Electrical and Electronic Waste Inventory and Management Strategies in Bangkok, Thailand

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Abstract

E-waste is one of the fastest growing waste streams in Asia due to rapid economic growth and technology advancement. Currently, there is no appropriate E-waste management strategy in Thailand. This study investigates the current E-waste management situation in Bangkok, Thailand. Interviews, surveys, questionnaires, and field visits were arranged to collect information from manufacturers, policy makers, informal sectors and consumers. The E-waste inventory methodology was developed in estimating E-waste generation. This study reveals that approximately 90,000 tonnes of E-waste were generated from households in 2003. E-waste from industries is not significant in the overall E-waste generation but E-waste from households is the main concern on the current E-waste management in Thailand. Moreover, informal sectors play an important role in E-waste management. Most of E-waste from households are dismantled and recovered by informal sectors and sold to the material recycling industry. Most of the informal sectors are not practicing safety measures on E-waste handling and processing. The questionnaire survey revealed that 64% of users have knowledge on the hazard of E-waste and only 40% of users are willing to pay for the E-waste treatment.

Keywords: E-waste, hazardous waste, municipal solid waste, informal sectors

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