the inclusion

of environmental education and the development of civic competencies, both of which form the basis for ESD. The Ministry of Education has also supported the integration of topics related to climate change, environmental protection, and responsible consumption into school curricula.

Serbia promotes ESD through a range of programs and partnerships, including cooperation with civil society organizations, eco-schools, and participation in regional and European educational networks. The "Eco-Schools" program, coordinated by the Foundation for Environmental Education (FEE), is one of the most widespread initiatives, helping schools engage students in environmental activities and community outreach. Moreover, the establishment of school gardens, project-based learning on sustainability topics, and international exchanges on environmental themes have helped expand the reach of ESD across the country.

Conclusions & suggestions

From the analysis of all partner country national policy frameworks, it is evident the common effort in promoting sustainability at various levels, including through a proper educational approach, in order to better reach younger generations and systematically contribute to a more environmentally aware society. However, despite the fact that in the countries where researches were done, and in general at more global level, i.e. in all countries adopting the [2030 Agenda for Sustainable Development of United Nations](#) (UN), there are obviously differences in national policies/laws and educational approaches to environmental sustainability, linked to each country-specific context, their efficacy can be, perhaps, further improved. Especially as far as education is concerned, major priority could be given to the implementation of more targeted initiatives or programmes, in order to have the greatest impact on future generations.

More generally, achieving the 2030 Agenda Goals in each country requires the activation of public policy coordination systems in order to make them coherent and integrated. The national strategies, which are added to those defined at the European level or decline them for countries presented, therefore assume a central role by defining objectives, indicators and processes for their implementation on the territories, e.g. National Strategy for the Circular Economy in Italy, Germany and Greece, National Climate Change Plan in Italy, Germany, Greece and Serbia.

In light of such considerations, our project intends to offer a possible solution to further strengthen national efforts towards the development of a more sustainable culture. As part of the project, UpSpace' Future oriented curricula, for both teachers and students, can represent a valuable starting point to better and more homogeneously integrate sustainability at school, as one of the fundamental institutions on which is based the wellbeing

of our societies. Based on the abovementioned national frameworks, these curricula provide opportunity for continuous professional development for teachers and active learning opportunities for students to better understand the complexities of our world and how they can contribute to a greater shift towards a more sustainable future. By proposing such curricula, UpSpace aims at suggesting schools to adopt a comprehensive curriculum which could potentially serve as a guide to addressing the issue of environmental sustainability at an educational level, specifically addressing sustainable development, no more as a separate topic, but as a soundly integrated subject, independent but at the same time strictly linked with many other academic disciplines.

Best Practices

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 5 examples per country illustrating how some national policies and educational approaches to environmental sustainability were implemented in the form of the project, initiatives, campaign or proposals by public or private bodies on local or national level. These examples emphasise the awareness and importance of the topic at different European levels.

Name of best practice	<i>Scuole Viaggianti</i> (travelling schools)
Country	Italy
Type:	Estra's educational project is dedicated to pre-school, primary and secondary schools.
Year of implementation (from 2020)	2024-2025
Context	
<i>Description of the initial situation</i>	Law 92 of 20 August 2019 introduced from the 2020-2021 school year the cross-curricular teaching of civic education in the first and second cycle of education. The

	second thematic core out of the total three on which this teaching is based is 'Sustainable development, environmental education, knowledge and protection of heritage and territory'. No less than 33 hours per school year should be devoted to civic education.
<i>Needs</i>	Identify collaborations and opportunities to support environmental education in schools.
<i>Main objective</i>	The aim is to experiment new forms of sustainability education through innovative methodologies combining digital and theatre, stimulating students' creativity and storytelling.
<i>Challenge addressed</i>	Offering students, the opportunity to reflect on the topic of sustainability and to develop critical thinking in an amusing way, despite the limited time available for this teaching at school.
Best Practice Description	
<i>Contents</i>	<p>On the website, schools discover seven cities to visit, each with its own particular sustainability issue. Students tackle the issue creatively, through the proposed teaching methods. Teachers have a Traveller's Kit available for each city, which contains videos and activity plans tailored to the age of the participants.</p> <p>At the end of the trip, students are invited to</p> <ul style="list-style-type: none"> - design, imagine and create their ideal smart city (a jury will eventually award 14 prizes to the best schools in various regions of Italy). - create their own travel diary: a report of the journey they have made during the year on environmental sustainability education. In this diary the students collect texts and pictures of the workshop experiences carried out with Scuole Viaggianti, school projects, educational trips and classroom activities concerning the UN Agenda 2030 Sustainability Goals. At the end of the journey, the 9 schools in the regions of Tuscany, Umbria, Marche, Abruzzo and Molise that will win the prize for the best Travel Diary will host, in available school spaces

	(courtyard, lecture hall, gymnasium, theatre, etc.) or in other locations, a live, zero-impact, energy-saving theatre performance, produced by ESTRA and realised by the Straligut theatre company, entirely inspired by the theme of the environment and travel. An actor-narrator will tell the wonders of their long journey, inspiring everyone to believe that change is possible and that the future is built together.
<i>Innovation</i>	<p>It is distinguished by its ability to combine fun and learning through engaging, hands-on activities. Students are invited to design their own 'Ideal Cities' allowing them to visualise a better future and encouraging them to use creativity and critical thinking. Another innovative aspect of the project is the 'Travel Diary', in which students can document their experiences and activities related to environmental sustainability education. This presentation may include stories, videos, school projects and other activities carried out during the year, all focused on the Sustainability Goals of the UN 2030 Agenda.</p> <p>The project, which has already involved over 1,600 schools and almost 65,000 pupils in Central Italy in previous editions, demonstrates the company's strong commitment to educating and raising awareness among the younger generations on crucial issues such as environmental sustainability.</p>
<i>What can be transferred to other contexts</i>	The project is in line with RiGenerazione scuola, the plan for the ecological and cultural transition of schools and the National Recovery and Resilience Plan (Italian PNRR), which makes its aims particularly shareable in other regions of Italy and beyond. Other schools around the world can take inspiration from it, adapt the idea to their own context and available resources, and initiate similar pathways to environmental sustainability awareness.
Link	https://www.scuoleviaggianti.it/ https://corporate.estra.it/rsi/progetti

	https://corporate.estra.it/posts/bulletin/comunicato-le-scuole-pronte-per-iniziare-un-nuovo-viaggio-con-estra-verso-un
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Name of best practice	<i>Mestieri che vogliono bene alla terra (Crafts that love the earth)</i>
Country	Italy
Type:	Educational proposal organised by Slow Food Education and financed by the Ministry of Labour and Social Policy, and in particular by the Directorate-General for the Third Sector and Corporate Social Responsibility.
Year of implementation (from 2020)	18-month project, concluded on 30 June 2023
Context	
<i>Description of the initial situation</i>	Some professions depend on the Earth and take care of it. These are professions of fundamental importance to society as a whole. However, young people today are not very familiar with these professions.
<i>Needs</i>	To familiarise young students with some important sustainable professions in order to be able to decide which career path is best for their future, or even (just) to learn what to eat and how to shop consciously.
<i>Main objective</i>	Promoting sustainable agriculture and actions, at all levels, to combat climate change; educating on sustainable consumption and production models. The project involves 150 schools in 9 Italian regions: Abruzzo, Basilicata, Calabria, Emilia-Romagna, Friuli-Venezia Giulia, Lazio, Piemonte, Sicily, Umbria.
<i>Challenge addressed</i>	Encourage first-hand experience of the professions of the future, i.e., all those professions that, by existing and acting in a good, clean and fair way, can tackle the climate crisis through food and ensure a better future for us.

Best Practice Description	
<i>Contents</i>	<p>Slow Food has made available the local networks made up of the crafts, traditions and knowledge of those who, on a daily basis, tackle the defence of ecosystems: local producers who protect the territory, chefs who create alliances with artisans to enhance the excellence and biodiversity of their lands. All those careful jobs that make it possible to design a new way of doing system and economy.</p> <p>The direct encounter with the network's artisans and the discovery of local products is a moment of play, discovery and growth, in perfect Slow Food style. The aim of this project is to give students the opportunity to get to know ecosystems and their balances up close, to increase their sense of belonging to a community and to experience virtuous production realities in order to acquire the skills necessary for a critical and informed reading of future challenges.</p>
<i>Innovation</i>	<p>Within the project, small producers and realities that protect territories and valorise local products were chosen. The project was divided into two stages</p> <ul style="list-style-type: none"> - the encounter with the 'craft' prepared in class through reading websites, information and promotional brochures, newspaper articles, interviews, etc. - the encounter with the real 'craft' through a visit to the company or a meeting held directly at school.
<i>What can be transferred to other contexts</i>	<p>The idea is perfectly replicable in other countries by identifying organisations that locally promote the culture of healthy eating and the promotion of sustainable and responsible jobs/crafts in direct contact with nature.</p>
Link	<p>https://www.slowfood.it/se-i-giovani-incontrano-i-mestieri-che-vogliono-bene-alla-terra/ https://www.slowfood.it/educazione/</p>

Name of best practice	<i>Albero di Falcone (Falcone's tree)</i>
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Country	Italy
Type:	Environmental legality education project, the National Project "A Tree for the Future," sponsored by the Ministry of Ecologic Transition.
Year of implementation (from 2020)	2020-2022
Context	
<i>Description of the initial situation</i>	The Carabinieri Foresteri are doing their part by protecting the priceless heritage of State Nature Reserves and State Forests. A green ridge that ideally crosses the entire Italian territory and represents an example of unified management of a European biodiversity capital unique for its variety of habitats.
<i>Needs</i>	Know the environmental benefits of having more tree species: the more plants we plant the greater the CO2 savings. Wanting to visualize our action with a graph we would see that as the years go by our carbon dioxide savings will increase and the benefit to the environment and our health will increase.
<i>Main objective</i>	The main objective was to create CO2 savings by planting trees and combat environmental crimes with the Environmental Legality Education Weapon and the involvement of schools in this strategic goal. The presence of the Falcone Tree will help raise awareness of social engagement but also the importance of environmental protection.
<i>Challenge addressed</i>	
Best Practice Description	
<i>Contents</i>	"A Tree for the Future" involves the donation and planting in Italian schools of about 500,000 seedlings over the three-year period 2020-2022: to date, nearly 900 schools have signed up and embarked on this path toward awareness of the importance of trees for climate change mitigation and environmental conservation with the support of the Carabinieri of Biodiversity. The supply of native plant species to be given to students has been enriched since April 2020 by a tree that symbolizes

	<p>commitment to the state and the fight against the Mafia: The Judge Giovanni Falcone Tree. Some buds of the famous <i>Ficus macrophylla columnarismagnoleides</i> that grows near the house of the judge murdered in 1992 by the Mafia, in fact, were taken thanks to the collaboration between the Carabinieri, Falcone Foundation, the Municipality and the Superintendence of Palermo and duplicated in the modern Carabinieri National Center for Forest Biodiversity (CNBF) in Pieve Santo Stefano (AR). The first schools to receive were those named after the Judge in Sicily and throughout Italy, which are estimated at 108 institutions including Primary I and II grades. These trees will help to form the "Great Widespread Forest" formed by the young plants planted by all the students and which will be visible on a special web platform that will monitor growth and CO2 storage.</p>
<i>Innovation</i>	The Center, at the forefront in Europe in the study and conservation of native forest species, was able to reproduce the tree to generate small Falcone plants to be donated to schools that request them.
<i>What can be transferred to other contexts</i>	The idea is perfectly replicable in other countries and other species of trees.
Link	https://unalberoperilfuturo.rgpbio.it/albero-di-falcone/

Name of best practice	<i>ORTI e PORTICI - Laboratorio permanente di Alfabetizzazione Vegetale - Giardino Savioli (GARDENS and PORCHES - Permanent workshop of Plant Literacy - Savioli Garden)</i>
Country	Italy
Type:	A theoretical/practical journey between history and landscape study, poetry and botany, entomology and photography, biology and horticulture to address issues

	of environmental protection from observation of the land in which we live.
Year of implementation (from 2020)	2022- active
Context (max. 2000 characters per section)	
<i>Description of the initial situation</i>	Environmental education was proposed in the workshop that aims to bring students closer to nature by theoretical and practical approach, which will help students to better understand environmental protection.
<i>Needs</i>	Addressing issues of environmental protection from the observation of the territory.
<i>Main objective</i>	The Savioli Garden proposes an educational itinerary aimed at preschools and elementary school in the area that broadens the skills of environmental education to include awareness of the history of places, making room for ENVIRONMENTAL HISTORY, one of the educational areas considered necessary and urgent for a new civic culture that holds together attention to the environment with social consciousness.
<i>Challenge addressed</i>	
Best Practice Description	
<i>Contents</i>	The PLANT ALPHABETIZATION workshop was attended by students from the "Liceo Scientifico Fermi" of Bologna in extra-curricular hours, proposed as a PCTO, and some adults (60 / 70 participants). In the green area, the following was identified a biodiversity "hotspot" for pollinators and beneficial insects, and the Savioli garden was been included in a Distal/UNIBO Research Project for the creation of corridors ecological corridors for apoids, hoverflies and odonates in the city of Bologna. The History-Environmental Workshop "What if I were a tree?" involved 4 sections of the Preschools "Carducci" and "Baraccano" (60/70 participants).
<i>Innovation</i>	The workshop is permanent, allowing for a bigger impact.

<i>What can be transferred to other contexts</i>	These types of workshops are easily applicable in different countries and also other contexts
Link	http://giardinosavioli.it/2023/02/23/laboratorio-alfabetizzazione-vegetale/ http://giardinosavioli.it/area-didattica/

Name of best practice	Education for Sustainable Development (ESD) Strategy 2030
Country	Germany
Type:	National Education Strategy
Year of implementation (from 2020)	2020
Context	
<i>Description of the initial situation</i>	Before 2020, the integration of sustainability into the education system in Germany was inconsistent and often not systematic. Many schools had individual projects, but there was a lack of a comprehensive strategy.
<i>Needs</i>	There was a need for a coherent strategy that integrates sustainability across all educational levels and actively involves teachers and students.
<i>Main objective</i>	The ESD Strategy 2030 aims to embed education for sustainable development in all forms and levels of education.
<i>Challenge addressed</i>	The challenge was to create a unified understanding of sustainability and motivate schools to develop their own concepts.
Best Practice Description	
<i>Contents</i>	The strategy includes curricula, training offers for teachers, and the promotion of school projects focused on sustainability.
<i>Innovation</i>	The strategy promotes an interdisciplinary approach that links social, economic, and environmental aspects

	of sustainability.
<i>What can be transferred to other contexts</i>	The development of a national strategy can serve as a model for other countries to integrate sustainability into their education systems.
Link	BNE Portal

Name of best practice	The "Klimabildung" Initiative
Country	Germany
Type:	Educational Initiative
Year of implementation	2022
Context	
<i>Description of the initial situation</i>	Climate change and environmental education were not sufficiently addressed in many schools, leading to a knowledge deficit among students.
<i>Needs</i>	Teachers needed resources and training to effectively teach climate education.
<i>Main objective</i>	The initiative aims to train teachers in climate education and provide materials.
<i>Challenge addressed</i>	The challenge was to empower teachers to convey complex climate topics in an understandable way.
Best Practice Description	
<i>Contents</i>	The initiative offers workshops, digital resources, and a network for sharing best practices.
<i>Innovation</i>	The use of digital tools and interactive learning methods enhances student engagement.
<i>What can be transferred to other contexts</i>	The development of teacher training programs can be adopted in other countries to strengthen climate education.
Link	Klimabildung Initiative

Name of best practice	"Schule der Zukunft" (School of the Future) Program
Country	Germany

Type:	School Program
Year of implementation (from 2020)	2021
Context	
<i>Description of the initial situation</i>	Before the launch of the "Zukunftsschule" project, many schools faced challenges in adapting their educational approaches to address contemporary societal issues such as populism, extremism, and climate change. There was a need for innovative frameworks that would allow schools to evolve beyond traditional teaching methods.
<i>Needs</i>	Schools required more freedom and flexibility to develop curricula that not only impart knowledge but also promote values such as responsibility, solidarity, and peaceful coexistence.
<i>Main objective</i>	The "Zukunftsschule" project aims to explore how education can be reimagined and practiced in a way that fosters democracy and sustainability, making schools active agents of social change.
<i>Challenge addressed</i>	The project addresses pressing societal challenges by empowering schools to become places of learning and transformation, thereby contributing to a more resilient and engaged society.
Best Practice Description	
<i>Contents</i>	Over 60 participating schools are involved in this five-year project, experimenting with innovative educational practices that emphasize democratic values and sustainability. The project encourages schools to develop their own unique approaches to education, fostering an environment where students can actively engage with societal issues.
<i>Innovation</i>	The project promotes a shift from traditional education to a more holistic approach that integrates social responsibility and environmental awareness into the learning process. Schools are seen not just as educational institutions but as catalysts for positive

	societal change.
<i>What can be transferred to other contexts</i>	The "Zukunftsschule" model can serve as an example for other countries looking to reform their educational systems to better address contemporary challenges. The emphasis on flexibility and community engagement can be adapted to various educational contexts.
Link	Schule der Zukunft

Name of best practice	"Global Goals for Sustainable Development" Education Campaign
Country	Germany
Type:	Educational Campaign
Year of implementation (from 2020)	2022
Context	
<i>Description of the initial situation</i>	Awareness of the UN Sustainable Development Goals (SDGs) was low in many schools, and there was a lack of concrete educational offerings.
<i>Needs</i>	There was a need for materials and programs that integrate the SDGs into the curriculum.
<i>Main objective</i>	The campaign aims to raise awareness of the SDGs among students and educators.
<i>Challenge addressed</i>	The challenge was to engage students in global issues and promote active participation in sustainability initiatives.
Best Practice Description	
<i>Contents</i>	The campaign provides resources for teachers and encourages schools to develop projects aligned with the SDGs.
<i>Innovation</i>	The campaign uses a gamified approach to engage students in learning about global challenges.
<i>What can be transferred to other contexts</i>	The model of integrating global goals into local education systems can be replicated in other countries.

Link	Global Goals Education Campaign
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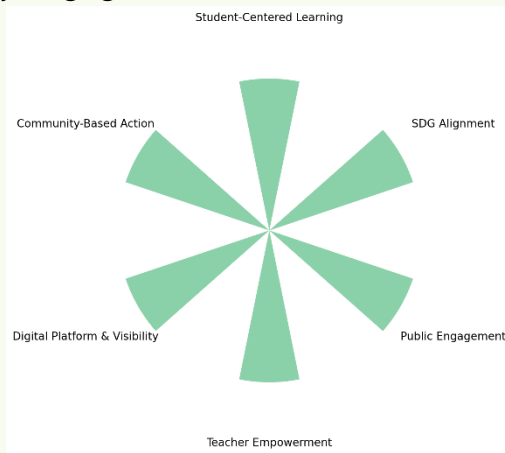
Name of best practice	"Schools for Earth" Certification Program
Country	Germany
Type:	Certification Program
Year of implementation (from 2020)	2023
Context	
<i>Description of the initial situation</i>	Before the launch of the "Schools for Earth" program, many schools in Germany were engaged in sustainability and climate protection efforts, but there was a lack of a formal recognition system to validate their initiatives.
<i>Needs</i>	Schools required a structured framework to guide their sustainability efforts and to receive support in implementing educational practices for sustainable development.
<i>Main objective</i>	The "Schools for Earth" certification aims to recognize and support schools that demonstrate a commitment to climate protection and sustainability through a comprehensive and continuous transformation process in education for sustainable development (BNE).
<i>Challenge addressed</i>	The challenge was to create a clear framework that encourages schools to integrate sustainability into their curricula and school operations while providing them with the necessary resources and training.
Best Practice Description	
<i>Contents</i>	The certification process involves schools demonstrating their commitment to sustainability through various initiatives, such as developing a sustainable school environment, conducting annual CO2 assessments, and implementing reduction measures. Schools also receive training and material support to enhance their educational practices.

<i>Innovation</i>	The program emphasizes a holistic approach to sustainability, integrating practical projects like tree planting and energy-saving initiatives into the school curriculum, thereby fostering a culture of environmental responsibility among students.
<i>What can be transferred to other contexts</i>	The "Schools for Earth" certification model can be adapted in other countries to promote and recognize sustainable practices in educational institutions, providing a structured approach to integrating sustainability into school operations and curricula.
Link	Schools for Earth - Greenpeace

Name of best practice	InAction for a better world – Bravo Schools
Country	Greece
Type:	<u>National participatory sustainability and environmental educational program</u>
Year of implementation (from 2020)	Ongoing, from 2018
Context	
<i>Description of the initial situation</i>	<p>Prior to the launch of Bravo Schools, environmental and sustainability education in Greek schools was fragmented, inconsistent, and often dependent on the individual motivation of educators or NGOs. Although the Sustainable Development Goals (SDGs) had been adopted at a national policy level, their integration into formal and non-formal education remained limited and lacked a coherent, participatory framework.</p> <p>Students were rarely engaged in hands-on learning projects that connected global challenges like climate change, biodiversity loss, or resource consumption to their local realities. Most schools lacked the tools or training to embed sustainability principles into their curricula in a meaningful and measurable way. Furthermore, there was no national platform that systematically recognized, evaluated, and disseminated</p>

	<p>the efforts of schools engaging in sustainability initiatives. Teachers often operated in isolation, and good practices were rarely shared or scaled up. Despite growing environmental awareness among youth, opportunities for student-led action and democratic participation in school-based decision-making were limited. There was a gap in linking education to civic responsibility and real-world impact. In parallel, public discourse on sustainability issues lacked the integration of youth voices and community-level educational innovation. With no structured incentive or feedback system in place, environmental education remained marginal in both pedagogical and public terms. The lack of institutional visibility for successful school initiatives meant limited long-term commitment and almost no policy feedback loops. The national education system required a robust, participatory, and inclusive mechanism to engage schools in environmental sustainability, empower students, and create public awareness around SDG implementation through education.</p>
<i>Needs</i>	<p>The development of the Bravo Schools initiative responded to several pressing needs in the Greek educational and societal landscape. First, there was a clear demand for a structured, inclusive, and participatory platform that would allow schools across the country to engage meaningfully with the UN Sustainable Development Goals (SDGs), particularly those related to environmental sustainability, such as SDG 13 (Climate Action), SDG 15 (Life on Land), and SDG 12 (Responsible Consumption and Production). Teachers and students needed both institutional support and pedagogical tools to translate these global objectives into local educational projects that were both relevant and actionable. Another critical need was the recognition of schools' efforts in sustainability education, as most school-based initiatives were not</p>

	<p>systematically documented, evaluated, or celebrated, leading to low motivation among educators to pursue ambitious projects beyond their curriculum obligations. Furthermore, there was a need to foster inter-school collaboration and community engagement, ensuring that successful projects could be shared and replicated. Teachers expressed the need for professional development opportunities and access to teaching materials and good practices that would align environmental topics with existing educational standards. In addition, students lacked platforms through which they could take ownership of learning and action on sustainability. The need to cultivate active citizenship and connect classroom learning with real-world problem-solving was paramount.</p> <p>On a societal level, there was also a need to strengthen the link between schools and the broader public. Environmental education in Greece was often disconnected from civic participation and policy dialogue. Bravo Schools was developed to address these gaps by offering a national structure that values participatory learning, creates visibility for grassroots efforts in education, and empowers the next generation of environmentally responsible citizens.</p>
<i>Main objective</i>	<p>At its core, the initiative aims to transform schools into active agents of change, where sustainability is not only taught theoretically but experienced and applied through action. The program aspires to build a generation of -among others- environmentally literate and socially responsible students who understand their role in tackling global challenges such as climate change, biodiversity loss, and resource depletion.</p> <p>Bravo Schools sets out to bridge the gap between formal education and civic engagement by offering schools the opportunity to develop sustainability-focused projects that are evaluated, publicly recognized, and shared across a national network. It</p>

	<p>emphasizes inclusive participation, encouraging not only teachers and students but also parents, local communities, and public stakeholders to be part of the learning and transformation process. The platform aims to foster a culture of collaboration, creativity, and critical thinking within the school environment.</p> <p>The initiative also has a strong objective of institutional empowerment. By supporting teachers with methodological guidance and recognizing best practices, it helps embed sustainability into school culture and curricula. Furthermore, the project seeks to raise public awareness and stimulate dialogue around the role of education in achieving the SDGs.</p> <p>In the long term, Bravo Schools aims to become a driver of national educational reform, showing how bottom-up, student-led innovation can influence school priorities and policies. It aligns with Greece's national strategy for sustainable development and contributes to EU-level goals on green and digital transition. The initiative envisions an education system where every school becomes a hub of sustainability, citizenship, and community engagement.</p> <div data-bbox="846 1131 1347 1581">  </div> <p>Figure 1: Main Pillars of the Platform</p>
<p><i>Challenge addressed</i></p>	<p>One of the primary challenges is the fragmented implementation of Education for Sustainable Development in primary and secondary schools. While policy frameworks may reference the importance of</p>

environmental education, in practice, many schools **lack the tools, institutional incentives, or pedagogical flexibility to effectively integrate sustainability into their day-to-day teaching**. This results in uneven coverage across regions, subjects, and school types, leaving many students without exposure to the knowledge and skills needed to understand and respond to the ecological crisis.

Another core challenge tackled by the initiative is the low visibility and recognition of school efforts in sustainability education. Many teachers and students develop impactful environmental projects that remain local, undocumented, or disconnected from national education goals. Without a structure to highlight and disseminate these projects, their potential for replication and long-term influence remains unrealized. Bravo Schools responds by offering a national platform for recognition, peer learning, and community celebration of good practices.

Moreover, the initiative seeks to overcome the disconnect between schools and society in sustainability action. Environmental problems are often taught abstractly, with limited links to students' lived experiences or communities. Bravo Schools emphasizes real-world application, encouraging students to design and implement local solutions with direct relevance—whether addressing plastic waste, reforestation, clean energy, or biodiversity conservation.

A further challenge is the lack of participatory and student-centered learning models. Many students feel disengaged from **top-down** education systems. Bravo Schools promotes ownership, creativity, and collaboration, placing students at the center of the learning process. It also helps schools respond to the growing demand for alignment with the SDGs and fosters public discourse on the role of education in the green transition, thereby strengthening the connection between classroom learning and global citizenship.

Best Practice Description	
Contents	<p>The initiative operates annually, offering a clear framework for schools to engage in experiential learning through <i>structured project development, guided by pedagogical resources</i> provided by the program. Each school designs its own initiative—such as awareness campaigns, scientific experiments, community collaborations, or artistic productions—that address an environmental or social dimension of sustainability. These projects are then submitted to the Bravo Schools platform, where they undergo evaluation by independent experts, public voting, and peer exchange.</p> <p>The process is designed to be educationally robust and inclusive, involving students as co-creators of knowledge and action. Teachers are supported through thematic guides and training sessions that align SDG concepts with classroom competencies and national curriculum objectives. Students are encouraged to develop critical thinking, creativity, and civic responsibility through interdisciplinary approaches. Each project must demonstrate not only the theme it tackles but also the process behind its creation, including collaboration, impact on the school or community, and the values it promotes.</p> <p>The program culminates in a national exhibition of projects, where exemplary initiatives are recognized and publicly shared through online and offline events. These include showcases on social media, coverage in national press, and interactive forums where schools can learn from each other. The digital platform acts as a living repository of best practices, allowing schools to browse past initiatives, find inspiration, and connect with others working on similar themes. In this way, Bravo Schools acts not just as a competition, but as a continuous mechanism for pedagogical renewal, public</p>

	<p>engagement, and the mainstreaming of sustainability education in Greece.</p> <p>Most importantly, the initiative is a platform for schools that are based on remote and/or distant areas to promote their work on environmental sustainability and the protection of the environment.</p>
<i>Innovation</i>	<p>Bravo Schools introduces a deeply innovative model of education for environmental sustainability by transforming traditional pedagogical dynamics into a participatory, values-driven process that bridges formal schooling with real-world action. Its innovation lies first in its structural design—a national platform that invites every school, regardless of location or resources, to co-create projects that align directly with the UN Sustainable Development Goals (SDGs), three of which are sustainable cities (GOAL 11), responsible consumption and production (cc. circular economy GOAL 12) and climate action (GOAL 13). This decentralized but unified framework empowers teachers and students not as passive recipients of knowledge but as active contributors to social and environmental change. It redefines the role of the school in society, positioning it as a hub of civic engagement and ecological transformation.</p> <p>The program moves beyond standard curricular approaches by embedding sustainability education into school culture through experiential, project-based learning. Rather than focusing on theoretical instruction alone, Bravo Schools requires <u>students to identify a real challenge in their school or community, design a creative response, and reflect on the process and its outcomes.</u> This reinforces key 21st-century skills such as systems thinking, collaboration, problem-solving, and democratic participation. Students are encouraged to take ownership of their learning, work across disciplines, and engage with stakeholders outside the classroom—</p>

	<p>including parents, local governments, NGOs, and businesses.</p> <p>What further sets Bravo Schools apart is its integration of evaluation and public engagement into the learning process. Submitted projects are reviewed not only by an expert panel but also by citizens through open online voting, creating a national conversation about education and sustainability. The visibility and recognition generated by this process serve as powerful incentives and validation mechanisms for both students and teachers. Additionally, the program's digital infrastructure functions as a dynamic repository of practices and resources, making innovation visible, replicable, and accessible.</p> <p>This holistic, student-centered, and system-oriented approach marks Bravo Schools as a pioneering model of how national-level initiatives can foster transformative sustainability education across formal learning environments.</p>
<i>What can be transferred to other contexts</i>	<p>Bravo Schools offers a transferable framework that can be effectively adapted by other countries or educational systems aiming to integrate sustainability into formal education. Its first transferable element is its scalable and inclusive structure. The program is designed to accommodate schools of all sizes and resources, urban or rural, public or private. This universality ensures equity and broad participation—critical for fostering systemic change in education. Countries seeking to mainstream Education for Sustainable Development (ESD) can replicate Bravo Schools' open-call model, which encourages grassroots engagement while providing centralized support and recognition.</p> <p>A second transferable feature is its emphasis on student-led, project-based learning (hands on experience). Rather than mandating a fixed curriculum, Bravo Schools allows schools to define their own sustainability challenges and propose solutions that are</p>

	<p>contextually relevant. This promotes ownership and flexibility, two key principles in successful pedagogical reform. Education authorities elsewhere can adopt this model by providing guidelines, resources, and visibility tools while allowing creativity and autonomy at the school level.</p> <p>Another highly adaptable component is the digital infrastructure. The Bravo Schools online platform serves as a repository, networking hub, and exhibition space, facilitating visibility and peer learning. This format can be reproduced using open-source or custom software solutions, enabling educators and students to exchange practices, build networks, and access support materials. It also serves monitoring and impact-tracking purposes, supporting policymakers with data on participation and thematic trends.</p> <p>The public engagement dimension—particularly the combination of expert review and citizen voting—offers a model for linking education with democratic participation. This mechanism fosters a sense of shared responsibility between schools and communities and positions sustainability education as a public good.</p> <p>Finally, the integration of the SDGs as the thematic backbone makes Bravo Schools globally relevant. Its alignment with the 2030 Agenda enables adaptation to different national priorities while retaining consistency with international frameworks. This combination of structure, flexibility, and values makes Bravo Schools a compelling exportable practice in the global movement for sustainability education.</p>
Link	<p>https://inactionforabetterworld.com/ - The official website of the initiative.</p> <p>https://bravo-schools.inactionforabetterworld.com/bravo-schools-practices - The official website of the initiative.</p>

Name of best practice	Revised Greek National Circular Economy Action Plan
Country	Greece
Type:	<u>Policy Action Plan</u>
Year of implementation (from 2020)	2021
Context	
<i>Description of the initial situation</i>	<p>Prior to the introduction of the (<i>revised</i>) National Circular Economy Action Plan in 2021, Greece operated primarily under a linear economic model characterized by extractive and wasteful patterns of production and consumption. The prevailing model emphasized the extraction of raw materials, the manufacture of goods, their use, and subsequent disposal—without structured consideration for reuse, recycling, or reintegration into the economic cycle. This unsustainable approach led to overexploitation of natural resources, increasing environmental degradation, and heavy reliance on landfilling.</p> <p>By 2020, over 80% of municipal waste in Greece was disposed of in landfills, while the country struggled to meet European Union recycling targets. However, over the last 5,5 years Greece has reduced by 70% the fines imposed by the European Court of Justice for illegal landfills, that -at some point- reached the amount of €3,6 mil. per annum.</p> <p>Greece's recycling infrastructure was underdeveloped and poorly integrated, particularly at the municipal level, where systems for separate collection, sorting, and treatment of recyclables were inconsistent or</p>

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	<p>absent. Public awareness about sustainable consumption remained limited, and few incentives existed to encourage producers or consumers to adopt circular practices. Extended producer responsibility schemes were narrow in scope and lacked enforcement. There were significant gaps in regulatory coordination, especially between national and local authorities, which hindered the deployment of integrated circular economy strategies. Moreover, innovation in eco-design and resource-efficient production remained rare across industries, and market mechanisms for secondary raw materials were fragmented or lacking altogether. The absence of an overarching national strategy further intensified these issues. Without clear policy direction, Greece faced the risk of deepening its ecological footprint while missing critical opportunities to align with the European Green Deal and EU Circular Economy Action Plan. The national economy, strained by prior financial crises and the COVID-19 pandemic, was in urgent need of a regenerative and resilient model of development to safeguard environmental resources, stimulate green jobs, and strengthen long-term competitiveness through sustainability.</p>
Needs	

To transition effectively toward a circular economy model, Greece needed to address a **complex range of structural, institutional, economic, and cultural deficiencies**. A major need was the creation of a coherent national framework that could unify fragmented policies, ensure interministerial coordination, and provide strategic direction for circular practices across all economic sectors. Without an overarching policy, municipalities, industries, and citizens operated in isolation, leading to inefficiencies and a lack of synergy in sustainability efforts.

Greece also needed to drastically improve its recycling performance, especially in light of EU mandates.

Investment in waste separation infrastructure, treatment technologies, and the modernization of recycling logistics was a pressing requirement. Another crucial need was raising public awareness and changing consumption behavior. Most citizens had limited understanding of the environmental impact of their consumption habits, and few incentives existed to motivate sustainable choices. The government needed to develop nationwide educational campaigns and behavior-based incentives to engage individuals and households meaningfully.

Extended Producer Responsibility schemes needed expansion in both scope and enforcement, ensuring that producers internalize the cost of environmental externalities and are encouraged to design products that are reusable, repairable, or recyclable. In the business sector, the need for financial incentives and regulatory support was vital to encourage the adoption of circular business models, especially among SMEs. Support for innovation, digitalization, and industrial symbiosis was also lacking and required significant public

	<p>and private investment. Finally, Greece needed a reliable monitoring and evaluation system with indicators aligned to EU metrics to track progress, inform policy adjustments, and ensure accountability. Addressing these needs was essential not only for meeting EU targets but for building a resilient, low-carbon, and competitive national economy rooted in sustainable development principles.</p>
<i>Main objective</i>	

The principal objective of this strategy is to establish a **comprehensive** and **cohesive policy framework** that enables the **systematic transition** from a **linear** to a **circular economic model**.

This transition is centered on the creation of a **regenerative, climate-neutral, and resource-efficient economy that** maximizes the value of products, materials, and resources by keeping them in use for as long as possible. The Plan's overarching aim is to embed circularity into every stage of the economic cycle—starting from sustainable product design and resource-efficient manufacturing, to responsible consumption, reuse, repair, and high-quality recycling. It prioritizes the integration of circular principles into policy-making, business practices, and consumer behavior in order to reduce environmental degradation, stimulate green innovation, and enhance economic resilience.

In alignment with the **European Green Deal** and the updated **EU Circular Economy Action Plan**, Greece's strategic objective is not only environmental but also socio-economic: the plan is designed to stimulate job creation, especially in green industries, enhance competitiveness of Greek businesses, and strengthen national capacity to respond to resource scarcity and global market fluctuations. This objective is deeply connected to climate action, as reducing waste and optimizing resource use contributes directly to emissions reduction goals.

Another key component of the plan's objective is to mainstream circular economy principles across governance levels, ensuring coordination between national ministries, local governments, private stakeholders, and civil society. This systemic approach promotes a culture of cooperation and shared responsibility.

	<p>In short, the plan seeks to ensure that circularity becomes a core development strategy for Greece, enabling the country to achieve long-term sustainability, meet EU legislative obligations, and generate inclusive economic opportunities while preserving natural capital and biodiversity.</p>
Challenge addressed	

The primary challenge addressed by the hereunto Plan is the deeply entrenched linear economic model that has historically **dominated production and consumption**

patterns in the country. This model—based on **extraction, production, use, and disposal**—has led to significant resource inefficiency, excessive waste generation, and overreliance on landfilling, with recycling and reuse remaining far below

European targets. The lack of integrated, strategic, and long-term national policy frameworks has further exacerbated the challenge, resulting in fragmented efforts across ministries, municipalities, and private actors. Coordination gaps and the absence of coherent enforcement mechanisms made it difficult to implement even existing legislation effectively.

Another key challenge lies in the **low public engagement** and **awareness around circularity**. Citizens lacked incentives or guidance for adopting **sustainable consumption habits**, and **waste separation** at the source was inconsistently applied, especially in rural areas. The cultural shift required to embrace repair, reuse, and product life extension had not yet taken root in everyday life or education.

The economic and business environment also posed challenges. Small and medium-sized enterprises, which constitute the majority of the Greek economy, lacked both the financial capacity and technical knowledge to adopt circular models. Regulatory uncertainty, limited access to funding, and the absence of structured incentives created an unfavorable environment for innovation in eco-design or product-as-a-service models.

Technological challenges further compounded the problem. Greece's waste management and recycling infrastructure was outdated, decentralized, and lacked uniform standards across regions. Systems for monitoring material flows, evaluating environmental

	<p>impacts, or managing secondary raw materials were fragmented or underdeveloped.</p> <p>Finally, the challenge of meeting EU regulatory compliance—such as obligations under the European Green Deal, Waste Framework Directive, and the Circular Economy Package—added pressure to deliver urgent, systemic reforms. The Action Plan thus responds to multiple, interconnected challenges spanning governance, infrastructure, behavior, and market dynamics.</p>
Best Practice Description	
<i>Contents</i>	The (revised) Greek National Circular Economy Action Plan is structured around a comprehensive set of

measures that reflect both strategic objectives and practical interventions, categorized into **four** main pillars: **production, consumption, waste management**, and the **broader market environment**. Each pillar outlines horizontal and sector-specific actions designed to shift the national economy from a linear to a circular model in a coordinated, inclusive, and forward-looking manner.

Under the production pillar, the Plan promotes eco-design, sustainable product development, and industrial symbiosis. It encourages businesses to incorporate environmental criteria into product life cycles—from the extraction of raw materials to the end-of-life phase. Special focus is placed on supporting innovation and digital tools to monitor and optimize resource use. Producers are incentivized to adopt cleaner technologies, utilize recycled materials, and design products that are reusable, repairable, and recyclable.

The consumption pillar targets behavioral change and informed decision-making. It includes awareness-raising campaigns for citizens and businesses, labeling systems to help consumers identify environmentally preferable products, and educational initiatives in schools and universities. Public procurement is transformed via “**green contracts**” and sustainability criteria to ensure that state purchasing decisions align with circular principles.



Figure 2: The Plan's Pillars and Main Objectives

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	<p>In the waste management pillar, actions are oriented toward the prevention, reduction, and proper treatment of waste. These include the reinforcement of Extended Producer Responsibility (EPR) schemes, improved infrastructure for waste separation and collection, and the creation of local networks for reuse and material recovery. There is also a clear emphasis on reducing single-use plastics and food waste.</p> <p>Finally, the market pillar focuses on building a viable secondary raw materials market, financing mechanisms for circular businesses, and establishing a robust monitoring and evaluation framework using circularity indicators.</p>
<i>Innovation</i>	<p>The Plan presents a multi-level, cross-sectoral designed operational mechanisms, and incentive structures that enable both systemic transformation and practical implementation. A key innovation lies in the promotion of eco-design and product lifecycle thinking. The plan moves beyond conventional recycling policies by incentivizing businesses to create products that are designed from the outset for durability, reparability, and recyclability. Through specific guidelines and financial incentives, it encourages producers to think about the end-of-life impact of their products, while also enabling consumers to make informed and responsible choices.</p> <p>The development and mandatory expansion of Extended Producer Responsibility schemes across sectors is another structural innovation. By holding producers accountable for the entire lifecycle of their products, the Plan transforms the traditional cost structures of waste management and shifts the burden toward upstream solutions. The EPR mechanisms proposed go beyond packaging to include electrical appliances, textiles, and construction materials.</p> <p>In the public sector, the institutionalization of green public procurement is a forward-thinking measure. By</p>

	<p>requiring environmental criteria in state tenders, Greece creates stable demand for circular goods and services, stimulating innovation in the private sector. This approach represents a demand-side innovation that reinforces market transformation.</p> <p>Digital innovation also features prominently, especially the use of monitoring systems and circularity indicators. These tools ensure transparent tracking of material flows, inform policy revisions, and align national progress with EU targets.</p>
<i>What can be transferred to other contexts</i>	<p>One of the most adaptable components is its integrated governance model, which aligns sectoral policies under a common circular economy framework. This cross-ministerial coordination mechanism ensures coherence between environmental, industrial, economic, and educational strategies. Countries facing fragmented policy landscapes can benefit from adopting such unified frameworks to promote consistency and long-term vision.</p> <p>The Plan's emphasis on eco-design and lifecycle thinking is another universally applicable feature. Guidelines encouraging producers to minimize environmental impacts at every stage of a product's life—while designing for reuse, repair, and recyclability—can be easily tailored to different regulatory and industrial environments. These design principles are technology-neutral and can be adopted by both developed and developing economies seeking to reduce waste and increase product longevity.</p> <p>Additionally, Greece's structured approach to Extended Producer Responsibility provides a replicable blueprint. By extending EPR obligations to cover new sectors (e.g., construction materials, textiles, electronics), the plan encourages upstream accountability. Countries with developing recycling systems can adapt these measures to shift environmental costs to producers and stimulate eco-innovation through market incentives.</p>

	<p>The green public procurement (GPP) model included in the Plan also offers high transferability. Establishing environmental criteria for public sector contracts creates guaranteed demand for sustainable products and services, which can catalyze circular innovation among suppliers. Local governments worldwide can implement similar procurement policies to mainstream circular practices.</p> <p>Moreover, the Plan's communication strategy, which links behavioral change campaigns with formal education, provides a soft power component that other countries can use to build public trust and engagement. Lastly, the monitoring system based on key circularity indicators, aligned with Eurostat and EU methodologies, can be adopted by other nations to ensure data-driven policymaking and international comparability.</p>
Link	<ul style="list-style-type: none"> • https://ypen.gov.gr/perivallon/kykliki-oikonomia/16052-2/ - Revised Greek National Circular Economy Action Plan. Data derived from the Greek Ministry of Energy and Environment, 2021. • https://www.naftemporiki.gr/green/climate/1719545/paranomes-chomateres-i-ellada-meiose-70-ta-prostima-toy-eyropaikoy-dikastirioy-tin-teleytaia-5etia/ - Landfills in Greece, illegality and fines by the EU, 2024. • https://www.opengov.gr/minenv/?p=11650 - Public Consultation/Deliberation on the topics of the Plan.

Name of best practice	Postgraduate Programme "Environmental Education", University of the Aegean
Country	Greece
Type:	<u>Nationally accredited postgraduate education programme</u>

Year of implementation (from 2020)	Reapproved and in effect under governmental decision until today. A new cycle for the 2025-2026 academic year has been announced.
Context	
<i>Description of the initial situation</i>	<p>Before the establishment of structured postgraduate studies in Environmental Education, Greece's approach to environmental education was characterized by scattered efforts, isolated school programmes, and a <u>general lack of institutional depth</u>. Although Environmental Education (EE) was officially introduced into the primary and secondary school systems in the early 1990s, it was implemented largely through <u>extracurricular activities</u> and <u>short-term teacher initiatives</u> rather than through formal curriculum integration.</p> <p>Teachers who engaged with EE often did so without specialized training, relying on limited resources or informal collaborations with NGOs. University-level academic pathways specifically dedicated to EE were either absent or too narrowly framed within environmental sciences or educational theory, without fostering the interdisciplinary integration that sustainability demands.</p> <p>All in all, environmental education and/or sustainability were offered as a pre-graduate programme for the last 20 years, however students who participated in them usually lacked the specialization hence a post-graduate programme was the solution to that problem.</p>
<i>Needs</i>	<p>The creation of the Master's programme responded to an urgent national need to professionalize and modernize environmental education in Greece. While Environmental Education had existed in Greek schools for decades, there was a clear gap in specialized postgraduate training that combined pedagogical theory with environmental sciences, ethics, and sustainability practices.</p>

	<p>The education system lacked structured academic pathways to prepare educators and researchers to tackle the complex socio-environmental issues of the 21st century. Additionally, there was a need to align educational practices with international policy frameworks such as the UN 2030 Agenda, specifically SDG 4.7, which calls for equipping all learners with the knowledge and skills to promote sustainable development. Beyond the pedagogical domain, there was also a systemic need: public institutions required professionals with interdisciplinary knowledge capable of supporting environmental awareness, climate policy, and sustainability planning.</p> <p>The programme also aimed to address the fragmentation of existing training efforts, ensuring coherence, national accreditation, and policy-level recognition. Finally, it sought to address a growing demand from educators themselves for continued training, upskilling, and a deeper ethical and scientific grounding in sustainability-related teaching.</p>
<i>Main objective</i>	<p>This specific case study is a postgraduate specialization for professionals in Education for the Environment and Sustainable Development, within the framework of the Educational Sciences. Specifically, it focuses on the education and training of human resources in the design, organization, implementation, and evaluation of Environmental Education (EE) programmes in formal, non-formal, and informal education settings. It aims at the systematic research of the field of EE, with the goal of documenting the current state, generating new ideas, and developing innovative educational methods and techniques. The programme emphasizes the dissemination of research findings within the educational system, social institutions, and, more broadly, among the stakeholders involved in shaping, making, and monitoring decisions for the protection of the natural, human-made, and cultural environment,</p>

through the development of partnerships with research institutions and other organizations in Greece and abroad.

The principal objective of the postgraduate programme is to cultivate and set the basis for a new generation of educators, researchers, and professionals who can meaningfully contribute to environmental education, sustainable development, and civic engagement. The programme aims to provide students with the theoretical, methodological, and practical knowledge needed to design, implement, and evaluate educational programmes focused on environmental awareness and sustainability. It combines pedagogical sciences with **environmental ethics, policy, and communication** to offer a holistic and interdisciplinary academic experience.

The programme also seeks to instill values of environmental justice, responsible citizenship, and critical thinking in its graduates, preparing them to lead both in classrooms and in public discourse. By training graduates to operate in formal, non-formal, and informal learning environments, the programme contributes directly to the national educational system, environmental governance, and policy design in Greece.

Main Pillars of the Master's in Environmental Education (University of the Aegean)

Lifelong Learning & Active Citizenship

Educational Methodology & Pedagogy

Environmental Ethics & Values

Environmental Science & Literacy

Theoretical Foundations of EE/ESD

Figure 4: Main Pillars of the Master's.

Challenge addressed	<p>The programme addresses a dual set of challenges—educational and societal. From an educational perspective, Greece historically lacked a coherent framework for advanced training in environmental and sustainability education, resulting in fragmented practices, under-qualified personnel, and a disconnect between policy aspirations and classroom realities. Teachers often lacked access to updated scientific knowledge, environmental ethics, or modern didactic tools tailored to sustainability. On the societal level, the country faced increasing environmental degradation, climate-related anxiety among youth, and low public literacy around sustainability issues. There was a pressing need for academic programmes that could produce well-informed, critically engaged, and pedagogically skilled professionals capable of responding to these complex challenges. Furthermore, the lack of national-level institutional pathways for EE specialization limited the system's ability to embed sustainability systematically into education policy.</p>
Best Practice Description	
Contents	<p>The Master's programme in Environmental Education at the University of the Aegean is structured around five thematic pillars: theoretical frameworks of Environmental Education and Education for Sustainable Development, environmental science and ecological literacy, environmental ethics and values, educational methodologies and pedagogy, and lifelong learning for sustainability. These areas are distributed across taught modules, seminars, and a supervised thesis.</p> <p>The curriculum includes interdisciplinary courses such as "Environmental Issues in the Light of Sustainable Development," "Environmental Ethics," "Educational Planning and Evaluation," "Communication and Education for the Environment," and "Lifelong Learning and Active Citizenship". <u>Students are trained</u></p>

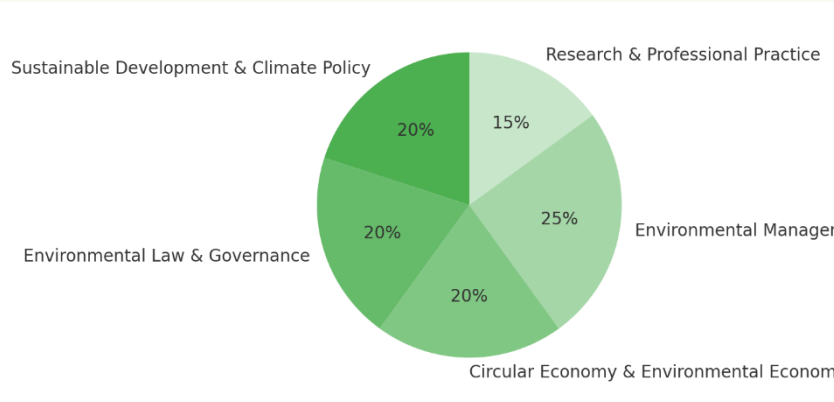
	<p>not only in how to teach sustainability but also in how to <u>think critically about the role of education in shaping ecological values and behaviors.</u></p> <p>The programme is delivered in blended learning format and uses modern and multilateral educational tools such as case studies, scenario-based teaching, and project-based learning. It also includes a strong research component, culminating in a postgraduate thesis that allows students to explore specialized topics. These often intersect with real-world challenges, including climate education, community engagement, biodiversity conservation, and environmental justice. The programme supports integration of formal and non-formal learning and encourages collaborations with schools, municipalities, NGOs, and policy institutions.</p>
<i>Innovation</i>	<p>The innovative character of this programme lies in its fully interdisciplinary structure, its official national policy status, and its ability to bridge scientific, ethical, and pedagogical dimensions of environmental education. <u>Unlike traditional environmental science or education degrees,</u> this programme explicitly integrates value-based education with environmental knowledge and civic action. Courses are not siloed; rather, they are designed to interact across disciplines to foster a systems-thinking approach.</p> <p>A core innovation is the inclusion of <u>environmental ethics as a foundational pillar</u> — not as an add-on, but as a central lens through which learners examine climate issues, policy decisions, and education strategies. Furthermore, the programme promotes lifelong learning and supports educators working in both formal (schools) and non-formal (community and NGO-led) contexts. It is also responsive to current educational trends, incorporating active and experiential pedagogies, as well as digital learning tools.</p> <p>Another innovation is its strategic alignment with international agendas — including the 2030 Agenda,</p>

	SDG 4.7, and UNESCO's Global Action Programme — while being deeply rooted in the national education system. As such, it functions as a hybrid model: academically rigorous, policy-relevant, and socially transformative.
<i>What can be transferred to other contexts</i>	<p>This postgraduate programme offers a replicable model for higher education institutions and national ministries aiming to establish coherent, policy-integrated training for environmental and sustainability education. Its most transferable component is its interdisciplinary design — combining pedagogy, environmental sciences, ethics, and lifelong learning — which could be adapted to fit the priorities of other national education systems.</p> <p>Furthermore, its grounding in national legislation shows how environmental education can be embedded within centralized governance while still fostering creativity and critical thinking. The programme's emphasis on environmental ethics and value-based education provides an especially relevant model for societies experiencing eco-anxiety or polarization around sustainability issues.</p> <p>The blended learning model, with structured modules, research work, and real-world engagement, is also transferable to universities that wish to develop similar postgraduate offerings without requiring extensive physical infrastructure. Finally, the close link between academic research and public education policy creates pathways for institutional dialogue that can benefit other regions looking to bridge the gap between higher education and environmental governance.</p>
Link	<ul style="list-style-type: none"> • http://www.tepaes.rhodes.aegean.gr/pms-pe/default.aspx - The official website of the Master's programme. • https://www.aegean.gr/postgraduate/%CF%80%CE%B5%CF%81%CE%B9%CE%B2%CE%B1%CE%BB%CE%B%CE%BF%CE%BD%CF%84%CE%B9%CE%BA%CE%AE-%CE%B5%CE%BA%CF%80%CE%B1%CE%AF%CE%B4%

	CE%B5%CF%85%CF%83%CE%B7 – The description of the programme. <ul style="list-style-type: none"> • https://www.eduguide.gr/grad/prokiryksi/panepisti-mio-aigaiou-perivallontiki-ekpaideusi%2C16?utm_source=chatgpt.com
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Name of best practice	MSc in Environmental Management and Sustainability, International Hellenic University
Country	Greece
Type:	<u>Postgraduate degree programme at national level (formal higher education, policy-aligned)</u>
Year of implementation (from 2020)	Ongoing and updated for the academic year 2024–2025 (originally launched prior to 2020, but revised under the Bologna process and operational during the 2020–2024 period)
Context	
<i>Description of the initial situation</i>	<p>This MSc programme is developed by the Department of Science and Technology at the International Hellenic University (IHU), Greece's only state university offering programmes exclusively in English. The programme reflects growing national and European commitment to addressing climate change, environmental degradation, and sustainable development through specialized education. It is situated within the framework of the European Green Deal, the EU and the Greek Circular Economy Action Plan, and the 2030 Agenda for Sustainable Development.</p> <p>Greece has seen increased pressure to align its environmental policy and economic model with sustainability principles, including in education. This postgraduate degree was designed to prepare graduates capable of navigating and leading the green transition. The programme operates <u>under national legislation</u> and is approved under the <u>Greek higher</u></p>

	<p><u>education governance framework</u>, which gives it national academic legitimacy and policy alignment. It is intended to meet not only labor market needs, but also Greece's strategic sustainability targets, contributing to <u>climate adaptation, biodiversity protection, sustainable resource use, and circular economy strategies</u>.</p>
<i>Needs</i>	<p>Prior to the introduction of this programme, postgraduate offerings in Greece on environmental issues were generally fragmented, either embedded within general science programmes or narrowly focused on specific fields like engineering or ecology. There was a lack of integrated educational models that brought together <u>environmental science, sustainability management, climate policy, and green entrepreneurship</u>.</p> <p>Moreover, most Greek postgraduate programmes in these areas were offered in Greek, limiting accessibility for international students and non-Greek professionals working in sustainability sectors. As climate policy became central to national and EU-level governance, it became evident that there was an educational and professional gap in producing graduates with both scientific and managerial competencies to address sustainability challenges through evidence-based and interdisciplinary solutions.</p>
<i>Main objective</i>	<p>There was a clear need for an English-language, internationally oriented postgraduate programme that would respond to contemporary environmental and sustainability challenges with a multidisciplinary and applied focus. Greece, as an EU member state, is obligated to implement sustainability and climate mitigation policies, but this required building capacity across public and private sectors.</p> <p>The market needed professionals who could lead environmental management plans, conduct impact assessments, navigate legal frameworks, and integrate circular economy strategies in both the</p>

	<p>public sector and corporate settings. At the same time, graduates needed training in modern tools—such as environmental risk modelling, lifecycle analysis, sustainability reporting, and regulatory compliance—combined with a robust ethical and scientific foundation. The programme was designed to respond to the dual need of strengthening both scientific knowledge and applied environmental management skills.</p>  <p>Figure 5: Main Pillars of the Master's.</p>
<p><i>Challenge addressed</i></p>	<p>The core objective of this Master's programme is to educate and train professionals who will act as agents of sustainability in their organizations and communities. The programme seeks to equip students with cutting-edge knowledge and practical tools in the fields of environmental science, environmental economics, circular economy, sustainable development, and environmental law and governance.</p> <p>A key aim is to provide a solid foundation for graduates to design, implement, and evaluate sustainability strategies, environmental audits, and policy interventions that support sustainable development goals at the local, national, and international levels. Furthermore, the programme prioritizes the development of leadership skills, strategic thinking, and the ability to operate in cross-sectoral and multidisciplinary teams.</p>
<p>Best Practice Description</p>	

<p><i>Contents</i></p>	<p>The curriculum consists of a structured two-semester programme plus a dissertation. Key modules include:</p> <ul style="list-style-type: none"> ☞ Sustainable Development and Climate Change ☞ Environmental Law and Policy ☞ Environmental Economics and Circular Economy ☞ Corporate Social Responsibility ☞ Environmental Management Systems and Standards (ISO 14001, EMAS) ☞ Lifecycle Assessment and Environmental Impact Analysis ☞ Renewable Energy Technologies ☞ Research Methods in Environmental Science <p>Electives include topics in water resource management, biodiversity conservation, sustainable agriculture, and environmental entrepreneurship. The final dissertation allows students to apply research methodologies and management tools to a real sustainability problem, offering both academic depth and professional relevance.</p>
<p><i>Innovation</i></p>	<p>The programme's most notable innovation is its integrative, practice-oriented, and policy-aligned design. Unlike traditional academic degrees, this MSc merges technical knowledge with managerial and legal expertise, preparing students to work directly with sustainability frameworks like the EU Green Deal and the SDGs. It emphasizes applied tools and decision-support systems (e.g., LCA, EIA, EMS), giving students hands-on skills.</p> <p>Moreover, it is one of the few fully English-language sustainability degrees offered by a public university in Greece, broadening access and enhancing international cooperation. Its curriculum is designed to rapidly adapt to new EU directives, market needs, and technological changes. Additionally, its collaboration with industries and environmental authorities grounds learning in real-world challenges, enhancing student employability and impact.</p>

<i>What can be transferred to other contexts</i>	<p>This MSc offers a replicable model for countries or universities looking to modernize their environmental education offerings by integrating sustainability science with applied management and policy. Its modular and interdisciplinary structure allows easy adaptation to local contexts. Its English-language delivery makes it a model for international outreach and mobility.</p> <p>The programme's focus on employability, real-world application, and alignment with current EU policy frameworks makes it a relevant template for higher education institutions in transition economies, especially in the Mediterranean, Balkans, and MENA regions. The structure of combining core and elective courses along with research internships could be easily mirrored in other academic systems seeking to strengthen their sustainability education pathways.</p>
Link	<ul style="list-style-type: none"> • https://st.ihu.gr/studies/postgraduate/ems#admissions – The programme's official website and the uploaded students' handbook.

Name of best practice	National Climate Law 4936/2022 – “Transition to Climate Neutrality and Adaptation to Climate Change”
Country	Greece
Type:	<u>National law / national strategy (legally binding climate and environmental governance framework)</u>
Year of implementation (from 2020)	2022 (published in the Official Gazette A' 105/27.05.2022)
Context	
<i>Description of the initial situation</i>	Before the enactment of the National Climate Law , Greece lacked a binding legal framework that integrated mitigation and adaptation under a single

	<p>policy umbrella. Climate-related actions were dispersed across ministerial strategies (energy, transport, environment), lacking cohesion, timelines, or enforcement. Although Greece participated in EU climate efforts and international agreements, domestic implementation relied primarily on non-binding roadmaps. This created policy inertia and regulatory uncertainty. Moreover, while regional and local authorities had growing responsibilities in environmental planning, they had neither statutory climate obligations nor consistent support.</p> <p>In addition, the energy sector remained partially dependent on lignite and natural gas, and there was insufficient coordination between climate adaptation measures (like those for flooding, water scarcity) and mitigation initiatives (such as transport electrification). Greece's climate vulnerability, especially in sectors like tourism and agriculture, underscored the urgent need for a centralized, enforceable, and forward-looking legal instrument to guarantee a sustainable transition.</p>
<i>Needs</i>	<p>The most pressing need was to consolidate climate mitigation and adaptation into a single legislative instrument to guide national policy through 2050. This included setting intermediate GHG reduction targets (2030, 2040) and defining responsibilities for sectors and administrative levels. The country required institutional tools such as carbon budgeting, early-warning systems, and scientific advisory mechanisms to ensure continuity and accountability. A legislative backbone was also needed to coordinate public and private investment, ensure compliance with EU funding preconditions, and structure public communication campaigns. Additionally, municipalities and decentralized administrations required clear obligations to integrate climate targets into spatial and development planning. Without such a framework, Greece risked non-compliance with EU law, reduced</p>

	access to funding, and exposure to escalating climate-related costs across infrastructure, biodiversity, health, and the economy.
<i>Main objective</i>	The primary aim of Law 4936/2022 is to set Greece on a binding trajectory toward climate neutrality by 2050. This includes defining intermediate milestones (2030: -55% net GHG emissions compared to 1990; 2040: -80%) and embedding climate considerations across all governance levels and policy sectors. The law introduces systemic mechanisms such as a national climate budget, municipal mitigation plans, sectoral transition strategies, and carbon performance monitoring . It also aims to improve adaptive capacity by institutionalizing National and Regional Adaptation Plans and integrating them with land-use and civil protection systems. The law establishes coordination, accountability, and participation mechanisms, including the creation of a Scientific Climate Council and formal reporting cycles to Parliament. Beyond emissions targets, it also seeks to facilitate a just transition, support low-income and vulnerable regions (e.g., lignite-dependent areas), and embed climate resilience into urban planning and energy systems.
<i>Challenge addressed</i>	The law addresses multiple interrelated challenges: (1) the lack of a centralized, enforceable legal mechanism for climate action; (2) institutional fragmentation across sectors and administrative levels; (3) Greece's vulnerability to climate impacts such as wildfires, floods, and biodiversity loss; (4) insufficient alignment with the EU's 2030 and 2050 climate goals; and (5) barriers to accessing EU climate funds due to weak domestic frameworks. It tackles these by mandating national and local action plans, creating a carbon budgeting framework, enabling sectoral decarbonization (e.g., energy, transport), and obligating municipalities to prepare emissions inventories and adaptation strategies. The law also responds to the need for robust data

	collection, early warning systems, and public communication on climate risks and responses.
Best Practice Description	
<i>Contents</i>	<p>Key contents of Law 4936/2022 include:</p> <ul style="list-style-type: none"> • Legally binding targets: 55% reduction by 2030; 80% by 2040; net-zero by 2050. • Sectoral transition roadmaps for emissions-heavy sectors. • Carbon budgets and GHG accounting frameworks. • National and Regional Adaptation Plans are integrated with Civil Protection mechanisms. • Climate obligations for municipalities and regional authorities. • Institutionalization of a Scientific Climate Council. • Emissions performance reporting to Parliament. • Measures on clean transport, building efficiency, fossil fuel phaseout. • Legal framework for climate-friendly public procurement and investment planning.
<i>Innovation</i>	<p>This is the first law in Greece that makes climate neutrality legally binding. It introduces carbon budgeting, multi-level governance mandates, and a scientific oversight body—elements previously absent in Greek climate policy. Its innovation lies in legally codifying adaptation and mitigation in a unified structure and imposing quantified timelines and sector-specific responsibilities. Unlike prior policies, the law extends accountability down to municipalities, which must produce data, create local climate plans, and engage the public. It also creates enforcement mechanisms tied to investment and planning approvals, thus ensuring compliance. It links to the EU Green Deal but retains nationally tailored instruments (e.g., adaptation indicators for Mediterranean ecosystems).</p>
<i>What can be transferred to other contexts</i>	<p>The Greek Climate Law provides a transferable template for EU and non-EU countries seeking to operationalize climate neutrality within a Mediterranean</p>

	<p>or decentralized governance context. Its integration of municipal obligations, carbon budgets, and national adaptation plans is replicable in other countries with fragmented administrative structures. The creation of a Scientific Council that reports independently to Parliament is a good practice for transparency and non-partisan oversight. The linkage between climate obligations and other policy fields (transport, public procurement, education) supports mainstreaming and could be adopted in other governance systems. It also illustrates how small and medium-sized countries can implement the EU Climate Law within a domestic context by enacting legally binding and enforceable national frameworks.</p>
Link	<ul style="list-style-type: none"> https://civilprotection.gov.gr/sites/default/files/2023-01/%CE%95%CE%B8%CE%BD%CE%B9%CE%BA%CF%8C%CF%82%20%CE%9A%CE%BB%CE%B9%CE%BC%CE%B1%CF%84%CE%B9%CE%BA%CF%8C%CF%82%20%CE%9D%CF%8C%CE%BC%CE%BF%CF%82%204936_2022.pdf – The official document/description of the law.

Name of best practice	Solar Energy in Schools – Pilot Projects
Country	Serbia
Type:	Renewable energy / Educational pilot / Infrastructure + Curriculum innovation
Year of implementation (from 2020)	2021-2023
Context	
<i>Description of the initial situation</i>	<p>Before 2021, most schools in Serbia relied on conventional energy sources and had little to no exposure to renewable energy systems in practice. While environmental topics existed in curricula, practical demonstrations of green technologies, such as solar energy, were lacking in school environments.</p>

<i>Needs</i>	There was a strong need to modernize school infrastructure and reduce energy costs while simultaneously enhancing the educational content related to renewable energy and climate change. Students needed opportunities to connect theoretical learning with real-world, sustainable technologies.
<i>Main objective</i>	To reduce energy consumption in schools through the use of solar energy, while using the installations as real-time educational tools for teaching about sustainability, energy efficiency, and environmental responsibility.
<i>Challenge addressed</i>	This practice addressed both the infrastructural challenge of outdated, inefficient energy systems in schools and the educational challenge of teaching complex environmental and technological concepts without practical application.
<i>Contents</i>	Through support from the Provincial Secretariat for Energy in Vojvodina and local municipalities, pilot schools were equipped with solar panels and monitoring systems. The project also included the integration of solar energy data into science and technology classes, allowing students to observe and analyze real-time energy production and savings.
<i>Innovation</i>	The core innovation lies in the dual-purpose approach : upgrading school buildings with solar infrastructure while simultaneously integrating these systems into classroom activities. Students could track energy usage, compare it with traditional sources, and explore how green energy works in real life. This created an interactive, STEM-oriented learning experience.
<i>What can be transferred to other contexts</i>	This model is highly scalable and transferable, especially in contexts where energy savings and climate education are both needed. Schools in other countries or regions can replicate the approach by partnering with local energy institutions or green tech companies, turning buildings into living laboratories for sustainability education.

Link	https://www.mre.gov.rs/vest/sr/2517/djedovic-handanovic-solarni-paneli-u-skolama-dobar-primer-mladima-o-stednji-energije-i-brizi-za-zivotnu-sredinu.php
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Name of best practice	Green Art Incubator – Greening the Cultural Sector
Country	Serbia
Type:	Non-formal education and capacity-building program, targeting professionals in arts and culture.
Year of implementation (from 2020)	2022– (ongoing)
Context	
<i>Description of the initial situation</i>	In the early 2020s, climate change was barely on the public radar in Serbia, and the cultural sector had little awareness or action on environmental issues. The arts community lacked knowledge of eco-friendly practices, and environmental topics were not prominent in artistic programming. There was a recognized gap in engaging the power of culture for climate advocacy.
<i>Needs</i>	The initiative arose from the need to reduce the environmental footprint of cultural institutions (theaters, museums, festivals, etc.) and to harness art as a tool to raise public awareness on climate change. Arts organizations needed guidance, skills, and networks to adopt green practices (e.g. energy efficiency in productions, sustainable materials, waste reduction) and to confidently address ecological themes in their work..
<i>Main objective</i>	The Green Art Incubator aims to “green” the arts and culture sector in Serbia – both in how art is produced and how it can influence society. Its dual goals are: (1) to encourage cultural organizations and creators to shift to sustainable, eco-friendly management and production practices, and (2) to position culture as an agent of

	change that educates and engages the public on environmental sustainability.
<i>Challenge addressed</i>	The project addresses the low institutional response to climate issues in Serbia by activating a new domain – culture – to join the green transition. It tackles challenges such as the absence of green standards in arts management, the lack of climate-related content in cultural programming, and the broader indifference of citizens and institutions toward the climate crisis. By focusing on the creative sector, it brings climate action into a sphere that traditionally had not been involved in environmental discussions.
<i>Contents</i>	Research & mapping of museums, theaters, festivals and others to assess their sustainability practices. A digital resource platform for green transformation in the arts, and courses by local and international experts, educating cultural workers in topics like energy efficiency in theaters, sustainable set design, eco-friendly event management, etc. Development of innovative e-toolkits (“green production guides”) tailored to arts and heritage fields – providing creative methods for climate adaptation, waste reduction, greener marketing and audience engagement in sustainability. Networking and an informal green arts network.
<i>Innovation</i>	This initiative is innovative in bridging two traditionally separate domains. Greening the arts is a novel approach in Serbia, where the idea of museums, theaters or film studios adopting carbon-footprint tracking or sustainable scenography had not been used. The Incubator's approach of creating sector-specific toolkits and training is highly specialized and creative, leveraging artistic thinking to solve environmental problems. It also introduces a new form of advocacy: artists as messengers of the climate crisis, thereby potentially reaching audiences in more emotive and imaginative ways. The project's format can serve as a

	model for other countries looking to engage the creative industry in sustainability.
<i>What can be transferred to other contexts</i>	The project has produced resources (digital platform, toolkits, policy recommendations) that can be used or adapted in other contexts. Its concept of a "Green Art Incubator" is transferable. The initiative's success in Serbia is already being shared regionally; for instance, the Incubator contributed to a British Council study on climate and arts in the Western Balkans, helping to disseminate best practices beyond Serbia. Additionally, its networking component and public-facing events (like the Climate Art Hub during European Green Diplomacy Week) can be reproduced to foster dialogue between artists, policymakers, and environmental experts in other countries.
Link	https://greenartincubator.org/

Name of best practice	WWF "Climate Heroes" Youth Project
Country	Serbia
Type:	Non-formal youth education and empowerment program led by WWF, in cooperation with local NGOs
Year of implementation (from 2020)	2021-2022
Context	
<i>Description of the initial situation</i>	surveys showed that while most Serbian youth were aware of climate change as a global issue, very few were personally engaged in climate action. In a 2021 regional poll, only about 19% of young people in Central/Eastern Europe described themselves as active on climate issues, and a large majority had never participated in any climate-related initiative.
<i>Needs</i>	The key need was to transform general awareness into concrete action. Youth need education on the climate crisis that goes beyond science – including training in leadership, project management, advocacy, and communication – to empower them

	to lead sustainability initiatives. The program also sought to build a peer network so young climate enthusiasts wouldn't feel isolated. Essentially, it aimed to provide knowledge, skills, and support for young people to become "climate heroes" in their communities.
<i>Main objective</i>	The Climate Heroes project's main goal was to create youth climate leaders by raising their awareness of the climate crisis and equipping them with skills to drive local change. Participants (ages 15–24) would learn about climate and sustainability topics (like wasteful consumption, renewable energy, biodiversity links to climate) and develop their own mini-projects to tackle these issues. The ultimate objective was for these trained youth to become ambassadors of the planet, inspiring and educating their peers to adopt more sustainable lifestyles and civic actions.
<i>Challenge addressed</i>	The project addressed the lack of youth engagement in climate action and the gap in practical environmental education for teens. Climate change can often feel too vast or politically charged; this initiative broke it down into tangible activities young people could undertake, thus combating feelings of helplessness. It also tackled misinformation and indifference by fostering critical thinking and showing youth how to influence others and engage local decision-makers.
<i>Contents</i>	Research & mapping of museums, theaters, festivals and others to assess their sustainability practices. A digital resource platform for green transformation in the arts, and courses by local and international experts, educating cultural workers in topics like energy efficiency in theaters, sustainable set design, eco-friendly event management, etc. Development of innovative e-toolkits ("green production guides")

	tailored to arts and heritage fields – providing creative methods for climate adaptation, waste reduction, greener marketing and audience engagement in sustainability. Networking and an informal green arts network.
<i>Innovation</i>	The innovative aspect of Climate Heroes is in its youth-driven approach. Rather than a top-down education campaign, it empowered young people to take the lead. The project combined capacity building with action, ensuring that learning was immediately applied in practice – a powerful educational model. It was also cross-border, which is uncommon in youth environmental programs; by connecting youths from multiple countries, it fostered a sense of a broader community and shared purpose beyond national borders. Moreover, the inclusion of a sociological survey to understand youth attitudes (and tailoring the program to those findings) was a smart evidence-based innovation. The creation of a peer network of “Climate Heroes” who can inspire others is an innovative twist on climate education, effectively creating young role models.
<i>What can be transferred to other contexts</i>	This model is transferable. Any country or NGO can adopt the toolkit and guide developed by WWF to run similar youth empowerment programs. The project's structure (workshops + guided projects + competition + forum) provides a template that can be replicated and adapted to different scales or topics. Already, the materials (like the “How to become a Climate Hero” guide and a series of video testimonials) are available for use by educators and youth groups.
Link	https://www.wwfcee.org/what-we-do/youth%20empowerment/youth-in-the-fight-against-climate-change

Name of best practice	Znanje za održivi razvoj
Country	Serbia
Type:	High School Formal Education Program
Year of implementation (from 2020)	2023
Context	
<i>Description of the initial situation</i>	In Serbia's formal education, sustainable development topics have traditionally been marginal – often limited to theory in geography or biology classes. There was little practical, community-linked sustainability education in high schools. Students had few opportunities to apply classroom knowledge of ecology or civics to real local problems, and teachers lacked resources and support to integrate sustainable development in a hands-on way. The National Convent (which monitors Serbia's EU integration) identified that youth engagement in the EU's Green Agenda was low at the local level. Thus, there was an initial context of schools needing guidance to connect global sustainability goals (like the SDGs) with local community action.
<i>Needs</i>	The program addressed several needs: (1) Curricular gap – the need to enrich secondary education with concrete sustainability content and skills, in line with SDG 4.7 (education for sustainable development). (2) Teacher support – a need for training educators to confidently teach SD concepts and supervise student projects. (3) Youth empowerment – high schoolers needed opportunities to engage with issues like waste management, energy saving, or biodiversity in their own communities, to make learning relevant and build civic responsibility. (4) Community awareness – local communities needed the fresh perspective and initiative of youth to tackle small-scale sustainability challenges. Essentially,

	“Znanje za održivi razvoj” (“Knowledge for Sustainable Development”) was needed to bridge schools with real-world environmental problem-solving.
<i>Main objective</i>	The main goal of this program is to embed sustainable development education into Serbian high schools through experiential learning. It aims to equip student-teacher teams with knowledge of sustainability and then help them implement small projects that address a local need. By doing so, the program's objective is to catalyze lasting integration of sustainability topics in school activities and curricula, and to show that even small youth-led actions can contribute to community well-being and Serbia's progress on environmental goals. Another key objective is to create a network of model schools that can demonstrate best practices in ESD and inspire others.
<i>Challenge addressed</i>	The initiative tackles the challenge of how to effectively introduce sustainable development in formal education in a way that is action-oriented. It addresses the often theoretical nature of school learning by introducing project-based learning on sustainability. It also confronts the lack of cooperation between educational institutions and civil society/experts – Petnica and the Convent acting as bridges. Moreover, it seeks to overcome the motivational challenge: both students and teachers may feel that topics like climate change or recycling are too large or outside their scope – this program shows them manageable entry points for local action. Finally, it addresses the challenge of moving beyond one-off eco-school activities by building continuity (through teacher training and institutional support) for ongoing ESD efforts.

<i>Contents</i>	<p>The “Znanje za održivi razvoj” program ran in three phases: first, in April 2023, student-teacher teams from various schools gathered at Petnica Science Center for hands-on workshops on sustainable development, covering climate change, resource use, and local activism. Next, back at their schools, teams identified local needs, designed small sustainability projects, and entered them into a contest judged by experts, with four winning proposals each receiving €1,000 in mid-2023 — like Belgrade's “Zelena Šesta” for greening school operations and Novi Pazar's “Re-Cycle” focusing on material reuse. Finally, in late 2023, the winning teams, supported by mentors, put their plans into action — planting trees, setting up compost systems, running awareness events — while teachers integrated these projects into school life, reporting outcomes by year's end.</p>
<i>Innovation</i>	<p>This program is innovative in the Serbian context for several reasons. First, it directly links formal education with community action – an approach not commonly seen in the rigid school system. By having a small competitive grants model for school teams, it introduced a new incentive for schools to engage with sustainability proactively. The partnership between Petnica (an established science education hub) and the National Convention on the EU (policy-oriented body) is also novel, combining educational expertise with policy advocacy – signaling that youth-led school projects are part of Serbia's broader EU integration and Green Agenda efforts. Additionally, the program focuses on capacity-building of teachers as coordinators, which is innovative because it creates local champions within schools who can continue integrating ESD beyond the project. The provision of seed funding to student projects is relatively unique</p>

	and introduces students to real project management and budgeting at a young age. Overall, the program represents an innovative model of a mini grant scheme for schools specifically dedicated to sustainable development.
<i>What can be transferred to other contexts</i>	The design of "Znanje za održivi razvoj" is highly transferable to other countries or regions. Any education authority or NGO coalition could replicate the three-phase model: training – project competition – implementation. The program requires modest funding (small grants) and yields high engagement, making it attractive and scalable. In fact, this program was implemented under a project supported by the German Embassy in Belgrade, indicating an interest in using it as a showcase that could be repeated or expanded. The involvement of 15 schools across all of Serbia's regions also provides a template for geographic balance that others can emulate. The materials from the Petnica seminar (curriculum, presentations) and the experiences of the pilot schools can serve as a knowledge base for future iterations – in Serbia, there is potential to turn this into an annual program and invite new schools each year. Other Western Balkan countries, also working toward EU environmental standards, could adopt this approach to engage youth in meeting local sustainability challenges.
Link	https://petnica.rs/konkurs-za-srednje-skole-znanje-za-odrzivi-razvoj

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