

Key success factors in setting up Deposit Refund Systems (DRS)

Natural mineral and spring water producers have been at the forefront in addressing the challenge of packaging waste by investing in sustainable packaging solutions and contributing to the end of life management of their packaging.

All drink containers used by the industry, be it PET plastic, glass or aluminium, are fully recyclable. Drink bottles made of PET are already the most recycled of all plastic packaging. However, despite the industry's efforts in setting up and financing packaging recovery organisations, the current level of collection of PET beverage bottles vary substantially across the EU. Some Member States collect more than 90% of PET bottles while others collect less than 20%.

On 15 May 2018, EFBW communicated publicly its pledges towards 2025 (90% collection for recycling of PET water bottles and 25% rPET use) in line with the objectives of the EU Plastics Strategy. On 21 May 2019, the Single Use Plastics Directive was approved with a 90% separate collection target for plastic beverage bottles by 2029 (77% by 2025) and an obligation for the industry to incorporate 25% of recycled plastic in PET bottles from 2025 (30% in all plastic bottles by 2030).

High collection of beverage PET bottles is a first, but very important, step towards higher use of recycled PET. However, to include recycled PET in their packaging, natural mineral and spring water producers require access to a consistent supply of high-quality, food contact, recycled material.

To meet the above stated EU targets while ensuring the availability of quality recycled PET, separate collection is essential. On 1 July 2019¹, the European natural mineral and spring water industry called for more efficient collection and sorting systems for beverage containers.

For Deposit Refund Systems to be efficient, it is important that they meet the following conditions:

Governance

- ❖ Similar to Packaging Recovery Organisations, **Deposit Refund System shall be set up and run by the obliged industry**
- ❖ The system should be run by a **Central Deposit Management Organisation, owned by the obliged industry**, run as a **not-for-profit organisation**, accredited by local authorities and **operated on a national scale** as the sole responsible entity. The management board should be governed mainly by

¹ https://www.efbw.org/fileadmin/DOCUMENTS/EFBW_calls_for_more_collection_01_07_19.pdf

obligated producers. Retailers play a critical role in the redemption process and should be part of the management board to help optimise program management and implementation.

- ❖ Similar to Packaging Recovery Organisations, the **income from the sales of the collected materials and unredeemed deposits should be returned to the Central Deposit Management Organisation** to cover for the system's operating costs, consumer communication and its continuous improvement.

Legal framework

- ❖ DRS should have a clearly defined **scope** in terms of which **product and packaging materials are covered**. As far as products are concerned, the scope should be as wide as possible and in principle include all beverage categories. With respect to packaging materials, aluminium and steel cans should be included alongside PET bottles, so that the system is financially sound and material substitution is avoided. The inclusion of other materials should be evaluated on a case by case basis.
- ❖ **Free-riding and fraud:** Compared to EPR schemes, DRS systems demonstrate a minimum occurrence of free riding. Effective and proven anti-fraud container labelling and electronic scanning technology need to be included in the design of the system. Financial planning for a DRS should include the provision and expenses that are related to anti-fraud enforcement, such as audits of return centres.
- ❖ **Key performance indicators for the DRS** (collection targets) and related obligations for industry and retail should be clearly defined. The targets should be measurable, achievable, cost effective and reported in a transparent way.
- ❖ **Conditions for accreditation** (financial means and management, cost and material control mechanism) of the Central Deposit Management Organisation, including detailed reporting obligations, should be clearly defined
- ❖ The DRS and its supporting legislation should include measures to ensure that the obligated industry has **fair and legitimate access to its recycled packaging materials**, thereby enabling bottle-to-bottle recycling at least as per EU rPET SUP targets

DRS design

- ❖ **DRS fees** to obligated industries should reflect the actual cost of collection and sorting as well as material revenue differentiated by material type, so that costs and revenues are allocated back to specific materials and cross-subsidisation of materials is avoided
- ❖ **Set up cost:** Depending on local circumstances, the system for taking back containers should balance the use of existing retail locations with dedicated redemption centres to maximize convenience and efficiency and reduce the carbon/energy footprint of collection. Depending on the local retail network, other sales channels or drop-off centres could be included.

- ❖ **Amount of deposit:** the deposit amount should be set according to the ambition of the program and consumer convenience, market impacts, and the program’s financial solvency. Local modeling studies are recommended before establishing or amending a DRS fee. The deposit level can be adjusted periodically based on program performance, inflation and other factors. The deposit fee should be defined on a country-by-country basis, by the national Deposit Management Organisation, considering local circumstances and it should incentivise a “bring back” culture in order to meet the collection targets set in the Single Use Plastics Directive or other national legislation
- ❖ **Redemption points:** For high-volume locations, the use of Reverse Vending Machines (RVMs) should be encouraged and optimised in relation to manual sorting, to manage costs and efficiency and leverage electronic data recording and anti-fraud systems. RVMs may only constitute a minority of collection points, but if properly located, they will collect the vast majority of containers relative to manual sorting. RVM deployment requires enough collection points to ensure consumer convenience, which is critical to collection rates, and the selection of locations for RVMs should be guided by criteria such as sales volume. Annual operation and maintenance costs associated with the RVMs should be paid by the CDMO.

Consumer convenience

- ❖ Deposit **redemption points must be easily accessible and convenient**, preferably placed in existing retail locations (“return to retail” model). It must also be **clear to consumers what material is included and what is not, as well as the deposit amount** (i.e. with the amount of the deposit not included in the sales price of the product).

Natural mineral and spring water producers package their products in fully recyclable containers and strive to achieve high return rates of their packaging, in every European country. Industry’s pledges and the Single Use Plastics Directive converged in setting very high collection rates for beverage bottles but also the incorporation of recycled PET, in new bottles. To achieve the quantity and quality required, DRS will play a pivotal role. This document provides the key design parameters for a well performing DRS and the systems’ details can be evaluated country by country. The beverage industry must have preferential access to food grade recycled materials in order to be fully circular and give every bottle a second life.