

**CASE 7: REPUBLIC OF MACEDONIA**

# Engaging children and youth in urban waste management



**GRANTEE**

Training for Sustainable Development



**COUNTRY**

Former Yugoslav Republic of Macedonia  
(Republic of Macedonia)



**LOCATION**

Skopje, Republic of Macedonia



**SGP CONTRIBUTION**

US\$26,000



**IN-CASH CO-FINANCING**

US\$12,500



**IN-KIND CO-FINANCING**

US\$12,520



**START DATE**

July 2012



**END DATE**

January 2013

**PROJECT CONTEXT**

Skopje is the capital of and largest city in Republic of Macedonia, and is home to around 618,000 citizens. The city has a well-organized waste collection system but the waste is not segregated and the collected waste is dumped in landfills or burned. The NGO Training for Sustainable Development, known locally as ORT, noticed the problem of littering in the city streets, with particular concern for the numerous plastic bottles left unrecycled. Plastic bottles are made of polyethylene terephthalate (PET) and when dumped in landfills or in nature they take about a thousand years to biodegrade, in addition to taking up an enormous amount of space. When PET waste is burned, dioxins – a persistent organic pollutant – are released into the environment. ORT came up with a plan for waste management with the goal of reducing the amount of PET waste in Skopje streets through collection and recycling.

**PROJECT IMPLEMENTATION**

When ORT first presented the waste management plan to municipality employees and decision makers in five Skopje municipalities, the idea was initially rejected. While ORT was told their plan was good and useful, it was thought not feasible due to a lack of personnel. ORT's team revised their plan and came up with the idea of engaging citizens in sorting the waste at source, with primary focus on students in schools.

With support from the GEF Small Grants Programme and in collaboration with the municipality of Chair-Skopje, the municipality of Centar-Skopje, and Skopje's public enterprise "Komunalna Higijena" (or Communal Hygiene), ORT launched an educational outreach program in 2011. The project was later extended to the municipality of Karposh and the municipality of Aerodrom, thus reaching four of the ten municipalities that make up the city of Skopje. Activities were designed for students to engage in learning about POPs and the environment at school. Collection hubs were set up in 29 primary schools in the four municipalities so that students could easily bring plastic waste with them to school and dispose of it there. Transportation companies were engaged to pick up the waste and transport it to recycling facilities. Workshops were organised to improve project management, transfer knowledge, and support capacity building through exchange of positive project experience.



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## RESULTS AND SCALING UP

In undertaking this project, ORT came up with an innovative approach focusing on student engagement. They organised a competition between the schools and communities involved to see who could collect the most waste. Awards were given to the best class, best school, and best community and the results list was published in all schools and municipalities. This competition between schools ensured that both teachers and students worked hard to do their best every month. Additionally, children were given gifts based on their performance and successful teachers were featured on TV channels. As a result of these positive incentives, the amount of plastic waste collected increased every month during the project.

In the course of the project 10,000 school children were involved in collecting plastic bottles, which increased segregation and collection of plastic waste by ten percent. Approximately 5,909 kilograms of PET bottles were collected and sold which generated an income of US\$2,844 as a resource for the schools. At the end of the school year, the funds from the PET plastic bottles sold were shared with 30 percent invested in the NGO and 70 percent used by the school for supplies. Moreover the collection of plastic bottles has become a habit among most students in the targeted schools.

The project eventually reached around 30,000 residents of Skopje with information about the harmful effects of POPs with around 7,600 students participating in educational lectures for environmental protection. The project also generated a number of benefits



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for the local community. For example, the company used to transport the waste increased their income due to their regular engagement by the project. The project has been replicated on a smaller scale in three other towns in Republic of Macedonia: Gevgelija, Kihevo (Kercova) and Zelenikovo. The four municipalities in Skopje involved in the project have continued and expanded their efforts by placing collection bins in all school within the municipalities.

## EXPERIENCES AND LESSONS LEARNT

A project of this magnitude was challenging for ORT and it was initially difficult to manage the project without a complete understanding and control of the waste management process. In particular, they found out that it was essential to have a reliable transportation partner involved. Timely collection of the waste was critical so the bins would not fill up and participants would not be demotivated by finding no available bins to dispose of their waste. Thorough groundwork in citizen engagement was also crucial for the project's success. During the project implementation ORT continuously raised awareness among youth by educating them in the classrooms about the environment and plastics. Children sometimes had a difficult time participating in the competition because their parents were sceptical about the value of waste collection. Thus, the involvement and education of parents as stakeholders was also important for activities to succeed, both in schools and at home. ORT also organized training and capacity building activities for its partners in the municipalities and government officials, which promoted a conducive policy environment for the project's success.