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## THE ROLE OF WASTE COLLECTION CENTERS IN A CIRCULAR ECONOMY SCENARIO: AN EMPIRICAL STUDY ON THE CITIZENS' PERCEPTION

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### **Abstract**

At a global level, due to the large diffusion of plastic and electronic products, people are disposing growing quantities of municipal solid waste (MSW), and its composition is more complex than ever before. Effective waste management behaviors, policies and technologies enable a variety of benefits in the multi-dimensional perspective of social, environmental and economic sustainability. Urban waste collection centers represent fundamental incentives for the separate collection of municipal waste, aimed at promoting actions that facilitate the contributions by citizens. In this context, the present study has a twofold purpose: to shed light on the current situation of separate collection initiatives and waste collection centers in Italy by analysing, in a preliminary phase, reference public data concerning six representative cities; to investigate the awareness and perception of quality of these initiatives in the perspective of citizens-users as well as their accuracy and frequency of use. Data collected through an online survey with a sample of 164 respondents were statistically analyzed through multiple regressions and allowed to test the predictive models concerning respectively the correlations among the variables of information and accuracy in the separate collection, and quality of service and frequency of use of collection centers. The results showed that the perceived accuracy is better predicted by information variables rather than by quality evaluation variables. Conversely, the frequency of use variable is better predicted by quality evaluation variables rather than by information variables.

*Keywords:* circular economy, citizens' perception, European Union regulations, municipal solid waste management, separate waste collection, waste collection centers

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