

A survey on waste flows

Anu Toppila's recent master's thesis 'Waste Flows in Finnish Producer Responsibility System – Case WEEE and Portable Batteries and Accumulators' surveyed the quantity and quality of EE waste that is directed outside of the recycling network organised by producers in Finland. In addition, the study determined the reason as to why some EE waste goes outside of the producers' recycling network.

The results of the research show that as much as half of the electric and electronic devices disposed of each year end up outside of the producers' recycling network. In terms of quantity, this corresponds to 51,000–53,000 tons of waste, with no certainty of its appropriate recovery and processing.

About 80% of the side flows of the producers' recycling network are caused by collection operations run by parties other than the producers. These actors include, e.g., waste management operators, collectors of scrap metal and other private actors who compete for access to waste with the producers. Some of the outside actors operate in the grey economy.

The majority of the side flows of EE waste are caused by the financial value of the raw materials contained by the waste and by significant reuse value of the devices in developing countries. Outside actors only collect EE waste that has financial value, so the valuable waste ends up somewhere else than in the producers' recycling network.

In addition to the outside actors, side flows of EE waste are generated by deficient consumer behaviour. Research results show that some amount of waste ends up outside of the producers' recycling network in mixed waste; furthermore, significant numbers of unused electric and electronic equipment are stored by households.

The master's thesis was written by assignment of the Pirkanmaa Centre for Economic Development, Transport and the Environment, which is a national authority on producer responsibility, and it was approved at the Jyväskylä University School of Business and Economics in September 2011.