

# RECYCLING & WASTE MANAGEMENT

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## Separate collection of plastic packages in Helsinki metropolitan area Finland

**Kouvo Petri and Kainulainen Aino**

Lappeenranta University of Technology, Finland

The separate collection system for recyclable wastes in the Helsinki Metropolitan region was ranked second best in a recent study comparing recycling schemes of European capitals (European Commission 2015). The collection system includes paper, cardboard, glass, metals and bio waste. Residual waste is collected and used in energy production. The collection system excluding paper is managed by the Helsinki Region Environmental Services HSY, a public organization owned by four municipalities (Helsinki, Espoo, Kauniainen and Vantaa). Paper collection is handled by the producer responsibility scheme.

The efficiency of the collection system in the Helsinki region relies on a good coverage of door-to-door-collection. All properties with 10 or more dwelling units are required to source separate bio waste and cardboard. This covers about 75 % of the population of the area. The obligation is extended to glass and metal in properties with 20 or more dwelling units. Other success factors include public awareness campaigns and a fee system that encourages recycling.

The separate collection of plastic packaging in Finland begun in 2016 within the producer responsibility scheme. HSY is supplementing the national bring point system with door-to-

door-collection. Pilot operations begun in the spring 2016 and has been continuing since then. Currently HSY is considering new regional waste management regulations for source separation of plastic packages for big apartment buildings.

This paper describes the results of plastic packages separate collection piloting, the key figures of quantity and quality of the collected plastic waste as well as results of plastic packaging waste LCA calculations and description of the plastic waste processing.

### Speaker Biography

Kouvo Petri has published technical articles and other technical reports. His PhD work investigated the modelling on heavy metal emissions during the co-combustion of biomass, peat and wastes. In current position as a director of the Waste Management Division of the Helsinki Regional Environmental Services Authority he is responsible for the waste management of nearly one million people and several commercial properties living and operation in the metropolitan area. In addition, Kouvo works as an associate professor at the Lappeenranta University of Technology, Finland. Education: Doctor of Technology, Lappeenranta University of Technology; Environmental Studies, University of Turku; Masters in Science of Energy Engineering, Lappeenranta University of Technology, Profession. Current: Director, Helsinki Region Environmental Services, Professor in Heat and Environmental Technology, Technology Manager, Environmental Technologies, Fortum Oyj; Development Manager, Electric Power Research Institute, California, USA, 1993-1995. Others: Chairman of the Board of Finish Solid Waste Association and Member of the Board of ISWA (2010-2012).

e: petri.kouvo@hsy.fi

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