

POLICY INSTRUMENTS TO PROMOTE REFILLABLE BEVERAGE CONTAINERS



Refillables have an important role to play in the circular economy. From glass beer bottles, to refillable plastic soft drink bottles, to coffee cups, refillable beverage containers can be reused several times before they are recycled, which is key to keeping valuable resources in the production cycle for as long as possible. In some countries, refillable bottles are reused up to 50 times, eliminating the need to manufacture 49 more bottles and avoiding all of the environmental impacts associated with their production and end-of-life management.

Aside from the obvious environmental benefits, refillable systems offer tremendous economic benefits in terms of material cost savings and job creation, which are multiplied with each refill. Despite these benefits, the market share of beverages in refillable containers has declined rapidly in jurisdictions around the world, as single-use alternatives made from glass, plastic, metal and multi-laminate materials take their place. In Western Europe alone, sales of refillable beverage containers have dropped from 63.2 billion units in 2000 to 40.2 billion units in 2015. (To see how refillables have declined in individual countries across Europe, visit the Reloop Reuse Resource Center at <http://reloopplatform.eu/beverage-sales-by-container-type/>)

Several factors can explain this decline, one of which is a shift in the retail landscape towards large retailers or “big box” stores. Without policies in place to promote them, retailers in Europe (and elsewhere) have stopped carrying refillables in an effort to reduce the labour, space and general management requirements associated with having to take them back. One such example is ALDI—one of Europe’s leading discounters—who adamantly refuses to sell anything in reusable packaging.

Another contributing factor to the decline in refillable beverage packaging and corresponding increase in one-way containers is that refillable systems require a greater level of cost internalization by beverage producers. Whereas producers of beverages in one-way packaging generally only incur a share of the end-

of-life management costs, producers of refillable beverage containers incur the full costs of collection and refill. This un-level playing field creates an economic incentive to use one-way containers over reusable ones.

Countries that continue to show a relatively high market share for refillable bottles have actively implemented policy instruments to preserve the refillable infrastructure. This factsheet discusses three policy mechanisms that, when used in tandem, can reverse the decline of refillable bottles: (1) mandatory container deposits; (2) green levies or advance disposal fees on single-use alternatives; and (3) reuse targets.

While these three instruments are the focus of this fact sheet, it is important to note that there are several other policy mechanisms that can be used to support reuse. These include:

- Recognizable National or European-wide labeling program;
- Promotion and education;
- A unique distribution system;
- Financial incentives to companies that sell products in refillable containers;
- Ban on one-way containers;
- A tradable permit system; and
- Broad materials policies (such as taxes on virgin materials).

#1 - MANDATORY CONTAINER DEPOSITS

While a deposit-return system (DRS) in and of itself may not compel a beverage manufacturer to switch to refillables, it establishes an infrastructure by which containers can be returned, and is one of the most effective ways to support high levels of capture and material quality. In short, it is a necessary component of any successful reuse system.

A DRS is a program that places a minimum refundable deposit on beer, soft drinks, alcohol and other beverages in order to ensure a high rate of recovery of containers for recycling or reuse. Under a DRS, deposits are charged on beverage containers when they are purchased and are refunded when the consumer returns the container to an authorized redemption location, such as a retailer. This is necessary to get the container back to the distributor for refilling.

DRSs result in high recovery rates because of the influence of the economic instrument on consumer behavior. Because of this, if the deposit is set too low relative to the overall purchase price of a beverage, there is little incentive to return the container for recycling. This, in turn, minimizes the economic advantage of refilling because the refillable bottle has

fewer trips (uses) and its economic benefit to the bottler is reduced.

Another important factor to consider when implementing a DRS program is its scope. In order to be most effective, it is essential that a deposit be applied to both refillable *and* non-refillable containers. If deposits are only applied to refillables, then there will be an incentive for consumers to purchase non-refillables, because only the refillable bottle requires an initial outlay of money (the deposit). Requiring a deposit on all beverage packaging levels the playing field in terms of point-of-purchase pricing.

Another way to encourage consumers to switch to refillables is to use multi-tier deposits. Under a multi-tier DRS, lower deposit rates are applied to refillable containers and higher deposits are applied to non-refillable containers, which creates a small economic incentive to purchase refillables. For example, in Germany, the deposit on a non-refillable bottle is 25-euro cents, versus the refillable alternative which carries an 8-euro cent deposit—a 16-cent per unit point-of-purchase advantage. While deposit return on all beverage containers is critical to support refillables, it alone cannot reverse the trend of producers shifting to non-refillable alternatives.

#2 - INTRODUCE GREEN LEVIES OR ADVANCED DISPOSAL FEES ON SINGLE-USE CONTAINERS

Implementing a “green” levy or fee on single-use containers is one of the most effective and commonly used tools available to governments to promote the use of refillables. The purpose of such levies or fees is to create a price advantage for beverages sold in refillable bottles, while at the same time discouraging the purchase and consumption of those in single-use containers.

Three elements that must be considered in the formulation of a levy or fee on single-use containers are:

- Who should pay the levy/fee?;
- Should the levy/fee be applied on a per unit or by volume basis?; and
- What should the levy/fee rate be?

In 1978, the Organization for Economic Co-operation and Development (OECD) recommended that the fairest way to apply a levy or fee would be directly onto the bottler or distributor.¹ Applying the levy or fee to the bottler at the point-of-sale would have the desired effect of providing the customer with a financial incentive to purchase the refillable, as the levy or fee would be passed on to the retailer, who would then pass it on to the customer.

¹ *Beverage containers: Reuse or Recycling*, Organization for Economic Co-operation and Development, 1978

Because it is the packaging itself, and not the beverage contained inside, that is the problem, it would make sense for the levy or fee to be applied to the container rather than have volume-based rates. This approach would also be simpler for retailers and consumers to understand.

Setting the levy or fee rate must be done carefully. If it is set too high, there will be significant opposition from consumers and possibly from importers. Conversely, if it is set too low, the added cost on single-use containers may go unnoticed by consumers. In this case, the levy or fee would not be achieving its goal, as it would provide no incentive to alter purchasing habits.

Consider, for example, New York state (U.S.), which implemented a \$0.02 tax on non-refillable soft drinks. This tax has had no effect on consumer behavior, likely because the consumer is unaware of the tax, which has been internalized into the price of the beverage.²

Conversely, in Finland the green levy on non-recyclable containers was 67-euro cents/litre and recyclable containers carried a 17-euro cent/litre levy. The numbers show how successful this combination of policies was at preserving the Finnish refillable system. In 2000, 73% of beer and 98% of soft drinks consumed in Finland were purchased in refillable containers.³ But on January 1, 2008 the packaging tax on recyclable beverage packaging was abolished. This meant that refillable beverage containers and recyclable beverage containers were now subject to the same terms and conditions of taxation. This has had the predictable result of decimating the refillable industry in Finland. In just one year, the carbonates and water markets were fully taken over by one-way PET containers and the refillable PET bottle vanished.

#3 - ESTABLISH (OR INCREASE EXISTING) TARGETS FOR REFILLABLE BOTTLES AS A PERCENTAGE OF BEVERAGE VOLUME

A target is a type of regulatory instrument that requires the entire beverage industry, or individual beverage companies, to package or sell a certain percentage of their beverage products in refillable containers. The main objective of this policy is to ensure that a minimum percentage of beverage containers sold within a given jurisdiction are refillable. One of the disadvantages of targets is that they provide little incentive, on their own, to increase use of refillables, especially if there is no penalty for non-compliance.

² *Case Reopened Reassessing Refillable Bottles*. David Sapphire, INFORM Inc, 1994

³ *Reduce, Reuse, Refill!*, Institute for Local Self Reliance, April 2002.