DEPOSIT REFUND SCHEME

Award Scheme	**Others**
Themes	**Waste Management**
Sustainable Development Goals	**Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable**

Summary

Deposit refund schemes provide a small refund to consumers when a plastic item is returned to an authorized collection point.

Background and Objective

Single-use plastic items are often discarded into garbage receptacles or the environment; only 9% of it is actually recycled, on average. By investing in a deposit refund scheme and creating financial incentives for consumers to recycle, many cities around the world have seen significant increases in collection and recycling rates.

Actions and Implementation

Deposit refund schemes are systems where consumers pay a small amount of money upfront, to be reimbursed to them when they bring the container to a collection point once they have finished using it. The container can then be recycled and transformed into secondary raw materials. Deposit refund schemes are typically operated by a governmental entity or an independent body. This agent is in charge of overseeing the scheme process from start to finish, from the installation of the necessary infrastructures to the monitoring of the deposit fee circuit that goes from producers to retailers and from retailers to consumers. The deposit refund scheme system is an application of the polluter-pays principle, where people are economically incentivized to recycle rather than to waste. It is mostly implemented to collect and recycle beverage containers made of plastic, metal and glass, as they can be easily transformed into secondary raw materials. Usually, the fee paid for each item ranges from €0.10 to €0.50, depending on the type and volume of the container.

Outcomes and Impacts

CASE STUDY EXAMPLES In Europe, 10 countries have already implemented deposit return schemes: Croatia, Denmark, Estonia, Finland, Germany, Iceland, Lithuania, Netherlands, Norway, and Sweden. All of which have achieved significant results. The least successful country is Estonia, with an impressive 82.7% total return rate – including can, PET and glass – which is already higher than many countries in Europe. The most successful example in Europe is Norway, with an outstanding 97% recycling rate for plastic bottles. Germany also has very high results, as it has the highest population and a broad DRS scope, targeting glass, plastic (mostly PET) and metal (aluminum) with 98.4% total return rate. The system was implemented by the ministry of environment in 2003 with a €0.25 fee per item, whether it is glass, metal or plastic. The system in Norway, run by Infinitum, has been live since 1996 following 10 years of discussion, development and testing. This system handles PET bottles for beverages (not food or household cleaning) and a small amount of HDPE and aluminum cans. Refunds can be made via one of the 3,500 reverse vending machines, with 93% of the total packaging collected via this channel. The remaining 7% is collected manually by one of 11,500 registered collection points. For products registered with Infinitum, consumers get one Krone (approximately €0.10) back for a 330ml plastic bottle or can and 2.5 Kr (approximately €0.26) for a large 2l plastic bottle. Infinitum has a recycling rate of 97% of all of the packaging that is registered through its system.

Conclusion

ALTERNATIVE SOLUTIONS Reverse Vending Machines Reverse vending machines provide an automated method for collecting, sorting and handling the return of used beverage containers for recycling or reuse. Key players: Tomra, Incom Recycle, Diebold Nixdorf, Sielaff, RVM Systems AS, Trautwein SB Technik, Kansmacker, and Envipco amongst others. See: https://www.tomra.com/en/collection/reverse-vending See: https://infinitum.no/english/about-us