

Preventing plastic waste locally Possible measures to take by municipalities



Single-use plastic packaging causes overflowing trash cans and inputs into the environment.

Photo: © Marco Breitbarth

"Municipalities can contribute to the reduction of plastic waste in a variety of ways directly on site, thereby reducing the burden on both people and the environment."

Prof. Dr. Anja Hentschel, Darmstadt University of Applied Sciences

Plastic waste poses considerable problems for many municipalities: Overflowing trash cans and carelessly discarded single-use plastic products or packaging (so-called littering) cause direct inputs into the environment or into wastewater through storm drains. Hygiene products that are incorrectly disposed of via the toilet clog the sewage system and affect pumps in wastewater treatment plants. This means that some plastic also enters rivers and then the sea via wastewater, damaging the environment. Inputs must therefore be prevented. This is where municipalities can make important contributions.

Municipalities can take action and must approach stakeholders in a targeted manner

As waste management authorities, consumers of plastic and operators of public facilities, municipalities are themselves the addressees of measures to prevent plastic waste. They can take action before plastic waste is even produced and causes problems. In this way, they can reduce disposal and cleaning costs and avoid inputs into wastewater and the environment. In addition, they must address a large number of other stakeholders with their measures: in addition to private individuals, these include retailers, the food service industry and companies in particular.

Municipal measures against plastic waste such as counseling, taxation and bans

Municipalities must make use of the full scope for action available to them to avoid plastic waste. A combination of different measures and the involvement of all stakeholders is particularly promising. Raising awareness and providing information form the basis of this approach. The municipality can encourage various actors to actively participate and take measures



Target groups of municipal measures against plastic waste. Graphic: © Simon Kaser

Research on the prevention of plastics entering wastewater

The interdisciplinary project "Environmental Policy Instruments to Reduce Plastic Pollution of Inland Waters via Drainage Systems" examines and classifies the occurrence of plastic pieces of at least 1 mm in size in wastewater treatment

plants and street drainage systems in the municipalities of Aachen, Roetgen, Simmerath and Stollberg. Surveys and a laboratory experiment support the analyses. Based on these findings, proposals for environmental policy instruments to prevent these plastic waste inputs are being developed.

together with them. Financial incentives, for example in the form of packaging taxes, are also conceivable. Finally, bans on single-use plastic (packaging) can be incorporated e.g. in market bylaws.

Municipalities can act as role models and show that plastic is often not necessary

Municipalities themselves can set a good example by taking measures in their numerous fields of action. Guidelines for buying and using plastic-free products, optimizing street cleaning and the intervals between emptying public trash cans, and dispensing with plastic decorations in public spaces are just a few examples.



Switching from the yellow bag to the yellow garbage can reduces pollution caused by plastic packaging. Photo: © Marco Breitbarth



e.g. municipal bans on single-use plastic products in bylaws, active prosecution and punishment of littering, etc.



Financial

e.g. adjustment of waste fees, packaging taxes, participation of manufacturers/organizers in cleaning costs, etc.



infrastructural

e.g. avoiding communal plastic decorations at Easter and Christmas, installing filters in storm drains, yellow garbage cans instead of yellow garbage bags, etc.



Informational

cooperative

e.g. targeted campaigns to raise awareness and motivate prevention, providing advisory services to waste disposal companies, etc.

e.g. awarding "plastic-free" labels to stores and cafes, volunteer waste collection campaigns, etc.

Possible measures against plastic waste in municipalities. Graphic: © Simon Kaser/pixabau.com

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