

Environmental Education

This good practice is relevant to European Green Capital Award Indicators:

1: Climate Change Mitigation, 6: Air Quality, 12: Governance

Introduction

Environmental Education (EE) helps us to engage with the world we live in, allowing citizens of all ages to explore environmental issues and develop a deeper understanding of the environment. EE gives citizens the opportunity to engage in problem solving, take action to improve the environment and to have the skills to make informed and responsible decisions.

Environmental Education gained international recognition at the **first United Nations** world conference on the Human Environment, held in Stockholm in 1972, and, through the **Belgrade Charter** (a global framework for environmental education) in 1975. The European Year for the Environment was launched by the **Foundation for Environmental Education** (FEEE now FEE) in 1987 in co-operation with the European Commission. The foundation led to some key initiatives including the **Green Key** and **Blue Flag** projects. These are known across the world for their promotion of sustainable business practices and the protection of our valuable natural resources.

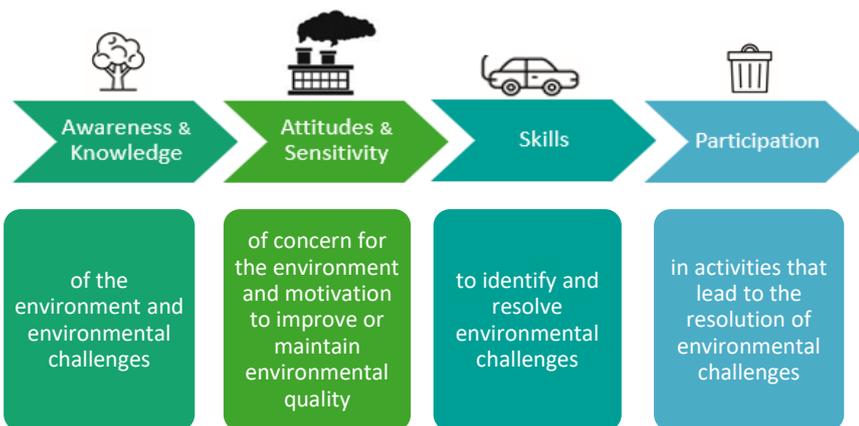
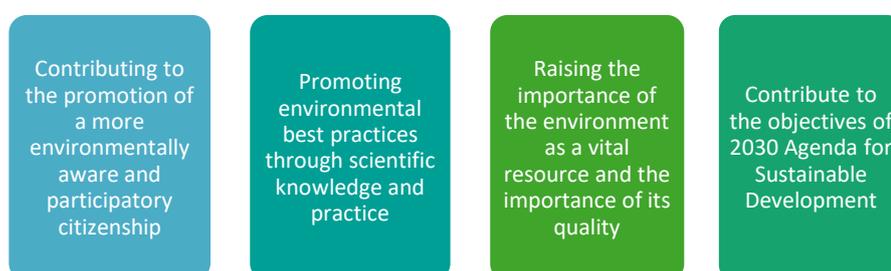


Figure 1. The Components of Environmental Education

Lisbon and Guimarães, both cities in Portugal, are conscious that EE is a powerful communication tool, and a fundamental way of achieving behavioural change in the overall population. In 1987 **the Environmental Associations Law** made it obligatory for the Ministry of Education and the Ministry of the Environment to include EE into study plans and programmes for school children to educate them of the need to preserve the environment. The Institute for the Promotion of the Environment, under the auspices of the Ministry of the Environment, is responsible for the strength of this programme, and the successful inclusion of EE into policy.

Key Aims of Environmental Education



Cities at a Glance

Statistics sourced from EGCA 2020 Applications.

Lisbon EGC 2020

- **Köppen Climate Classification:** Csa (Mediterranean Hot Summer)
- **Population:** 547,773
- **Area:** 84.9 km²
- **Population Density:** 5,090 inh/km²
- **GDP:** 22,800 €/Capita

Guimarães

- **Köppen Climate Classification:** Csb (Mediterranean Warm Summer)
- **Population:** 158,124
- **Area:** 241.3 km²
- **Population Density:** 656 inh/km²
- **GDP:** 14,693 €/Capita

Want to know more?

For further information about these Projects please see:

- <http://www.fee.global/>
- <https://sustainabledevelopment.un.org/milestones/humanenvironment>
- <http://www.greenkey.global/>
- <http://www.blueflag.global/>
- <http://worldenvironmentday.global/>
- <https://www.cm-guimaraes.pt/p/pegadas>

Find out more about the **European Green Capital Award**, and its sister competition, the **European Green Leaf Award** on our website:

ec.europa.eu/europeangreencapital/



Lisbon, Portugal

Lisbon is using a continuous strategic approach that combines policy and pedagogical activities to highlight the importance of environmental education as a crucial component for more active citizenship. Engagement with teachers and students has resulted in a positive rise in community awareness and proven essential to the overall success of initiatives for the improvement of air quality and mobility in the city.

Every year, the Municipality of Lisbon develops a set of pedagogical environmental activities around the themes of air quality and sustainable mobility. These topics are addressed in school curricula using 'innovative pedagogical methods' directed at the school community, from kindergarten to high school, involving students, teachers and educational assistants.

Pedagogical – 'relating to teaching'

In relation to Environmental Education this may include practical workshops, games, awareness sessions, field trips, study tours, exploration of estuaries, school allotment gardens, competitions and celebrations of environmental dates.

Commendable Projects

In 2017, a total of **466 pedagogical activities** were undertaken by **99 education establishments** in the classroom and in the field involving the participation of 10,114 students and 1,181 teachers and educational assistants. Some of these activities are described below:

<p><u>Green Backpack</u> (Mochila Verde)</p> <p>Environmental Education Pilot Project - targeting 6 year olds in a range of pedagogical activities in the themes of the environment and energy within an urban context</p>	<p><u>Orient Cycl-Express</u> (Ciclo-Expresso do Oriente)</p> <p>Citizen promoted 'cycle bus' that takes children in the most eastern neighbourhood in the city from home to school and back with voluntary supervision organised by parents</p>	<p><u>Pedi-BUS</u></p> <p>Like a real bus, children walk to and from school, with one or more voluntary parent(s), along a defined route, stopping at certain 'bus' stops where they are collected or delivered according to an established schedule</p>
<p><u>Lisbon's Monsanto Forest Park</u></p> <p>Children are invited to explore the Forest Park using a range of their senses to listen, smell and feel the world around them</p>	<p><u>Bike to School Day</u></p> <p>Encourages students, teachers and parents to cycle to school</p>	<p><u>Road Runner Mobility Game</u> (Papa-léguas Jogo da Mobilidade)</p> <p>A game to encourage parents and children to commute using sustainable transportation</p>
<p><u>The Air We Breath (O ar que respiramos)</u></p> <p>The municipality developed this programme for children between the ages of 10 and 12 years old, encompassing around 160 students/year. It is part of the scope of the Air Quality Improvement Plan for the Lisbon Region and Tagus Valley 2011-2014, specifically focusing on air quality.</p> <p>Students are invited to reflect on the importance of air as a vital resource for life, learning about the main air pollutants, their sources, their effects on public health and the environment and the human role in improving air quality. This activity is a dual learning process, inside and outside the classroom - the campaign 'Best air for all' brings the students to visit an Air Quality Monitoring station and a Green Park in Lisbon where children receive information and create their own information sheet to take home.</p>		



Figure 2. Kids environmental board game (Source: City of Lisbon)

Future Planning

The initiatives will continue through the existing and new sets of actions to raise awareness of the importance of air quality and sustainable mobility for diverse target audiences. These awareness actions will be directed at schools or public entities and aim to highlight the effects of air pollution on health and the environment; and promote practices and behaviours that can improve air quality. These initiatives have low implementation costs and can be implemented with existing municipal resources.

Guimarães, Portugal

The National Strategy for Environmental Education 2020 in Portugal stresses the 'increasing importance of the activity of municipal technicians and the environmental education equipment in the development of Environmental Education projects or programmes'. The Municipality of Guimarães, with the Landscape Laboratory, sees Environmental Education as one of its strongest pillars, providing the community with a wide set of environmental activities, seeking to emphasise the importance of the preservation of nature and its resources.



Figure 3. Knowledge sharing and seminars at the Landscape Laboratory
(Source: City of Guimarães)

Guimarães has a range of activities targeted at different audiences, understanding that education for sustainability needs a cross-generational approach. Projects such as the 'holiday camp' are a huge draw for young citizens. The camp organises a diverse programme during school breaks, where young people can participate in some of the research and development projects carried out by the institution. In addition to the activities designed for a younger audience, the Landscape Laboratory also offers activities for a more senior audience, facilitating the sharing of knowledge between generations.

Commendable Projects

Established in 2015, [PEGADAS](#), meaning footprints is the name of Guimarães' programme to promote sustainable practices through the provision of environmental education to all citizens.

The programme is based on the municipality's sustainable development strategy, and promotes the City's environmental, ecological and inclusive policies, which aims to support the necessary change in the territory, and encourage a shift in the awareness and behaviours of the community by creating 'ecocitizens'. Its goal each year is to promote new partnerships and themes in order to motivate and engage all participants actively and dynamically.



Figure 4. Worksheets for the PEGADAS activities
(Source: City of Guimarães)



Figure 5. Educational environmental activities (Source: City of Guimarães)

The programme is open to all schools in Guimarães. Each school has access to a PEGADAS space on the Landscape Laboratory website which provides the programme's actions and guidance, so it can be run by a local co-ordinator.

Under PEGADAS, Guimarães has successfully developed a set of pedagogical activities across the thematic areas of Waste, Energy, Water, Air, Noise, Mobility, Nature and Biodiversity, Forestry, Agriculture and Environment, and Sustainability with the aim of reducing consumption, emissions, noise, and waste, and ultimately reducing the environmental footprint of the city. These

activities have been carefully created to align with the [UN 2030 Sustainable Development Goals](#). There are a series of 'anchor' activities under the main themes such as 'Biodiversity GO!', 'From the river to the Sea', 'Environment Brigades', 'Eco Parliament' and other engaging activities such as monthly challenges, games and community events.

To date over 20,000 students along with their families and professors have participated in approximately 500 actions with 40 partners annually in the PEGADAS programme, which runs from September to June each year.

Future Planning

There are plans for the introduction of a second generation of sustainable and environmental gaming activities for smartphones and tablets and creating a PEGADAS Application as a tool for Schools and Professors, to follow up their activities and share with others.