

# BOTTLES TO BOATS

## EDUCATIONAL RECYCLING PROGRAMME IN GREECE

The [Bottles to Boats](#) educational programme that transforms plastic bottles into sailboats, is one of the initiatives that received the national recognition in Greece by the [Energy Globe Award 2021](#). Carried out since 2018 in Kalamata (Greece), it represents an innovative practice of great interest, which can be replicated in different contexts.

Bottles2boats is an *Educational Circle of Recycling* programme, corresponding to a five-steps boat-making process. It engages the students of secondary schools in the implementation of an environmental activity through a complete cycle of recycling, benefiting the local community of Kalamata (Greece) as a whole.

Bottles2boats is managed by two organizations based in Kalamata: KANE *Social Youth Development*, a non-profit organization which also involves European programs for educational activities with the aim to foster youth motivation in taking initiatives and become active citizens; and RADIKaA *Recycling Awareness Design Innovation Kalamata Association*, who's core idea is to raise awareness about environment and health by involving citizens in waste recycling.

At international level Bottles2boats started with the support of the European Union Erasmus programme and the European Solidarity Corps, another EU initiative focused on activities for youth people. A consortium was implemented by KANE as Greek hosting organization, to involve 16 volunteers coming from eight European countries by partnering with youth organization of Estonia, France, Italy, Poland, Portugal, Romania, Slovakia and Spain.

Bottles2boats began in June 2018 involving secondary schools in Kalamata and their students as well as the international volunteers. The first stage began with the environmental awareness training of students and the collection of plastic bottles for recycling. These activities were followed by the pilot stage consisting in the construction of the first dinghy sailboat from recycled plastic bottles. In July 2018, the sailboat was tested in the Mediterranean Sea and deemed seaworthy, thus proving the success of the construction. The project continued with the collection and processing of plastic bottles by the schools of Kalamata and the second phase was done in October 2019, when more international volunteers arrived for the construction of other dinghy sailboats.

The project was continuing until the 2021 when it was replicated on an improved form with regards to the methods, execution, results and overall impact.



The Educational Circle of Recycling programme begins in the classroom with educational activities, continues with the collection of plastic water bottles and the processing of plastic. Students can see the result of the upcycled plastic bottles, which are made into plastic cords, then woven into plastic nets used to make the sailboat. Innovative, simple and low-cost machines built with everyday materials are constructed and placed in schools for students to participate in shredding plastic bottles to either flakes or cords. For example, a recycled bicycle and recycled parts of cars are used to build the shredder. An iron rod and 2 small cutters comprise a small mobile shredder that can be attached to a stable surface. Loom built by wood and knitting strings creates plastic nets from the plastic cords shredded from the plastic bottles. A wooden mold is used for the shape of the sailboat and is built by low-cost wooden panels.

The educational cycle gives the opportunity to every student participating in the process to experience something very interesting, also using the sailboat that they built. The project also offered free sailing lessons to Greek and international students. The website pages of the promoters offer the opportunity to get to know this innovative environmental educational program in detail.

Bottles2boats was designed to overcome in an innovative way problems encountered in Greece and which are very common to many other contexts:

- Greece is facing an increasing plastic pollution: excessive use of single-use plastic bottles, making up a large percentage of waste found in the sea, beaches, bays, together with recycling activities still insufficient to solve the problem both in the Kalamata community and nationally. Combining education, theory and practice, Bottles2boats is allowing young people to make a concrete contribution to solve the great problems of modern societies.
- Most of the environmental education programs involving young people focus on the collection of plastic waste from beaches, parks and public spaces as the end-product of the activity. Even though people participate with this end goal, usually they do not get involved in the following steps of recycling, which are essential part of the process to reduce plastic waste. Bottles2boats breaks through this common approach and generates a strong motivation by considering waste a resource and by working on the entire cycle ranging from collection, waste processing and construction of a usable and desirable final product.
- The *Educational Circle of Recycling* was approved and sponsored by the Greek Ministry of Education, to be carried out in its experimental phase in the schools of Kalamata. Secondary schools play a key role in guiding young people towards future professional activities and towards new visions for a more sustainable world. Bottles2boats it is an example of a new educational approach to promote environmental awareness, which motivates young people to be creative and take active part in the challenge of concretely building the new solutions needed.

The success of the project in Greece gained recognition by the Ministry of Environment and the Ministry of Development, thus contributing for further national development of circular economy activities. In the local community of Kalamata, citizens became more active on environmental issues and promoters of plastic recycling thanks to its mobilized and educated students to be a key player in local society.

The national [Sustainability Observatory of Greece](#) presents the Bottles2boats project as a best practice framed in the 17 Sustainable Development Goals of the United Nations 2030 Agenda.



## To know more

[Bottles2boats in Kane NGO website](#)

[Bottles2boats national winner 2021 energy globe award](#)

[Bottles2boats in Kane ONG website ngokane.org](#)

[Bottles2boats - Crowdfunding](#)

[Call for volunteers in Kane NGO website](#)

[Call for volunteers in Kane NGO website](#)

[Bottles2boats in European youth portal](#)

[European Solidarity Corps - European Youth Portal \(europa.eu\)](#)

[Bottles2boats in sustainablgreece2020.com](#)

[Bottles2boats in adelslovakia.org](#)

[Guidebook WWF Guide in panda.org](#)

