

# Apply Home Composting in your municipality



*By applying Home Composting, the municipality and public utility can make savings in the operations and reduce quantities of communal waste ending up on the landfill and thus contribute to overall positive impact to the environment.*

## Good Practice

### Municipality of Backi Petrovac, Serbia

Domestic composting means the composting of biodegradable waste generated in individual houses' yards, where the resulting compost shall be used by houses' owners as an organic fertilizer in gardens, vegetable gardens and flowerbeds. This is the most cost-effective solution for dealing with organic waste because the waste-producer is also a waste-processor (composter) and end user. The analysis has shown that in the Western Balkans region, organic waste accounts for even 50% of the total municipal waste ending up in landfills. Therefore, the most suitable for home composting are the areas predominated by individual housing and rural areas that produce the greatest amount of biodegradable waste.

- Given that Bachki Petrovac is a local community consisting of 4 villages, areas under plants, parks and greenery take the largest share of the municipality's territory. Also, farming is the prevailing economic activity, so therefore, it generates a large amount of biodegradable, i.e. green waste, which before the introduction of home composting, could not be adequately solved. The municipality has no composting site established as a waste-collection place where compost would be produced in a centralized way. So, this is the first thing that will cost the municipality much more than the distribution of these domestic composters in phases. The green waste ended up at the landfill, thus increasing the landfill's body and mass, says Dushko Lukac from Bachki Petrovac Municipality in Serbia.

Industrial or centralized composting has a number of disadvantages, too. Organized collection of the organic waste fraction and its selection from among the general waste, its transport and proper treatment, implies financial, material and energy investments of utility companies dealing with waste management. However, home composting should be carefully organized such that easily accessible advisory support is provided to households, because the improper composting can produce a discharge of methane, ammonia and nitrous oxide in the atmosphere, which is a byproduct of the decomposition process. It is most important that the citizens show interest.

- When we saw that GIZ was planning such a project, we first put together a questionnaire through which people would give their opinion, whether they would want to compost, how much compost they would have etc. So, a survey was conducted and we found that the citizens' interest was high. Then, we advertised on television, and the information was also posted on the

municipality's website. We were looking for the most favourable composter manufacturer. There were different ideas about how these composters should look, but it was finally agreed that they should be made of wood, be colored, look natural and fit into any garden. The composters were distributed to citizens about one year ago. We first distributed 100 pieces, and then, because of the great interest, we distributed another 40 pieces. We also distributed the brochures we got from GIZ, together with the composters, says Tanja Turanova from Bachki Petrovac Municipality in Serbia.

The next step was to monitor the very process of composting. Professional teams from the Municipality and Public Utility Company went on the ground and visited the households that received composters. The first round was conducted on 14 May this year, and on average, the bins were up to 48% full, but with a lower density, and then, in the second round already, which was conducted on 19 August, they were 64% full, but with a much higher density, because the decomposition process of organic matters had already advanced significantly.

- The monitoring went well; there were some questions about the process of composting itself and what had to be disposed in the composter. We had about 85 cubic meters of compost collected during this project. This is virtually 4 trucks filled with waste that will not end up at the landfill. Realistically speaking, one year has already passed and we believe that the compost will be increasingly growing, says Lukac.

The distributed 140 composters covered 3% of the households in Bachki Petrovac, and the municipality is projecting that by 2023, 20% of all households will be covered. In this case, we will speak about approximately 600 cubic meters of compost annually.

- In this way, citizens did 2 things. They reduced the proportion of biodegradable waste, and for their own needs, produced a natural fertilizer, humus, which as of next year, they could use to fertilize their gardens and have a higher yield, for example, from their vegetable gardens or flowerbeds, added Turanova.

Some households can already see the first results of their composting, while the product, i.e. the compost, finds its practical application.

- In some households, citizens have already taken the composting result from the bottom of their composter and started using it in their fields, says Lukac.

Crucial for the Project is the cooperation between the Local Government and Utility Company. Although either of them is not yet aware of the financial benefits from the introduction of this process, since it is quite difficult, in a short period of time and on a small number of composters placed, to see the economic gains, still, the very reduction of the amount of waste that should be collected, transported and disposed, will significantly contribute to reducing the costs. On the other hand, the effect on the environment, the proper management of waste where it is generated, the environmental awareness raising, are not questioned at all.

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The methodology for Local Governments and their Public Utility Companies (Terms of Reference) for Applying Home Composting is available at NALAS website [www.nalas.eu](http://www.nalas.eu) and SeSWA website.

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