

## Experiences of Czech municipalities with introducing biowaste collection

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Biowaste (biodegradable municipal waste) has always represented a notable portion of total municipal waste in the Czech Republic. However, until past decade or so there has been rather little attention paid to it municipalities, as people were often able to utilize generated biowaste on their own properties (primarily for further individual agricultural production), had agreements with local collective farms that could utilize this biowaste, or simply burned it. The side effects of this were that little has been developed in terms of biowaste collection, as well as fact that the amount of generated biowaste has not been measured very precisely, due the absence of any kind of systematical process through collection programs or so.

Situation is changing in past two decades, as less people are using their properties for agricultural purposes, and therefore have no longer capacities to utilize generated biowaste (mainly garden waste from mowing lawns), with simply burning it being continually less of a socially (and depending on the situation also legislatively) acceptable option. Another big source of demand for biowaste, collective farms, has also dropped due to the large changes in Czech economy after the fall of socialism regime in 1989 that resulted in closing down the majority of them. There are several usual results of these changes; generated biowaste is either stockpiling in various places without any further processing; people individually attempt to dispose of it in often questionable ways; or biowaste ends up with mixed municipal waste, what notably increases its volume and represents a rather costly way of dealing with garden waste.

Neither of this represents a viable option for municipalities that have usually limited budgets, need to cope with current legislation, and least not last need to reflect the needs and wishes of their inhabitants, who are generally becoming more environmentally conscious. In order to deal with the increasing amounts of generated biowaste, many municipalities in the Czech Republic introduced some kind of biowaste collection programs (since 2015 this became compulsory by the law), that could solve above mentioned issues.

There are two main parts of this paper. In the first part we briefly describe general development of biowaste collection in the Czech Republic approximately since it became an EU member state until present, together with quantitative research and relevant statistics of the available data, and compare the situation with other EU member states. In the second part we conduct a qualitative research based on the interviews with people responsible for waste management in municipalities in order to provide description of the both common and less common practices of how biowaste is collected in Czech municipalities together the experiences of municipalities with introducing their biowaste collection programs. We have selected both municipalities that have longer experience with collecting biowaste as well as municipalities that have introduced biowaste collection just few years ago, in order to cover municipalities in various stages of biowaste collection introduction. We focus both on what has been identified as working with significant impact on the biowaste collection, as well as on what has not been proved to work towards expected outcomes. For clarification, in this paper we focus on “green” waste, as it represents a major part of biodegradable waste collected in municipalities from households. We do not focus on other types of biodegradable waste such as sludge, food processing industry waste, agricultural waste or so, as these do not generally represent a notable portion of municipal waste.

The benefit of this paper is that it provides a first-hand experiences with introducing green waste collection programs in municipalities and therefore can serve as a guide for municipalities planning to introduce green waste collection with examples of what measures were effective, what on the other hand did not work as expected and should be avoided, and generally what can they expect when introducing such programs.