

# Assessing the Informal Diversion of Aluminium Beverage Cans in Selected Eastern European Cities

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(Summary of the results of the study commissioned by the Packaging Group of European Aluminium to the BOKU University of Natural Resources and Life Sciences, Vienna)

### Introduction

In view of the ambitious aluminium packaging recycling targets as proposed in the EU Circular Economy package the Packaging Group of European Aluminium has commissioned a study on how industry could formalize the recycling of the considerable amounts of used beverage cans which are collected by waste pickers, in particular in some of the Eastern-European countries.

The study has been carried out by the Institute of Waste Management BOKU University of Natural Resources and Life Sciences, Vienna, in close cooperation with some key experts of the Packaging Group network in Hungary, Romania and Greece. The study will be officially published.

### Aim of the study

The aim of the study was to develop a methodology in order to better estimate the magnitude of the informal beverage can collection activities. The study was carried out in the two largest cities of Romania and Greece (Bucharest, respectively Athens) and in Miskolc, a smaller but important town in Hungary.

Based on the outcomes of interviews with local stakeholders including individual waste pickers and comparing reported results in some international studies, it can be concluded that 1.6 kg/day is the average amount of used beverage cans (UBCs) that is collected from a typical informal collector of recyclables.

In the selected cities very different situations exist regarding the collection of UBC's; from the use of modern voluntary take back machines at supermarkets in Hungary to a high percentage of semi-legal / illegal collection activities in Greece and a mixture of both in Romania, relying in all three countries on an existing network of scrap dealers.

In all cities the informal sector hugely contributes to the formally collected amounts: via the take back machines in Hungary about 58 % and via the scrap dealers in Romania and Greece respectively 66 and 83 %.

The major problem in terms of obtaining reliable collection data is due to the fact that as long as the collected beverage cans are not accompanied by proof of acquisition from individual collectors by means of ID copies, these quantities cannot be regarded as collected from the population and therefore cannot be taken into account by the Extended Producer Responsibility schemes in their official recycling reports to the national authorities. This combination of waste pickers without ID's and strict legal provisions make these transactions illegal and actually prevent official operators such as the aluminium recycling sector to act as buyers and to report these quantities in the official recycling statistics.

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## Two options for generating proof of recycling

The study tables, apart from the deposit-option (which is not further tackled in detail) two major options for generating proof of a proper separate UBC collection and a satisfying can recycling rate.

The first option, which turned out to be very promising in at least Hungary (and meanwhile also introduced on a smaller scale in Romania) is the use of modern collection instruments like voluntary take back machines (VTBM's) and other value driven automated collection systems, like for example the in-front-of-store take back units installed on the parking areas of hypermarkets, such as in Romania.

This option is only working for valuable materials, where the revenues from recycling are high enough to justify the investments in a dedicated collection system. On top, consumers might be confused by the existence of parallel collection systems for other recyclables. It might also result into thievery of UBC's and other valuable waste items from existing separate collection bins. Therefore such automated take back systems have to be accompanied by awareness building activities, involving all stakeholders active in the separate collection sector.

The introduction of well-functioning EPR systems is the actual preferred collection method in Europe. However, it seems to be difficult to transport well-established systems to countries with a less developed waste management structure. In some Western-European countries separate collection was introduced in the seventies. These systems have been upgraded and developed to the needs of the specific countries several times since then. In some Eastern-European countries EPR systems have been introduced without an appropriate analysis of the needs and accompanying measures and frameworks.

## Recommendations

Focusing on the informal collectors, at least two if not three main recommendations could be identified in order to obtain higher amounts of collected and traceable UBCs and therefore proof of the fulfilling of the recycling quotas:

- 1) An easing of the reporting system not requesting an ID from the informal collectors would give the possibility to introduce the informal collected UBCs in the formal EPR system;**
- 2) An adapted design of EPR separate collection bins, so that no more cans could be taken out that already have been separately collected;**
- 3) The recognition of a certain amount of informal recycled UBCs can be seen as a third and additional solution.**

It can be concluded that in terms of formalising the informal sector both the investment in VTBM's as well as enabling the keeping of records for UBC collected by people without ID are preferable and logical solutions.

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