

Households and circular economy: Empirical insights on the economics of home waste sorting

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Abstract

Despite the growing knowledge and interest in circular economy, much of the research efforts to date have been approached from an environmental engineering system perspective using tools such as life cycle analysis. Research into the behavioural aspect such as economic analyses that quantitatively assess the role of consumer choices in the realization of increased recycling remain scant. Research insights on these subjects can provide inputs into the development of policy interventions to influence consumers' behaviour to support a transition towards a circular economy. The present project, commissioned by the Ministry of Environment and Food of Denmark, investigates household behaviour on waste sorting. More specifically, the project aims to quantify to what extent people are willing to sort their household wastes and to investigate the different factors that influence their preferences for waste separation. Data have been collected through a national scale survey, which includes a choice experiment. Household respondents were asked to evaluate different waste sorting schemes. Complete responses from 1011 households were analyzed. In the presentation, findings regarding the heterogeneity of household preferences for waste sorting and handling will be presented. These highlight results from Latent Class Choice model and from an analysis of how household socio-demographic and residential characteristics may explain their propensities towards different sorting schemes. Results from the project are expected to contribute not only towards academic debates surrounding the subject matter but also to inform policy making especially in relation to the Danish strategies towards more efficient and effective waste management in support of a circular economy.