

Deposit Refund System for Beverage Containers in Latvia: Learnings within the Baltic States

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INTRODUCTION

One of the main global environmental problems we are facing is the increasing the amount of waste. There are numerous policy instruments used to reduce the environmental impact of packaging. Many EU member states use producer levies, packaging and resource taxes, deposit-refund systems and producer responsibility systems (Bailey, 2017; Watkins et al., 2017).

MATERIALS AND METHODS

In this article we conduct comparative analyses and evaluate the effectiveness of deposit-refund systems for beverage packaging in the three Baltic States: Estonia, Latvia and Lithuania. Data used in the study is obtained from statistical databases of the Central Statistical Bureau, Eurostat and Euromonitor, as well as from stakeholders of the deposit-refund system – beverage manufacturers, retailers and waste management organisations. When necessary data was not available, we made calculations and approximations using analogies with neighbouring countries, e.g. regarding the quantity of different kinds of beverage containers (plastics, glass, cans) delivered to the market, the average weight of containers, changing trends etc.

RESULTS

To stimulate the rate of beverage packaging collection and recycling, both Estonia (2005) and Lithuania (2016) have introduced deposit-refund systems. Both are mandatory centralized systems with collection rates over 90%. The strengths of the Estonian system are a result of sophisticated IT solutions, differentiated EAN coding logic, elasticity and good management. The Lithuanian system is one of the most technologically advanced systems. One of its positive features is the lease of taromats, reducing the upfront investment costs for retailers and producers.

DISCUSSION

Previous research shows that the introduction of a deposit-refund system increases the collection rate of beverage packaging (Dewey, Denslow, Chavez, Romero, & Holt, 2011; Lavee, 2010) but requires substantial organisational and financial resources. It is more economically viable to introduce a deposit system when separate waste collection system is already in place. The results of this study are similar.

CONCLUSION

1. Latvia needs a DRS in order to achieve PET goals and reduce environmental pollution;
2. The required score and distribution is about the same
3. A DRS has to be operated by a non-profit organisation consisting of manufacturers and retailers;
4. The recommended deposit is 10 cents;
5. Provision should be made for the inclusion of beverage cartons and alcoholic beverage bottles;
6. Provision should be made for the inclusion of refillable glass bottles and jars.

KEYWORDS

Deposit-refund system, Baltic States, beverage packaging, waste management

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