

Box 4.4: Refill and reuse

Refillables are crucial to tackling plastic pollution and achieving a circular economy. Refillable beverage containers can be used several times before they are recycled, keeping valuable resources in the production cycle for a longer time. Refillable PET bottles can be reused up to 15 times, and refillable glass bottles around 25 times,¹ eliminating the need to manufacture new bottles and avoiding many of the environmental impacts associated with their production and end-of-life management. Some LCAs calculate that refillable bottles can save 40% of the equivalent raw materials and 50% of the carbon emissions of single-use bottles, although this depends on key variables, such as the size of the distribution network.²

Reuse offers significant economic benefits – replacing just 20% of single-use plastic packaging with reusable alternatives offers a business opportunity of at least \$10 billion.³ Reusables not only eliminate plastic waste but also reduce many of the GHG emissions associated with plastic or glass production and recycling.

Over the past two decades, we have seen a decline in the use of refillables across the world, with single-use packaging becoming the predominant choice for producers. 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 – a decrease of 36%.⁴

A reusable plastic bottle can be reused up to 15 times, preventing up to 14 single-use ones from being made. As such, if you displace 1 refillable bottle from the market you replace it with 15 single-use ones over the course of its use⁵ (or 25, in the case of glass bottles). In countries such as Mexico, the Philippines and Indonesia, refillables still make up more than 30% of beverages sold. However, the share of refillables continues to drop; in India, for example, refill declined from 86% in 1999 to 37% in 2018.⁶

This decline has occurred for a variety of reasons. First, many FMCGs have enacted a deliberate policy of removing refillables from the market and replacing them with single-use plastic; this is particularly prevalent in low- and middle-income countries.⁷ Second, large retailers have opposed selling products in reusable packaging, and many are only required to pay a small EPR fee for single-use packaging, rather than bearing the higher costs of a refill system.⁸ Third, without supportive legislation, refill systems cannot compete in countries where single-use containers can be produced, delivered and sold cheaply at scale.

Many refill systems operate through a deposit system to incentivise the return of packaging. However, having DRS only for refill – and not for single-use packaging – ends up creating an uneven playing field, whereby participating in the refill system involves an extra cost and inconvenience for the consumer, who must pay a refundable deposit and return the packaging after use; single-use is cheaper, as it has no deposit and can be thrown away after use. In contrast, a DRS system combining refill and single-use containers places both types of packaging at the same level of convenience – both types have a deposit, and both must be returned after use. Furthermore, additional policy mechanisms must be applied to shore up refill in such a system; for example, higher deposits for single use, refillable quotas, lower fees for refillables producers and a tax on virgin material.⁹

Other challenges that need to be addressed to operate DRS for refill at scale include container standardisation across brands; managing decentralised bottling and distribution in nationwide schemes, particularly for imported goods; and the economic cost of setting up the initial system. Crucially, levelling the playing field through mandatory DRS is an important first step, ensuring the system is set up to anticipate a future move to refillables from the start, with further policy measures available for reinforcing refill and reuse once a level playing field has been created.

Minimal packaging and refillable store: 'Harm Less Store' in Hornsey, UK

Credit: David Mirzoeff



Refillable glass bottles

Credit: Mateo Abraham

References

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