

The Analysis of Municipal Waste Management Systems and Municipal Waste Recycling in Selected European Union Countries*

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Abstract

The improving of waste management systems is one of requirements of the circular economy. In the regions of the EU, despite the same demands for the implementation of circular economy, there are different conditions in the adjustment and implementation of appropriate solutions. The motive behind the study was to present the analysis of waste management systems in sample EU countries and an attempt to review them. There is a void in literature that makes this study important and that makes it an interesting topic. The literature contains single and fragmentary parts of waste management systems in various countries but there are not detailed comparisons. Thus, the paper analyses examples of EU countries with similar or various waste management systems. The study was based on an analysis of data obtained from scientific literature, legal acts, statistical databases and available reports. The indicator taking into account is the recycling rate of municipal waste in selected EU countries. Changes and progress in the municipal waste recycling rate in selected years of the period 2000-2023 in Austria, Germany, Italy, Poland and Portugal were also presented. The analysis shows that there are certain similarities or differences in waste management systems. However, there are also factors that could be examined in more detail by extending the future research. Comparing the waste management systems should be taken into account their challenges, achievements and barriers in the context of circular economy goals and the specificity of a given region and the system embedded in it.

Keywords: waste management systems, municipal waste recycling