### reloop

## Enabling Refillables: Deposit Return Systems

## Deposit return systems are a prerequisite for a successful refillable beverage container market

Modern, comprehensive deposit return systems (DRSs) drive increased recycling rates. In addition to their environmental and economic benefits, DRSs are also a prerequisite for a scalable refillable beverage container system.



According to Reloop analysis across 93 countries, refillable container use fell from 34% to 20% between 1999 and 2018, while sales of single-use PET containers have increased sharply, from 17% to 41%, over the same period.<sup>1</sup>

The surge in single-use packaging has driven a waste crisis in oceans and waterways, added to the climate crisis, and sent billions of tons of valuable resources like aluminum, PET, and glass to landfills and incinerators. In the US, more than 140 billion single-use beverage containers are burned, buried or landfilled each year.

The decline in refillables had nothing to do with consumer preference. In parts of Canada today where refillables are common, consumers cannot readily distinguish between a refillable and single-use beverage container: the user experience is identical. The move to single use containers reflects, instead, retailer and producer efforts to avoid costs associated with refillable container collection and processing.







Refillables are an important part of the solution to this waste crisis. Refillable beverage containers can be reused multiple times before being recycled or discarded, reducing both waste and greenhouse gas emissions in the beverage industry. In Germany, actual figures from the beer industry indicate reuse rates of up to 50 times.<sup>2</sup>



Successful deposit return systems have existed in the US and all over the world for decades. They require consumers to pay a deposit on any included container they purchase. The deposit is then fully refunded when the container is returned. The result of this simple recycling incentive has been higher container recycling rates (typically over 85%<sup>3</sup>) higher-quality material for recycling or reuse, and reduced litter.

DRSs establish a common infrastructure by which containers can be returned for recycling or refill, as the graphic below illustrates.

# Integrated collection of single-use & refillable deposit containers

The two most important components of a refillables system for consumers are that it be convenient and financially rewarding. For producers, getting as many refillable containers returned as possible is key.

With modern deposit return systems, the consumer does not have to distinguish between returning a container for recycling or refill; that distinction is made instead by the back-end handling systems. This makes return simple for the user, who is motivated to get their cash back. Producers, meanwhile, benefit from a collection system uniquely equipped to deliver high volumes of quality material.

Both behind the scenes and from a user perspective, high-performing DRS enable a robust refillable container marketplace, and guarantee that valuable resources are reused, not discarded.

Each time a bottle is reused, environmental impacts associated with production and end-of-life management are avoided. Refillable systems also offer tremendous economic benefits in terms of material cost savings and job creation, which are multiplied with each refill.



## DEPOSIT RETURN SYSTEMS: BENEFITTING REFILLABLES

### **REFILLABLES-FRIENDLY POLICIES**

Adopting the following measures will help accelerate the transition to increased use of refillables.

![](_page_0_Picture_24.jpeg)

#### **Enact Best-in-Class DRS**

- Reduce wastage by introducing DRSs on all single-use beverage containers.
- Require DRSs to be inclusive by container material and size, centered on return-to-retail (where consumers can return containers to retailers as part of their everyday activities), and easily accessible to all.

## **Glass: Why all the Fuss?**

Though glass can be infinitely recycled without losing quality, it doesn't play well with other materials. When glass is collected alongside other recyclables, breakage and mixing with paper and plastic results in material contamination, making recycled glass costly and uncompetitive relative to virgin material. Consequently, less than 25% of glass is recycled today.<sup>4</sup>

![](_page_0_Picture_30.jpeg)

- Consider refill quotas or single-use container fees to incentivize a shift towards better packaging design and collection models.
- Use multi-tier deposits, whereby refillable containers are subject to lower deposit fees than their single-use counterparts.
- Incentivize beverage producers to switch to refillable beverage containers, ensuring access to containers collected through DRS.
- Support DRSs that allow producers to rent a standard refillable bottle from a third party.
- Introduce tax incentives and funding for reusable packaging recovery pilots, to shift behavior in the beverage supply chain.

![](_page_0_Picture_36.jpeg)

- Set key performance indicators for refillables to maximize environmental outcomes.
- Require all refillable containers to be recyclable so that the system follows the waste hierarchy (Reduce > Reuse > Recycle)
- Where deposit return and refillable systems are in place or planned, ensure a seamless experience from the consumer perspective to achieve the highest possible rate of return.

Utilizing DRS and glass containers for reuse rather than recycling comes with significant environmental benefits. Glass bottles that are reused multiple times generate 57-85% fewer greenhouse gas (GHG) emissions compared to other packaging.<sup>5</sup>

![](_page_0_Figure_41.jpeg)

![](_page_0_Figure_42.jpeg)

- 1 Wilcox, Jason and James MacKenzie. 2021. What We Waste. https://www.reloopplatform.org/wp-content/uploads/2021/04/What-We-Waste-Reloop-Report-April-2021-1.pdf
- 2 Saphire, David. 1994. Case Reopened: Reassessing Refillable Bottles. Book News Inc.
- Reloop Platform. 2020. Global Deposit Book 2020.
  https://www.reloopplatform.org/wp-content/uploads/2020/12/2020-Global-Deposit-Book-WEB-version-1DEC2020.pdf
  Glass: Material Specific Data. US Environmental Protection Agency. Accessed June 11, 2021.
- https://www.epa.gov/facts-and-figures-about-materials-waste and-recycling/glass-material-specific-data
  Wilcox, Jason and James MacKenzie. 2021. What We Waste.
- https://www.reloopplatform.org/wp-content/uploads/2021/04/What-We-Waste-Reloop-Report-April-2021-1.pdf

![](_page_0_Picture_48.jpeg)

bottlebillreimagined.org