

State of art and design trends for innovative sorting and collection methods of household waste

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1. Introduction

In the paper a desk study is presented with six selected cases on state of the art technology and design trends for innovative sorting and collection methods for household waste including food waste, which are in agreement with EU directives.

2. Collection methods

The cases are selected and described in collaboration with the Danish Waste Association. They represent five special challenges relevant for the living labs of the South Baltic Region “WasteMan” project. The study includes examples on collection methods for multiple fractions in old downtown areas – see Fig. 1, and old villages with lack of space for collection bins, as well as innovative suction systems and approaches for using shared recycling facilities to create awareness and changing user habits [1,2]. The study is also focusing on the food waste system, i.e. the loop from households through pulp technologies to prepare food waste to biogas treatment and how to ensure the residuals from the biogas plant can be used as a soil improver/fertilizer.



Figure 1. Public collection point (a) with suction system in Helsingør (for medieval towns with constricted space and pathways) [1] and (b) public collection points in Kulturvet, central Copenhagen [2]

3. Conclusions

The overall conclusion was that there is no all-encompassing solution for sorting in medieval towns. The best solution must therefore be a combination of systems, decided upon with involvement of the users.

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**WASTE
MAN**

**Interreg
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EUROPEAN UNION

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4. References

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