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MODEL FOR REGIONAL MANAGEMENT OF ELECTRICAL AND ELECTRONIC WASTE (WEEE) FLOWS

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Abstract

The tenacious technological development at latter decades has conditioned the growth of electrical and electronic equipment (EEE) amount and generation of their waste. That is a global heterogeneous problem including different stakeholders and various aspects: environmental, economic, social and technological. The regional electrical and electronic waste (WEEE) management systems (MS) are developed in order to solve this problem. The implementation of WEEE recycling and collection targets is not obtained in every region. The transdisciplinarity and differences of every country has shown the need for integrated evaluation of the regional WEEE systems in order to regulate EEE flows and WEEE collection, treatment activities in reasonable manner. The integrated model for evaluation and regulation of regional EEE and WEEE flows is described at this article. The model is based on life cycle thinking approach (LCThA), where all the stakeholders and other impact factors in particular region are integrated and evaluated in order to create cooperation based WEEE management system instead of current national WEEE treatment system. The verification of the model is based on the Lithuanian case study.

Keywords: material flow, region, waste of electrical and electronic equipment (WEEE), waste management

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