



Understanding the Circular Economy

The driving force behind deposit return systems, recycled content mandates, and other policy tools is the concept of a circular economy. According to the Ellen MacArthur Foundation, a circular economy eliminates waste and pollution, circulates products and materials through reuse, repair, or remanufacture, and regenerates and enhances nature⁸.

In the case of beverage containers, the circular economy is best embodied through reuse (where a container is refilled many times without being remanufactured) or bottle-to-bottle (or can-to-can) recycling. Bottle-to-bottle recycling refers to recycling processes where captured material streams are sufficiently high quality to be recycled directly into new containers rather than downcycled to a lesser use. Bottle-to-bottle recycling is the best remanufacturing use for material because it allows material to be used again and again. One analysis found that raising recycling rates for plastic, aluminum, and glass by 50%-80% in Europe would cut its industrial emissions by a third⁹. Despite this obvious carbon reduction potential, current research reveals that **less than 2% of plastic is currently recycled in a closed-loop capacity**.¹⁰

Downcycling, on the other hand, devalues materials by using them for a downgraded purpose, typically one where they can not be recycled again, such as turning plastic beverage containers into carpet and clothing textiles.